# Exploring the teaching reform path based on OBE concept - Taking the introduction of artificial intelligence into the course of "network marketing" as an example

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Abstract: This article explores the teaching reform path based on the OBE (Output Based Education) concept, and takes the introduction of artificial intelligence in the course of "Network Marketing" as an example to illustrate. The article first introduces the background and significance of the OBE concept, emphasizing that teaching reform needs to focus on achieving learning outcomes. Then, taking the course "Online Marketing" as an example, the current problems in teaching were analysed, such as outdated teaching content and insufficient practical abilities of students. Subsequently, the article introduced artificial intelligence technology and proposed the idea and specific methods of introducing artificial intelligence in the course of "Network Marketing". Finally, the article summarizes the teaching reform path based on the OBE concept and puts forward some suggestions, providing reference for future teaching reforms. Overall, this article explores the teaching reform path based on the OBE concept by taking the introduction of artificial intelligence in the course of "Network Marketing" as an example. This reform approach helps to improve students' learning effectiveness and practical abilities, while also improving teachers' teaching level and quality.

**Keywords:** artificial intelligence, teaching reform, OBE

# 1. Introduction

In the era of informatization and digitization in the 21st century, artificial intelligence (AI) has become an indispensable part of our lives, work, and learning [1]. With the rapid development of technology,

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the field of education is gradually introducing this innovative technology to better meet the needs of society and individuals. As an important business course, the teaching method of 'Online Marketing' should keep up with the pace of the times, introduce artificial intelligence, and cultivate students' abilities and qualities in a digital environment. This article will explore the path of teaching reform based on the OBE (Output Based Education) concept. Taking the course "Online Marketing" as an example, it will discuss how to effectively combine artificial intelligence technology to improve students' learning effectiveness and practical abilities.

OBE is a learning outcome-oriented education model that emphasizes clear and measurable learning objectives, and evaluates and provides feedback on students' learning outcomes through different evaluation methods. This model encourages teachers to be student-cantered, focusing on their learning needs and interests, as well as how to apply the knowledge they have learned to practical situations.

However, traditional teaching methods often overlook the cultivation of students' personalized needs and innovative abilities [2]. By introducing artificial intelligence, we can provide students with a more personalized and challenging learning environment, stimulating their innovative thinking and problem-solving abilities. At the same time, artificial intelligence can process a large amount of data and information, providing students with richer and more in-depth learning resources and feedback, thereby improving their learning effectiveness.

In this context, this article will explore how to introduce artificial intelligence into the course of "Online Marketing" and how to carry out teaching reform based on the OBE concept. We will analyse the practical application of artificial intelligence in the course of "Network Marketing", study how to set clear and measurable learning goals, and evaluate students' learning outcomes. We will also discuss how to adjust teaching methods and strategies to meet the teaching requirements based on the OBE concept, ultimately achieving high-quality educational goals.

# 2. Literature review

The teaching reform path based on the OBE (Output Based Education) concept is a result oriented educational philosophy that emphasizes the cultivation of students' practical and innovative abilities, enabling them to meet job requirements in practical work [3]. In the course of "Network Marketing", introducing artificial intelligence technology into teaching can better achieve the teaching objectives of OBE concept. The literature review on artificial intelligence can involve multiple fields and research directions, including but not limited to neural networks, deep learning, machine learning, natural language processing, computer vision, reinforcement learning, etc [2].

Artificial intelligence (AI) has made remarkable progress in recent decades. AI is a technology and method that simulates human intelligence, including fields such as machine learning, natural language processing, and computer vision. The development and application of these technologies have profoundly changed our way of life and work. Neural networks are an important technology in the field of AI, which simulates the working principles of human brain neurons. In the past few decades, neural networks have gone through a development process from perceptron to deep learning. Deep learning is a branch of neural networks that simulate the hierarchical cognitive process of the human brain by constructing multi-layer neural networks, enabling machines to better learn and understand information such as natural language and images. Machine learning is another important branch in the field of AI,

which trains a large amount of data to enable machines to learn patterns and patterns. Machine learning has a wide range of applications, including speech recognition, image recognition, natural language processing, and so on. Among them, deep learning is an important branch of machine learning, which simulates the hierarchical cognitive process of the human brain by constructing deep neural networks. Natural language processing is an important research direction in the field of AI, which mainly studies how to enable machines to understand and generate human language. In the past few decades, natural language processing has developed rapidly, including fields such as speech recognition, machine translation, and text generation [2]. Among them, deep learning has also made important contributions to the development of natural language processing. Computer vision is an important branch in the field of AI, which mainly studies how to enable machines to understand and interpret real-world images and videos. In the past few decades, computer vision has developed rapidly, including fields such as image recognition, object detection, and image segmentation. Among them, deep learning has also made important contributions to the development of computer vision. The development and application of artificial intelligence technology have profoundly changed our way of life and work. In the future, with the continuous progress of technology and the expansion of application scenarios, artificial intelligence will play an important role in more fields [3].

# 3. Problems in the Reform of the Course of "Network Marketing" Introduced by Artificial Intelligence

The introduction of artificial intelligence (AI) into the curriculum reform of "Network Marketing" is a hot topic in the current education field. With the rapid development of technology, artificial intelligence has become an important tool in the business field, which has a significant impact on students' employment prospects and ability improvement. However, this reform also faces some problems and challenges.

Firstly, the complexity and difficulty in understanding of artificial intelligence technology may affect students' interest and effectiveness in learning. Online marketing involves a large number of advanced technologies such as data analysis and machine learning, and for some students without relevant background knowledge, they may feel confused and frustrated. Therefore, when introducing artificial intelligence, teachers need to adopt appropriate teaching methods, simplify concepts, and reduce learning difficulty. At the same time, teachers also need to pay attention to students' learning progress and understanding level, and adjust teaching strategies in a timely manner.

Secondly, the application of artificial intelligence technology requires a large amount of data support. In practical teaching, students may not be able to obtain sufficient data for practical operations. In addition, the acquisition and use of data also need to comply with relevant privacy and ethical regulations, which are also issues those teachers need to consider when introducing artificial intelligence. To solve this problem, schools and enterprises can establish cooperative relationships to provide students with internship or project experience, allowing them to learn and use artificial intelligence technology in practice.

Once again, the application of artificial intelligence technology requires the guidance and assistance of professional technical personnel. However, in actual teaching, such resources may be lacking. Therefore, teachers may need to seek external technical support or training when conducting artificial intelligence teaching. At the same time, schools can also provide relevant courses to cultivate

students' programming and data processing abilities, preparing them for future work related to artificial intelligence.

Finally, the application of artificial intelligence technology needs to be combined with the actual business environment. However, in actual teaching, it may not be possible to provide sufficient practical opportunities. To address this issue, schools and enterprises can establish cooperative relationships to provide students with internship or project experience. At the same time, schools can also simulate business environments to allow students to conduct simulation operations in the classroom and improve their practical abilities.

Overall, although the introduction of artificial intelligence into the "Network Marketing" course reform has brought many benefits, there are also some issues that need to be addressed. We need to find appropriate teaching methods to address data and technical support issues, while also considering the provision of practical applications and practical opportunities. Only in this way can we better utilize artificial intelligence technology and improve students' employment competitiveness and innovation ability.

# 4. Optimization of artificial intelligence import courses

The teaching reform path based on the OBE (Output Based Education) concept is a result-oriented education model that emphasizes the cultivation of students' practical and innovative abilities, enabling them to meet job requirements in practical work. In the course of "Network Marketing", introducing artificial intelligence technology into teaching can better achieve the teaching objectives of OBE concept [5].

Firstly, artificial intelligence technology can provide students with richer practical opportunities [6]. For example, using artificial intelligence technology for market research and data analysis can help students better understand market demand and competition, thereby better formulating marketing strategies. In addition, artificial intelligence technology can also be used for practical operations in search engine optimization and social media marketing, allowing students to have a deeper understanding of the practical application scenarios of online marketing.

Secondly, the introduction of artificial intelligence technology can improve students' innovation ability. For example, artificial intelligence technology can be used to practice personalized recommendations and customized services, enabling students to better understand consumer needs and behaviour patterns, and thus propose more innovative marketing solutions. In addition, artificial intelligence technology can also be used for practical operations in virtual reality and augmented reality, allowing students to have a deeper understanding of the development and application of emerging technologies.

Finally, the introduction of artificial intelligence technology can promote teaching reform for teachers [6]. For example, artificial intelligence technology can be used to develop tools such as intelligent teaching systems and online learning platforms, allowing teachers to better grasp students' learning situations and needs, thereby better adjusting teaching content and methods.

Introducing artificial intelligence technology into the course of "Network Marketing" can better achieve the teaching objectives of OBE concept and improve students' practical and innovative abilities. At the same time, it can also promote teaching reform for teachers, improve teaching quality and effectiveness. Therefore, it is necessary to actively explore the teaching reform path based on the OBE

concept, and promote the teaching innovation and development of the "Network Marketing" course. Specifically, the curriculum and teaching content can be improved. According to the requirements of OBE concept, redesign the course outline and teaching content, add practical links and case analysis, etc., to improve students' practical operation ability and problem-solving ability. Strengthen the cultivation of teachers' professional literacy and teaching ability. Teachers are the core force of education and teaching, and they should strengthen the training and improvement of their professional qualities and teaching abilities to improve the quality and effectiveness of teaching. Establish a comprehensive evaluation system. Evaluation is one of the important links in education and teaching, and a comprehensive evaluation system should be established, including various evaluation methods such as exams, projects, and papers, to comprehensively evaluate students' learning outcomes and ability levels. Strengthen cooperation with enterprises. Enterprises are one of the important sources of talent cultivation. We should strengthen cooperation with enterprises, carry out school enterprise cooperation projects, internships, and practical training, so that students can better understand industry needs and development trends. Introduce more cutting-edge technologies and tools. With the continuous progress and development of technology, new technologies and tools are constantly emerging. These technologies and tools, such as artificial intelligence and big data, should be actively introduced to cultivate students' innovative thinking and practical abilities.

# 5. Conclusion

The teaching reform path based on the OBE concept helps to improve the teaching quality of the course "Online Marketing" and cultivate students' comprehensive qualities and abilities. By establishing clear teaching objectives, designing reasonable teaching content and methods, establishing an effective evaluation system, strengthening the construction of teaching staff, and creating a good learning atmosphere, measures can help to achieve the maximum value of education and teaching.

The teaching reform path based on the OBE concept is guided by expected learning outcomes, focusing on students' actual needs and future career development. Introducing artificial intelligence technology into the course 'Online Marketing' can improve students' online marketing skills and practical operational abilities. In the process of teaching design and implementation, attention should be paid to the cultivation of students' autonomous learning and practical operation abilities, while strengthening the guidance role of teachers. In the process of teaching evaluation, attention should be paid to students' actual learning outcomes and future career development. Through the teaching reform path based on the OBE concept, the teaching quality of the course "Network Marketing" can be improved, and network marketing talents with innovative and practical abilities can be cultivated.

### References

- [1] Hou Berlin (2022) Artificial Intelligence Technology Classroom Teaching Quality Intelligent Monitoring and Diagnosis Practice Based on OBE Concept - Taking the Course of "Electromechanical Transmission and Control Technology" as an Example Computer Application Abstracts, 38 (24), 27-30
- [2] Li Jun,&Hu Yue An Analysis of the Reform of Split Classroom Teaching in Applied Technology Universities Based on OBE Concept Taking the Course "Introduction to New Media" as an Example

- [3] Wang Lijuan,&Liu Siyu (2020) The Idea and Implementation Path of Curriculum Reform in Preschool Education Based on OBE Concept Taking "Teaching Activity Design Curriculum" as an Example Journal of Shaanxi Preschool Normal University, 36 (2), 7
- [4] Hou Berlin (2022) Artificial Intelligence Technology Classroom Teaching Quality Intelligent Monitoring and Diagnosis Practice Based on OBE Concept - Taking the Course of "Electromechanical Transmission and Control Technology" as an Example Computer Application Abstracts, 38 (24), 27-30
- [5] Jiang Haijiao,&Tian Dazhi (2023) Exploring the Path of Ideological and Political Education in Universities Based on OBE Concept under the Background of Artificial Intelligence Journal of Longdong University, 34 (3), 132-136
- [6] Sun Ningning, Fa Hongliang,&Yang Chengfeng Research on the Construction of Marketing Professional Curriculum System Based on OBE Concept in the Era of Big Data Marketing Industry (202120)