

# Exploration of Digital and Intelligent Teaching Reform in the “Internet Finance” Course at Vocational Universities Under the OBE Concept

**Yun Jiang and Xiaoping Zhong**

*School of Economics and Management, Shanghai Zhongqiao Vocational and Technical University, Shanghai, China*

*\*Corresponding author: Yun Jiang, E-mail: [jiangyunliz@163.com](mailto:jiangyunliz@163.com).*

---

## Abstract

With the deepening of global education reform, the concept of outcome based education (OBE) has gradually become an important guide in the field of higher education. Based on the OBE education concept and in the context of the development of digital intelligence, this paper explores the teaching of Internet Finance in vocational colleges in a “student-centered, results oriented” way. The teachers should try teaching reform from the three aspects of teaching objectives, teaching content and evaluation system, so that the Internet Finance course in vocational colleges can be upgraded from a course providing a brief introduction to professional Frontiers to an important carrier that can truly cultivate high-quality technical and skilled talents.

## Keywords

digital and intelligent, teaching reform, internet finance course, vocational universities, OBE concept

---

## 1. Introduction

Internet Finance is a professional expansion course for finance majors, which mainly cultivates students' scientific and rational Internet financial thinking, innovative awareness and ability to apply relevant knowledge to professional practice, improves students' ability to analyze and judge the Internet financial market, and enhances students' risk awareness and prevention ability. This paper attempts to propose that under the OBE education concept, in combination with the current background of digital intelligence development, we should reform and explore the teaching of Internet Finance in vocational colleges, and carry out the teaching design under the OBE concept, in order to improve the quality of teaching and realize the two-way combination of teaching and education.

## 2. Background of Teaching Reform

### 2.1 Policy Guidance

#### 2.1.1 Policy Release of Vocational Education

On July 31, 2021, the Chinese government issued the “Opinions on Promoting the High Quality Development of Modern Vocational Education” proposing to accelerate the construction of a modern vocational education system, build a skilled society, promote the spirit of craftsmanship, and cultivate more high-quality technical and skilled talents, skilled craftsmen, and national craftsmen (Yuan et al., 2021). It requires vocational education to adhere to market-oriented approaches, promote employment, and align school

layout, major construction, talent cultivation with market demand. Vocational colleges should persist in focusing on practice and strengthening abilities, enabling more young people to realize their life value through their unique skills. As a professional teacher on the front line of vocational university teaching, it is necessary to implement the spirit of the National Vocational Education Conference in daily teaching, update the practical teaching system, optimize the allocation of teaching resources, deepen the integration of industry and education, strengthen school enterprise cooperation, and promote the high-quality development of modern vocational education in practical work.

### **2.1.2 Digitization Empowers Teaching Reform**

On July 18, 2024, the Chinese government officially adopted the “Decision on Further Comprehensively Deepening Reform and Advancing the Path of Modernization with Chinese Characteristics”. The Decision clearly states that we should promote the digitization of education, build a learning society, and strengthen the guarantee of lifelong education (Yu, 2025). How to use technologies such as big data, virtual reality (VR), and artificial intelligence (AI) to construct new teaching and education scenarios has become an urgent educational issue that needs to be solved. True digital teaching breaks the physical boundaries of traditional classrooms and builds a learning ecosystem of “all time, all scenario”, allowing students to experience new trends in industry development even on campus. The interactive functions of digital platforms have reshaped the traditional teaching system and better aligned with the current student-centered educational philosophy.

## **2.2 The Rise of OBE Education Concept Boom**

The OBE concept was first born during the basic education reforms in the United States and Australia. In the 1980s, “OBE” was a widely popular educational term in the American education industry. After being proposed by American scholar Spady in 1981, it has now become the mainstream concept of education reform in countries such as the United States, the United Kingdom, and Canada. The OBE concept is an educational philosophy that deeply embodies student-centered and sees student-centered learning outcomes as the core driving force. This concept emphasizes the practical effects and ability cultivation in the teaching process, and is more integrated with the requirements of enterprises for talents. It fundamentally subverts the passive mode of “teacher speaking, student listening” in traditional teaching, and instead starts from social needs and learning development goals, reverse designs teaching objectives, teaching content, and evaluation system, and ultimately achieves a spiral improvement in educational quality through continuous improvement. The application of OBE concept in the teaching of Internet Finance in vocational colleges has natural advantages. First, the OBE concept is oriented to the output of results, focusing on what students can do in the future rather than what they have learned, which can help students improve their practical skills and thinking ability more clearly. Secondly, the approach of reverse teaching design optimizes the curriculum structure, and through a continuous improvement mechanism, teachers continuously adjust their teaching through feedback, thereby improving the quality of teaching.

## **3. Analysis of the Current Teaching Situation of Internet Finance**

### **3.1 Teaching Objectives**

#### **3.1.1 Disconnection between Teaching Objectives and Job Needs**

At present, when determining the teaching objectives of Internet finance, most schools still start from the knowledge in the teaching materials, and then match the corresponding skill objectives and value objectives, which is still a positive process of determining the curriculum objectives. Moreover, due to the rapid development of Internet finance, the three-dimensional goal based on the knowledge system of teaching materials is often lagging behind, which can not be docked with the job demand. If the teaching objectives can not be updated in time, the knowledge exposed to students can not reflect the latest achievements of the development of Internet Finance, which has a negative impact on the quality of teaching, the development of students' career and the overall effect of education.

### **3.1.2 Lack of Focus on Professionalism**

At present, the curriculum with ideological-political elements is mainly concentrated in the theoretical teaching part. By excavating the ideological and political elements in the cases of Internet Finance will help to shape students' emotion and national identity, international vision and innovative consciousness. Because of the disconnection between teaching objectives and job needs, it is easy to ignore the part of professional quality in curriculum. Professional quality, a soft indicator, is also an important determinant of whether students can adapt to their posts well in the future. They are directly related to whether students can play a role in the team, maintain calm under pressure, quickly adjust their mentality after investment failure, and not lose their way in the wave of financial innovation.

## **3.2 Teaching Content**

### **3.2.1 The Content of Teaching Materials is Updated Slowly**

Internet finance is a rapidly developing field, and new business models and technologies are constantly emerging, which puts forward high requirements for the updating speed of teaching materials. Because the development speed of Internet Finance exceeds the compilation and renewal cycle of traditional textbooks, many textbooks become outdated soon after publication. If the syllabus is based on textbooks, the content of the curriculum may be stuck in the textbook and unable to integrate cutting-edge content into the curriculum. If teachers incorporate some cutting-edge content on their own, they may not be able to complete the course as required by the outline. Therefore, most teachers' teaching contents focus on the introduction of the development status of various Internet Finance business, and the current cutting-edge technologies such as artificial intelligence, big data and block chain can only be popularized at the conceptual level. After learning, students only form a superficial understanding of Internet finance, which can not let students master the skills needed for their posts, and ultimately lead to a serious shortage of students' business ability.

### **3.2.2 Incomplete Training Content**

Practical training is an important part of the course, which provides students with a simulated business scenario to transform theoretical knowledge into on-the-job ability. However, at present, practical teaching is still an auxiliary form attached to classroom theory teaching, and even some practical training contents are only simple digital processing of the teaching materials, which do not have the characteristics of deep teaching. Moreover, due to the limitations of class hours, the practical teaching of "Internet finance" in many schools can not make students fully grasp business operations, thus affecting students' understanding of professional knowledge. Several large training platform providers on the market have their own priorities, some simulating transactions, some simulating front end and back end operations, and there is great economic pressure for vocational universities, especially private vocational universities, to establish a complete Internet financial training system. Even if the existing training platform is not fully integrated with external resources (such as enterprises and industries), the integration of industry and education remains on the surface, and the connection with industry resources is not close, which affects the timeliness and practicality of training content, so it is difficult to achieve the expected teaching objectives.

## **3.3 Evaluation System**

### **3.3.1 Limitations of a Single Assessment**

Curriculum assessment and evaluation system is an important basis to measure the realization of training objectives. However, in current vocational universities, the written test scores still account for more than half of the learning evaluation, and the process evaluation such as program planning and teamwork is insufficient. This evaluation model, which emphasizes test results over process participation, weakens students' practical enthusiasm and is difficult to fully and truly reflect such practical abilities as communication, cooperation and problem solving (Jia et al., 2025). At the same time, the main body of evaluation is still the traditional teacher-leading model, which fails to really give students the opportunity to self evaluate and mutual evaluate, and the content of evaluation can not fully reflect the changes in students' emotional attitudes. This traditional evaluation model does not refine the ethics evaluation indicators, and can not truly reflect the cultivation of students' values and ethics. In addition, the lack of a perfect personalized precise evaluation and continuous

improvement mechanism, and the formation of a “assessment-feedback-improvement” teaching evaluation closed-loop, has further affected the improvement of the quality of personnel training.

### 3.3.2 The Evaluation Effect of Digitalization Methods Is Not Satisfactory

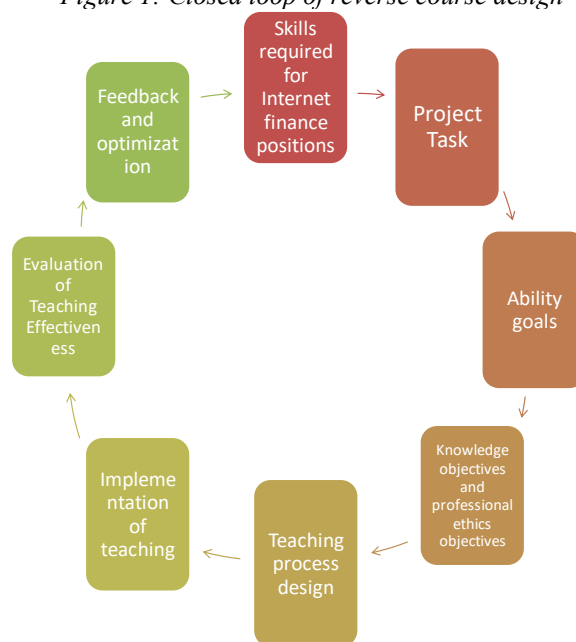
This problem is mainly reflected in two aspects: first, the teaching evaluation systems of some vocational universities still rely on traditional methods, the application of digital and intelligent tools is insufficient, and there are still shortcomings in the accumulation, storage and vertical and horizontal comparative analysis of evaluation data. Teachers can not fully tap and utilize the information value of relevant data, which affects the efficiency and quality of teaching evaluation, and then affects the development of teaching quality and improvement work (Xie et al., 2025). The second is excessive dependence on new technologies affecting the authenticity of the evaluation. In some vocational universities, teachers can obtain students' relevant information and online learning data in real time through digital intelligent tools such as online learning platforms and information management systems, but due to the limitations of the timeliness and integrity of the data itself, these data results will inevitably have potential drawbacks in the presentation. If teachers blindly follow the results of data analysis, it will affect the authenticity of evaluation, weaken teachers' evaluation sensitivity, passivate teachers' evaluation and decision-making ability, and restrict the execution of teachers' evaluation decisions (Guo & Yu, 2022).

## 4. Curriculum Reform Measures Based on OBE Concept Under the Background of Digital Intelligence

### 4.1 Take the Job Demand as the Starting Point, Reverse Design the Teaching Goal

The OBE concept emphasizes what students can do after graduation, and curriculum design based on this concept should also start from job requirements, building a reverse design chain of “job standards → project requirements → course objectives” (as shown in Figure 1) (Jia et al., 2025). Firstly, based on the specific needs of the career scenario, create project modules, clarify the tasks to be completed by the project, and then set goals. Based on the specific learning objectives, design a complete teaching process and consider the space for continuous improvement in the future. Establish an appropriate closed-loop mechanism of evaluation-feedback-optimization. Unlike the traditional approach starting with knowledge goals and placing ability goals and ideological and political goals behind them, in this process, ability goals are closer to job requirements and are identified first, while knowledge goals and ideological and political goals such as values and ethics should revolve around ability goals.

Figure 1: Closed loop of reverse course design



In order to better practice the teaching mode under the OBE concept, the author arranged the teaching objectives of the Internet Finance course, starting with the ability objectives, collaborated with the knowledge objectives and the ideological and political objectives, and built a new teaching objective matrix, as shown in Table 1.

*Table 1: Teaching Objective Matrix of Internet Finance Course*

Competency Requirements	Knowledge Content	Ideological and political objectives
Customer profiling capability	Various businesses of Internet finance	Ensuring user privacy and data security, and inspiring students' sense of professional responsibility
Digital marketing capability	Various businesses of Internet finance	Inspire students' innovative consciousness while enhancing their self-protection awareness, stay away from online fraud and illegal pyramid schemes
Policy interpretation ability	Supervision of Internet finance	Policy and legal awareness, cultivating students' reverence for financial policies and regulations
Planning ability	Equity Crowdfunding	Professional division of labor and cooperation awareness, legal risk awareness
Ability to use new payment tools	Digital currencies and third-party payments	Innovation consciousness and compliance consciousness
Risk identification and avoidance ability	P2P platform and Online loans	Sense of mission for inclusive finance and concept of common prosperity
Customer service capability	Financial Intelligence	Guide students to establish a customer-centric service philosophy and cultivate their service awareness
Self-directed learning ability	Big data finance, Supply chain finance and Blockchain finance	Lifelong learning and innovation consciousness

## 4.2 Based on the Intelligent Teaching Resource Platform, Update Teaching Content in a Timely Manner

In view of the lag of the published Internet Finance textbooks in the market, vocational universities can use AI technology to build an intelligent teaching resource platform. Teachers first upload information such as curriculum introduction, syllabus, assessment requirements, and electronic textbooks to the teaching platform, and use web crawlers, data mining and other technologies to collect data about the forefront of industry development from authoritative academic websites, research reports, news information and other sources for screening and sorting, forming a powerful database with the information provided by teachers themselves. Next, natural language processing (NLP) technology will be used to analyze and understand these data, quickly extract core viewpoints and important conclusions, and compare and integrate them with existing educational content. Through this method, teachers can timely identify the parts of the teaching content that need to be updated and generate corresponding update suggestions. In this process, the participation of teachers is still indispensable. They can judge whether the updated content is suitable for students' knowledge level and cognitive ability based on their teaching experience and educational philosophy. At the same time, further optimization and improvement should be made to the updated content to make it easier to understand and accept. In addition, machine learning algorithms are used to learn from large amounts of historical data, in order to predict which content may become outdated over time or which new knowledge points may become more important in the future, thus helping teachers prepare in advance.

In practical teaching applications, intelligent teaching resource platforms also need to push real-time updated educational content based on students' learning progress. If students show strong interest or demand in a certain knowledge point, the intelligent teaching resource platform can immediately provide them with the latest relevant materials and expanded reading. For students with different learning abilities and levels, it is necessary to adjust the difficulty and depth of the updated content to achieve personalized teaching. The intelligent teaching resource platform also needs to integrate with existing learning management systems. When educational content is updated, the system can automatically notify teachers and students and provide corresponding update instructions and learning guidance. At the same time, generate practice and test questions based on the updated content to help students consolidate their new knowledge.

Vocational universities must also cooperate deeply with industry enterprises, strive to build a training platform of “Internet financial ecosystem”, organically combine position training, professional quality training and professional skills training, improve the content of practical training and teaching, and transform high-quality resources of cooperative enterprises into educational resources. Conditional vocational universities should try to create a completely authentic training base to further shorten the gap between students' training environment and actual jobs. At the same time, actively promoting the integration of courses and competitions based on existing training platforms. The skills competition projects of vocational universities are usually organized by authoritative enterprises in the industry, focusing on practical tasks of several core businesses of the enterprises, reflecting the requirements for the basic work content and core skills that practitioners must master proficiently. This can better hone the ability of participating students to solve problems quickly and efficiently, and also help promote deep cooperation between schools and enterprises, making education more in line with market demand and more in line with students' career development needs.

### 4.3 Constructing An Evaluation System Combining Process and Development Evaluation

Vocational universities should establish a comprehensive, structurally sound, and hierarchical evaluation index system, reduce the proportion of final grades in the overall evaluation, strengthen the evaluation of students' skills, professional qualities, and practical abilities, and achieve an organic combination of quantitative and qualitative evaluation, knowledge and ability assessment, and ethics assessment (as shown in Table 2). We should shift the evaluation subject from a single mode to a more diversified pattern, using artificial intelligence evaluation systems to jointly build a comprehensive evaluation community that includes multiple dimensions such as students, teachers, society, AI, etc., enhancing the fairness and objectivity of evaluation, and thereby improving the credibility and effectiveness of evaluation results.

Table 2: Evaluation Methods and Proportion of Internet Finance Courses

Assessment Type	weight	Ideological and political elements	Assessment purpose	Excellent	Good	Moderate	Pass	Fail
online learning	10%	Lifelong learning awareness, policy and legal awareness	Course preview and understanding of industry frontiers	Completed over 90%	Completed 80%	Completed 70%	Completed 60%	Completed below 60%
Case Analysis	10%	Sense of mission for inclusive finance and concept of common prosperity	The combination of theoretical knowledge and industry practice	Can draw lessons from case studies	Explain the case process and related financial logic	Introduce the causes and consequences of the case	Understand the development process of the case	Not familiar with the case
Speech and discussion	10%	Innovation consciousness and critical thinking consciousness	Performance of discussion and reporting	Participate in discussion more than 3 times and speak with reason and evidence	Participate in discussion more than 3 times	Participate in discussion 2 times	Participate in discussion 1 times	Not participating
Homework quality	10%	Rigorous attitude, meticulous spirit	Review of course knowledge	Accuracy rate of over 90%	Accuracy rate of 80%	Accuracy rate of 70%	Accuracy rate of 60%	Not fully completed
Classroom peer evaluation	10%	Team collaboration awareness	Teacher evaluation, student self-evaluation, peer	Total score of 360 or above	Total score of 320 or above	Total score of 280 or above	Total score of 240 or above	Total score below 240

Assessment Type	weight	Ideological and political elements	Assessment purpose	Excellent	Good	Moderate	Pass	Fail
			evaluation, AI system scoring					
skills competition	10%	Competitive awareness and students' sense of professional responsibility	Mastery of job skills and evaluation by industry experts	Received a national level award	Received provincial and municipal awards	Received a school level award	Participate in the competition	Not participating
final exam	40%	Code of Integrity, Sense of Social Responsibility, and Rule of Law Concept	Check the mastery of knowledge	90 points or above	80-90 points	70-80 points	60-70 points	Below 60 points

In addition, vocational universities should also use digital technology to develop data analysis tools for real-time monitoring and evaluation of students' learning behavior, recording students' personal attendance, classroom performance, level of engagement, participation in discussions, homework presentations, practical achievements, etc. forming a visualized electronic file for each student, in order to timely discover students' learning characteristics and patterns, and provide strong support for personalized teaching and accurate evaluation. This real-time monitoring and evaluation can capture every progress and confusion of students, helping teachers better understand their needs and problems, and thus develop teaching plans and evaluation standards that are more in line with students' actual needs (Xie et al., 2025).

## 5. Conclusion

As an important course for financial majors in vocational universities, the teaching effect of Internet Finance is not only related to the foundation of students' professional quality, but also has an important significance for the talent reserve of the whole industry. With the rapid development of the Internet financial industry, higher requirements have been put forward for talent cultivation. Vocational university teachers should not only have solid theoretical foundation and industry experience, but also have cutting-edge teaching concepts and innovative teaching thinking. Therefore, teachers need to break through traditional teaching methods, actively explore new teaching models centered on students under the guidance of OBE concepts, design teaching plans based on expected learning outcomes, and carry out teaching practices. At the same time, teachers should keep up with the pace of the times, make reasonable and effective use of intelligent tools in curriculum design, and continuously improve the teaching system. In addition, teachers should also have keen insight, track the latest developments in the field of Internet finance in a timely manner, pay attention to the formation of students' professional skills and professionalism, and truly achieve the educational goal of vocational universities to cultivate application-oriented and practical talents.

## References

- Chen, Q. (2024). Analysis on the integration path of ideological and political education and skill training of art higher vocational students. *Shaanxi Education (Higher Education)*, 4, 22–24.
- Deng, M. (2025). Research on the mining and integration of ideological and political elements in curriculum under the background of high-quality development. *Modern Business Trade Industry*, 1, 211–213.
- Guo, C., & Yu, Z. (2022). Practical dilemma and optimization approach of classroom teaching evaluation with digital intelligence empowerment. *Journal of the Chinese Society of Education*, 7, 51–58.
- Jia, J., Fan, C., & Zhang, L. F. (2025). Research on the construction of hybrid teaching mode of automobile marketing and planning course in vocational universities under the concept of OBE. *Auto Time*, 9, 42–44.

- Wu, H. (2021). A preliminary study on the teaching reform of garden tree cultivation course based on the OBE teaching concept. *Hubei Agricultural Sciences*, 6, 384–385.
- Xie, M., Bian, W., & Wang, Z. (2025). Optimization path of teaching evaluation in secondary vocational schools under the background of digital intelligence. *Life & Lovers*, 4, 81–83.
- Yu, S. (2025). The mechanism and practical path of empowering college basketball teaching with digital intelligence technology. *Contemporary Sports Technology*, 2, 49–52.
- Yuan, Q., Duan, Q., Yuan, G., & Lu, X. (2021). Research on the development of new think tanks in higher vocational education under the background of type education: a case study of Yangzhou Vocational University. *Journal of Yangzhou College of Education*, 12, 55–59.
- Zhang, L., & Wang, S. (2022). An investigation on the role of vocational education skill competition in personnel training. *Journal of Educational Development*, 12, 74–82.

### **Funding**

This research received no external funding.

### **Conflicts of Interest**

The authors declare no conflict of interest.

### **Acknowledgment**

This paper is an output of the science project.

### **Copyrights**

Copyright for this article is retained by the author(s), with first publication rights granted to the journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).