

Blended Teaching Mode of "Work-Course-Competition-Certification" in Finance Majors of Vocational Colleges under the "1+X" Background

Zhang YanHua

School of Economics and Finance, Guangxi International Business Vocational College, Nanning, Guangxi, China

Abstract: This study explores the feasibility and effectiveness of implementing a blended teaching model of "Work-Course-Competition-Certification" in finance majors of vocational colleges under the "1+X" certificate system. Using literature review and theoretical analysis, the study compares domestic and international teaching models to develop a teaching framework that meets the needs of contemporary financial talent. The research first outlines the core concepts of the "1+X" certificate system and its impact on vocational education, followed by an analysis of the theoretical foundations and practical requirements of the "Work-Course-Competition-Certification" teaching model. Based on this, the study proposes design principles and implementation strategies for the blended teaching model, including curriculum integration, innovative teaching methods, and optimized evaluation systems. The findings indicate that this model effectively enhances students' professional skills and overall competence, aligning with the current demand for high-skilled talent in the financial industry. Additionally, the model promotes teaching reform in vocational education and fosters a deeper integration of education and industry.

Keywords: Vocational Education; Finance Major; Blended Teaching; Work-course-competition-certification; Teaching Model

1. Introduction

1.1 Research Background and Significance

With the rapid global economic development and continuous technological advancements, the financial industry's demand for highly

skilled professionals is increasing. As the core of the national economy, the financial sector requires practitioners to not only possess solid theoretical knowledge but also strong practical skills and innovative thinking. Therefore, vocational colleges, as crucial bases for cultivating applied talents, face the challenge of enhancing students' vocational skills and comprehensive qualities.

In recent years, the introduction of the "1+X" certificate system has provided new opportunities for vocational education. This system aims to enhance students' employability and career development capabilities by combining vocational skill level certificates with academic certificates. Particularly in finance majors, students need to master theoretical knowledge in finance and economics, as well as practical skills such as financial analysis and risk management. Thus, the "1+X" certificate system provides a clear direction for the teaching reform in finance majors.

The effective implementation of this system in vocational colleges' finance majors under the "1+X" background is an urgent issue. This not only concerns students' employment prospects but also impacts the talent supply and quality improvement in the entire financial industry. Researching the implementation of the "1+X" certificate system in vocational colleges' finance majors has significant practical and theoretical value.

1.2 Overview of the "1+X" Certificate System

The "1+X" certificate system refers to students obtaining academic certificates while also acquiring several vocational skill level certificates to enhance their professional abilities and employability. The core concept of this system is to promote students' holistic

development through a diversified evaluation system, meeting the market's demand for highly skilled talents.

For finance majors, the "1+X" certificate system requires students to master solid theoretical knowledge and possess strong practical skills and innovative thinking. For example, while completing foundational finance courses, students can choose to obtain vocational skill certificates such as Financial Management Specialist and Risk Management Specialist. These certificates typically include practical projects like case analysis and financial product design, aiming to enhance students' practical operational skills.

The implementation of the "1+X" certificate system not only helps students accumulate more practical experience during their studies and improve their employability but also provides more career opportunities through the social recognition of these certificates. This system allows students to better integrate theoretical knowledge with practical abilities, forming comprehensive professional qualities.

1.3 New Challenges in Vocational Education

Under the impetus of the "1+X" certificate system, vocational education faces new challenges. How to organically integrate the assessment content of vocational skill level certificates with curriculum teaching to avoid the "two-skin" phenomenon, where the assessment of vocational skill certificates and curriculum teaching content are disjointed, leading to students' confusion and inability to apply learned knowledge to practical operations. Therefore, vocational colleges need to reform their curriculum settings to ensure the close integration of theoretical teaching and practical training.

How to enhance students' learning interest and participation through innovative teaching models and cultivate their autonomous learning and practical abilities. Traditional teaching models often center on teachers, with students passively receiving knowledge and lacking opportunities for active participation. Vocational colleges need to introduce more interactive and practical teaching methods, such as project-based teaching, simulation experiments, and corporate training, to stimulate students' interest and enhance their practical abilities.

How to construct a scientific and reasonable

evaluation system that comprehensively reflects students' learning outcomes and professional abilities is also an urgent issue for vocational education. Traditional evaluation systems often focus on the assessment of theoretical knowledge, neglecting the evaluation of practical abilities and comprehensive qualities. Vocational colleges need to establish a diversified evaluation mechanism, including classroom performance, training outcomes, certificate assessment, and other aspects, to comprehensively evaluate students' comprehensive abilities.

Under the background of the "1+X" certificate system, vocational education needs comprehensive reforms in curriculum settings, teaching models, evaluation systems, and other aspects to better cultivate high-skilled financial talents that meet market demands.

1.4 Research Content and Main Issues

This study aims to explore the feasibility and effectiveness of implementing a blended teaching model of "Work-Course-Competition-Certification" in vocational colleges' finance majors under the "1+X" certificate system. The research includes: reviewing the current status of related teaching models domestically and internationally, constructing a teaching framework that meets the needs of contemporary financial talent cultivation, proposing design principles and implementation strategies for the blended teaching model, and evaluating and optimizing the model's implementation effects. The main issues include: how to organically combine job requirements, course content, competition practice, and certificate assessment, how to enhance students' vocational skills and comprehensive qualities through the blended teaching model, and how to construct a scientific and reasonable evaluation system.

2. Review of Domestic and International Research Status

2.1 Research Trends in Domestic Vocational Education Blended Teaching Models

Domestic vocational education has made significant progress in the research and practice of blended teaching models. With the deep development of "Internet+Education," blended teaching models have been widely applied in vocational colleges, promoting the

improvement of teaching quality and students' comprehensive qualities. Feng Chang (2022) pointed out in his research that under the TPACK framework in the information age, vocational courses, especially basic courses in cross-border e-commerce, can effectively enhance students' practical abilities and innovative thinking through blended teaching models. The TPACK (Technological Pedagogical Content Knowledge) framework emphasizes the integration of technology, pedagogy, and subject content. Feng Chang's research shows that through the combination of online learning platforms and physical classrooms, students can better understand the practical operations of cross-border e-commerce and enhance their ability to cope in actual work situations. Additionally, this model also promotes students' autonomous learning abilities and teamwork spirit. Hu Min (2020) explored the student-centered online-offline blended teaching model under the background of innovation and entrepreneurship, emphasizing the importance of students' subjectivity. In this model, the role of teachers shifts from knowledge transmitters to learning facilitators and promoters, with students becoming more active in the learning process. Hu Min's research shows that the blended teaching model can significantly improve students' learning interest and participation, cultivate their innovative thinking and practical abilities. Through project-based learning and case analysis, students can apply theoretical knowledge to solving practical problems, enhancing their entrepreneurial awareness and capabilities. Cheng Feng et al. (2023) studied the application of blended teaching in the reform of emergency medicine teaching models under the "Internet+" background, emphasizing the deep integration of technology and teaching. Emergency medicine teaching requires students to have rapid response and decision-making abilities. Cheng Feng et al. introduced virtual simulation technology and online simulation training, allowing students to practice in an environment close to reality, improving their emergency handling and clinical decision-making levels. The study shows that the blended teaching model not only enhances students' technical skills but also strengthens their psychological qualities and professional ethics. Wu Jiajie and Yang Zhou (2021)

explored the differentiated teaching reform under "Internet+Education," proposing teaching strategies that adapt to different learning needs. Different students have varying learning styles, interests, and foundations, and traditional "one-size-fits-all" teaching models cannot meet the needs of all students. Wu Jiajie and Yang Zhou provided personalized learning resources and support for students with different learning levels and needs through blended teaching models. For example, through online platforms, they offered rich learning materials and interactive tools, allowing students to choose suitable learning paths based on their own situations. The study shows that this differentiated teaching strategy effectively improves students' learning outcomes and satisfaction.

In summary, domestic vocational education has accumulated rich experience in the research and practice of blended teaching models. By organically combining online learning with traditional classroom teaching, vocational colleges can better meet students' personalized needs and enhance their comprehensive qualities and professional abilities. However, the implementation of blended teaching models still faces some challenges, such as teachers' information technology capabilities and the effective integration of teaching resources, which require further research and exploration. In the future, with the continuous advancement of technology and the update of educational concepts, blended teaching models will play a more important role in vocational education.

2.2 Overview of Foreign Vocational Education Blended Teaching Model Development

Foreign vocational education has an earlier start and rich experience in the research and practice of blended teaching models. Blended teaching models combine the advantages of traditional classroom teaching and online learning, enhancing students' learning effects and participation through diversified teaching methods and resources. Countries such as the United States, the United Kingdom, and Australia have widely applied blended teaching models in vocational education, achieving significant results.

In the United States, community colleges have improved students' learning flexibility and

autonomy through the combination of online and face-to-face courses. The U.S. vocational education system places great emphasis on students' practical abilities and applied skills, and blended teaching models play an important role in this process. Through online courses, students can conduct autonomous learning after class, review the knowledge learned in class, and interact with teachers through online discussions. Face-to-face courses enhance students' practical operational skills through simulation experiments and field visits. For example, some community college nursing courses combine online learning with face-to-face simulation training, allowing students to receive comprehensive training in both theory and practice. British vocational colleges enrich teaching content and forms through Virtual Learning Environments (VLE) and online resource libraries. The British VLE system provides students with a comprehensive platform where they can access classroom lectures, audiovisual resources, and participate in online discussions and quizzes. In addition, British vocational colleges provide students with rich learning materials through online resource libraries, including e-books, academic papers, case analyses, etc., greatly expanding students' knowledge base. For example, a business course at a British vocational college uses the VLE system to allow students to study and review anytime, anywhere, and also enhances students' practical operational skills and teamwork abilities through online simulated business activities. Australia's Vocational Education and Training (VET) system emphasizes practice-oriented education, enhancing students' vocational skills and employability through the combination of simulation training and online learning. Australian VET courses typically include a large amount of practical training content, and students gain practical work experience through simulated operations in a virtual environment. For example, an electrical engineering course at a technical college in Australia combines online learning platforms with field simulation training, allowing students to gain practical operational experience while mastering theoretical knowledge. In addition, the online learning platform also provides rich learning resources and interactive tools to help students better understand and apply what they have learned.

Foreign research on blended teaching is also rich. For example, researchers have analyzed the advantages and disadvantages of different teaching models through comparison and proposed optimization strategies. The successful application of blended teaching models not only relies on advanced technical means but also requires scientific teaching design and effective management strategies. These studies provide valuable experience and reference for domestic vocational education's blended teaching.

2.3 Theoretical Discussion and Practical Analysis of the "Work-Course-Competition-Certification" Model

The "Work-Course-Competition-Certification" four-in-one teaching model integrates job requirements, course content, competition practice, and certificate assessment, enhancing students' vocational skills and comprehensive qualities through diversified teaching methods and evaluation systems. This teaching model has received widespread attention and application in recent years, with many researchers conducting in-depth discussions and practical analyses.

Du Xinzhen et al. (2019) proposed the "four-in-one" blended teaching model, combining job requirements, course content, competition practice, and certificate assessment, aiming to cultivate applied financial talents. The study indicates that the "Work-Course-Competition-Certification" model integrates job requirements into course teaching, keeping students closely aligned with industry trends. Course content design emphasizes both theoretical knowledge and practical skills, fostering innovative thinking. For example, in finance courses, teachers use case studies and simulated trading to help students understand and apply their knowledge in practical settings. Li Xiang et al. (2022) validated the effectiveness of this model in the "Electrical Machines and Control Technology" course. Their research demonstrated that integrating industry standards and job requirements makes the curriculum more relevant and practical, enabling students to better understand and master the skills needed in their field. The competition practice component enhances practical skills and teamwork through simulated projects, while certification assessments, through authoritative validation,

boost students' employability. Chen Mengming (2022) explored a modular blended teaching model based on the "Think-Work-Certify-Compete" framework. This model emphasizes modular course design and diverse teaching methods, allowing students to choose learning paths that suit their needs, thereby enhancing flexibility and autonomy. Diverse teaching methods, such as case-based teaching, project-based learning, and simulation training, enable comprehensive development and improvement in various learning stages. Liu Yansong et al. (2022) examined the "four-in-one" blended teaching practice in IT courses at medical vocational colleges. They proposed strategies for integrating course content and evaluating teaching effectiveness. The study showed that combining job requirements, course content, competition practice, and certification assessments allows students to systematically grasp relevant knowledge and skills. Integration strategies include modular course design, diverse resource allocation, and flexible teaching methods. Evaluation methods encompass a multidimensional assessment system to comprehensively reflect students' learning outcomes and professional abilities. The "Work-Course-Competition-Certification" model effectively enhances students' vocational skills and comprehensive qualities through diversified teaching methods and scientific evaluation systems. With the continuous development of teaching technologies and educational concepts, this model will play an increasingly important role in vocational education, cultivating high-quality applied talents that meet market demands.

3. Theoretical Framework

3.1 Theoretical Foundations of Teaching Model Innovation

Innovating teaching models requires a solid theoretical foundation to ensure scientific and effective practices. Constructivist learning theory is a key foundation for teaching model innovation. It posits that learning is an active process of knowledge construction, where students interact with their environment to gradually build their knowledge systems. Constructivism emphasizes the learner's active role, suggesting that knowledge is not passively received but actively constructed

through interactions with the environment, tasks, and others. Blended teaching models, by integrating online and offline resources, provide diverse learning environments and resources that enhance students' autonomous learning abilities. Students can engage in self-directed online courses, internalize and apply knowledge through classroom discussions and practical activities, ultimately forming their own knowledge systems.

Social learning theory, on the other hand, emphasizes that learning is a social process, acquired through interaction with teachers and peers. It posits that learning is not just a cognitive activity but also a social one, where learners gain new knowledge and skills through observation, imitation, and internalization during interactions. Blended teaching models promote student interaction and collaboration through online discussions and cooperative learning, enhancing learning outcomes. For instance, online platforms enable students to participate in discussions, share resources, and collaborate on projects, deepening their understanding and application of knowledge through interaction. Additionally, teachers act as guides and facilitators, providing timely feedback and guidance to help students achieve their learning goals.

3.2 Connotation and Classification of Blended Teaching Models

The blended teaching model combines traditional classroom teaching with online learning, using diverse methods and resources to enhance student learning outcomes and engagement. Its essence lies in its flexibility and diversity, combining the interactive advantages of face-to-face teaching with the convenience and resource richness of online learning. Blended teaching models can be classified into the following types based on teaching content and methods:

Classroom-based with Online Supplementation: This model primarily relies on traditional classroom teaching, supplemented by online resources and activities. For example, teachers conduct knowledge lectures and discussions in class, while students use online platforms for review, homework submission, and online discussions. This model suits courses requiring extensive face-to-face interaction and practical operations, like lab and training courses.

Online-based with Classroom Supplementation:

This model predominantly uses online platforms for knowledge delivery and learning activities, with classroom sessions reserved for problem-solving and practical operations. For example, students undertake self-directed learning tasks like watching videos and online quizzes on the platform, while classroom time is used for discussing difficult points and practical exercises. This model fits theory-heavy courses requiring substantial self-directed learning, like foundational and professional knowledge courses.

Integrated Classroom and Online Learning: This model seamlessly integrates classroom teaching and online learning. Students pre-study via online platforms, engage in interactive discussions and practical exercises in class, and review and complete assignments online post-class. This model suits comprehensive learning and multi-feedback courses, like project-based and integrated practice courses.

Different blended teaching models suit varied teaching content and objectives. Teachers should choose and design based on specific circumstances to achieve optimal teaching effectiveness.

3.3 Theoretical Construction of the "Work-Course-Competition-Certification" Teaching Model

The theoretical construction of the "Work-Course-Competition-Certification" four-in-one teaching model requires the organic integration of job requirements, course content, competition practice, and certification assessment. This model enhances students' vocational skills and comprehensive qualities through diversified teaching methods and scientific evaluation systems.

Job Requirements: These refer to the knowledge and skills students need to master based on the actual demands of the finance industry. Vocational education aims to cultivate applied talents, so course design must closely align with industry needs. Collaborating with enterprises and industry associations to understand the latest job requirements and industry trends ensures that course content meets real-world job demands. For instance, in finance majors, job requirements might include financial analysis, risk management, and investment strategies.

Course Content: This involves designing

course content and objectives based on job requirements. The curriculum should cover core knowledge and skills needed for the job while emphasizing the integration of theory and practice. For example, a financial analysis course should teach the theoretical aspects of financial statement analysis and incorporate case studies and simulation exercises to enhance practical skills. Modular design ensures the curriculum is systematic and targeted, helping students comprehensively master relevant knowledge.

Competition Practice: Participating in various vocational skill competitions enhances students' practical abilities and innovative thinking. Competitions serve as a test of skill levels and a way to improve practical skills and creativity. For instance, finance students can engage in financial analysis and investment simulation competitions, applying their knowledge in real-world scenarios to solve problems and improve their abilities.

Certification Assessment: This involves evaluating students' learning outcomes and vocational abilities through vocational skill level certifications. Certification provides authoritative validation of students' skills, enhancing their employability. For finance majors, obtaining certifications like CFA (Chartered Financial Analyst) or FRM (Financial Risk Manager) boosts professional capabilities and market competitiveness. Certification assessments are not just skill tests but also significant career development aids.

Combining job requirements, course content, competition practice, and certification assessment to construct a scientific and rational "Work-Course-Competition-Certification" teaching model can comprehensively enhance students' vocational skills and comprehensive qualities. Its application in vocational education helps students better adapt to industry needs and improves employability, driving teaching reform and enhancing education quality in vocational colleges. With continuous advancements in educational technology and industry development, the "Work-Course-Competition-Certification" model will play an increasingly important role in vocational education.

4. Design of the "Work-Course-Competition-Certification" Teaching Model

4.1 Determination of Teaching Objectives

Teaching objectives are the starting point and destination of educational activities, serving as crucial guidelines for the teaching process and evaluation of teaching effectiveness. In the "Work-Course-Competition-Certification" teaching model, the determination of teaching objectives must closely align with the actual needs of the finance industry, ensuring that students acquire necessary knowledge and skills, along with good professional ethics and comprehensive qualities.

Knowledge Objectives: These involve the financial theoretical and professional knowledge students need to master. This includes, but is not limited to, financial market analysis, financial product design, risk management, and investment strategies. The setting of knowledge objectives ensures that students understand the basic principles and mechanisms of financial markets, master the design and evaluation methods of financial products, and grasp the basic strategies of risk management. For example, in a financial market analysis course, students should learn the fundamental methods of macroeconomic analysis, industry analysis, and company analysis, and be able to apply these methods to conduct in-depth analyses of financial markets.

Skill Objectives: These involve the practical operational abilities and professional skills students need to possess. These skills include, but are not limited to, financial analysis, investment decision-making, risk assessment, and financial instrument operation. The setting of skill objectives ensures that students can apply theoretical knowledge to real-world work situations and possess the ability to solve practical problems. For instance, in an investment decision-making course, students should be able to use financial analysis tools to evaluate investment projects and make rational investment decisions.

Quality Objectives: These involve the professional ethics and comprehensive qualities students need to develop. These qualities include, but are not limited to, professional ethics, communication skills, teamwork, and innovative thinking. The setting of quality objectives ensures that students can exhibit good professional conduct and comprehensive abilities in their careers. For example, in a professional ethics course,

students should understand and adhere to the professional ethics standards of the finance industry and possess good professional integrity.

By clearly defining knowledge objectives, skill objectives, and quality objectives, teaching activities can become more targeted and systematic, helping students comprehensively enhance their professional capabilities and comprehensive qualities.

4.2 Structural Design of Course Content

The structural design of course content is a core component of teaching model design, directly affecting teaching effectiveness and students' learning experiences. In the "Work-Course-Competition-Certification" teaching model, the structural design of course content needs to be based on teaching objectives, designing corresponding course content and teaching plans, and constructing a scientific and rational curriculum system.

Theoretical Courses: These involve the financial theoretical and professional knowledge students need to master. These courses include financial markets, financial engineering, investments, and risk management. The design of theoretical courses ensures that students can systematically grasp the basic theories and methods of finance, laying a solid foundation for subsequent practical and comprehensive courses. For example, in a financial markets course, students should learn the basic structure, operational mechanisms, and main participants of financial markets, understanding their functions and roles.

Practical Courses: These involve the practical operations and professional skills training students need to undergo. These courses include simulated trading, case analysis, and practical operations. The design of practical courses ensures that students can apply theoretical knowledge to actual operations, enhancing their practical skills and professional abilities. For instance, in a simulated trading course, students can use a simulated trading platform to trade financial products such as stocks, bonds, and futures, experiencing the real market environment and trading process.

Comprehensive Courses: These involve the professional skill competitions and certification assessments students need to

participate in. These courses include financial analysis competitions, investment simulation competitions, and vocational skill level certification assessments. The design of comprehensive courses ensures that students can showcase their professional skills and comprehensive qualities in competitions and assessments, enhancing their employability. For example, in a financial analysis competition, students need to apply their knowledge and skills to conduct in-depth analyses of financial markets and propose reasonable investment recommendations.

By organically integrating theoretical courses, practical courses, and comprehensive courses, a scientific and rational curriculum system can be constructed to comprehensively enhance students' professional skills and comprehensive qualities. This course structure design not only helps students better adapt to industry needs but also drives teaching reform in vocational education, improving education quality.

4.3 Application of Teaching Methods and Technologies

The application of teaching methods and technologies is a crucial component of teaching model design, directly impacting teaching effectiveness and students' learning experiences. In the "Work-Course-Competition-Certification" teaching model, the application of teaching methods and technologies needs to be based on course content and teaching objectives, selecting corresponding teaching methods and technological means to enhance students' learning interest and participation, and cultivate their autonomous learning and practical abilities.

Teaching Methods: These should include various forms such as lecturing, discussion, case analysis, and project-based teaching. Lecturing is suitable for imparting theoretical knowledge, helping students systematically grasp the basic theories and methods of finance. Discussion methods are suitable for cultivating students' critical thinking and communication skills, stimulating their learning interest and thinking abilities through group discussions and classroom debates. Case analysis methods are suitable for enhancing students' practical operational abilities and problem-solving skills, allowing them to better understand and apply their knowledge through analyzing real cases.

Project-based teaching methods are suitable for cultivating students' teamwork and innovative thinking, enabling them to learn and grow through completing actual projects.

Teaching Technologies: These should include various means such as multimedia technology, network technology, and virtual reality technology. Multimedia technology can enrich teaching content and forms, enhancing students' learning interest and participation through various forms such as videos, audios, and animations. Network technology can expand teaching space and time, allowing students to learn and review anytime and anywhere through online learning platforms. Virtual reality technology can provide immersive learning experiences, enabling students to conduct practical operations and skill training in virtual environments.

Through diverse teaching methods and technological means, students' learning interest and participation can be enhanced, and their autonomous learning and practical abilities can be cultivated. This application of teaching methods and technologies not only helps students better master knowledge and skills but also drives teaching reform in vocational education, improving education quality. In the future, with the continuous development of educational technology and teaching concepts, the application of teaching methods and technologies will play an increasingly important role in vocational education.

5. Implementation Strategies for the Teaching Model

5.1 Integration Strategy of Online and Offline Teaching Resources

The integration of online and offline teaching resources is crucial for the implementation of the blended teaching model. By integrating these resources, diverse learning environments and resources are provided to enhance students' learning outcomes and engagement. Online teaching resources should include various forms such as online courses, online discussions, and online tests, while offline resources should encompass classroom teaching, lab and field training, and vocational skill competitions. The organic combination of these resources builds a scientific and rational teaching model, enhancing students' vocational skills and comprehensive qualities.

5.2 Guidance and Management of Students' Learning Process

The guidance and management of students' learning process are essential for the implementation of the blended teaching model. Effective guidance and management, including the formulation of learning plans, monitoring of the learning process, and evaluation of learning outcomes, enhance students' learning effectiveness and engagement. Through scientific and rational guidance and management, students' autonomous learning and practical abilities are improved, fostering their professional ethics and comprehensive qualities.

5.3 Evaluation and Feedback Mechanism for Teaching Effectiveness

The evaluation and feedback mechanism for teaching effectiveness is a critical component of the blended teaching model implementation. By assessing and providing feedback on teaching effectiveness, the model's validity and scientific nature are verified, thereby enhancing teaching quality and outcomes. Evaluation and feedback should cover the assessment of students' learning outcomes, teachers' teaching effectiveness, and the optimization and improvement of the teaching model. A scientific and rational evaluation and feedback mechanism improves teaching quality and outcomes, driving teaching reform in vocational education.

6. Evaluation and Optimization of the Model

6.1 Evaluation System for the Implementation Effectiveness of the Teaching Model

The evaluation system for the implementation effectiveness of the teaching model is crucial for the optimization of the blended teaching model. By evaluating the model's implementation effectiveness, its validity and scientific nature are assessed, enhancing teaching quality and outcomes. The evaluation system should include the assessment of students' learning outcomes, teachers' teaching effectiveness, and the optimization and improvement of the teaching model. A scientific and rational evaluation system improves teaching quality and outcomes,

driving teaching reform in vocational education.

6.2 Theoretical and Practical Considerations for Model Optimization

Theoretical and practical considerations for model optimization are essential for the improvement of the blended teaching model. By reflecting on the model's theory and practice, scientific and rational optimization strategies and measures are proposed to enhance teaching quality and outcomes. Optimization strategies should cover the refinement of teaching objectives, curriculum content, and teaching methods and technologies. Through scientific and rational optimization strategies, teaching quality and outcomes are improved, driving teaching reform in vocational education.

6.3 Strategies and Measures for Continuous Improvement

Strategies and measures for continuous improvement are vital for the optimization of the blended teaching model. By continuously refining the model, teaching quality and outcomes are enhanced, driving teaching reform in vocational education. Improvement strategies should include the optimization of teaching objectives, curriculum content, and teaching methods and technologies. Through scientific and rational improvement strategies, teaching quality and outcomes are improved, driving teaching reform in vocational education.

7. Conclusion and Future Outlook

7.1 Research Conclusion

This study explores the "Work-Course-Competition-Certification" four-in-one blended teaching model for finance majors in vocational colleges under the "1+X" certificate system, proposing scientific and rational design principles and implementation strategies. The findings indicate that this model effectively enhances students' vocational skills and comprehensive qualities, aligning with the current demand for high-skilled talent in the finance industry. Additionally, the model contributes to driving teaching reform in vocational education, achieving deep integration between education and industry.

7.2 Theoretical and Practical Significance of the Research

The theoretical significance of this study lies in enriching the theoretical framework of vocational education teaching models through the exploration of the "Work-Course-Competition-Certification" model, enhancing the scientific nature and effectiveness of teaching models. The practical significance is demonstrated by the improvement of students' vocational skills and comprehensive qualities through the design and implementation of the teaching model, promoting teaching reform in vocational education, and achieving deep integration between education and industry.

7.3 Limitations and Future Directions of the Research

The limitation of this study is that the exploration of the teaching model is primarily based on theoretical analysis, lacking empirical research and case studies. Future research can further validate the model's effectiveness and scientific nature through empirical research and case studies, deepening and broadening the research. Additionally, future research can explore the application and promotion of the teaching model in other professional fields, driving comprehensive development in vocational education.

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