**Blended Teaching Reform and Practice of Chinese Cuisine Cooking Techniques Course Based on OBE Concept**

**ABSTRACT**

With the continuous development of vocational education, the blended teaching reform of Chinese Cuisine Cooking Technology course based on OBE concept has become a key means to improve teaching quality. This paper aims to explore how to optimize the teaching objectives, contents, methods and evaluation system of Chinese Cooking Technology course through blended teaching mode based on OBE concept. Through the analysis of the traditional teaching mode, it is found that there is a derailment between the course content and the industry demand, and the practical ability and innovative thinking of students need to be improved. The reform plan promotes the optimization of course content and the diversification of teaching methods through innovative teaching strategies, the construction of a diversified evaluation system, and the interface with industry development trends. Through the implementation of the teaching reform, students' skills mastery, teamwork and innovation ability have been significantly improved. The research results show that the blended teaching reform based on the OBE concept not only improves the comprehensive quality of students, but also enhances their ability to adapt to the development of the modern catering industry, which has high practical value and feasibility.

Keywords: OBE concept; blended teaching; curriculum reform; core literacy.

1. **INTRODUCTION**

With the continuous development of education concepts in the new era, the direction of teaching reform in vocational education has gradually changed to a student-oriented education model. the OBE (Outcomes-Based Education) concept, as an important direction of modern teaching reform, focuses on students' learning effectiveness and ability enhancement, and provides a new theoretical basis and methodological guidance for teaching practice. As the core course of Chinese Cuisine Culinary Technology, its teaching content is complex, changeable and practical, and the traditional teaching mode can't meet the diversified learning needs of students and the actual requirements of the industry development (Gao, 2021). Therefore, the blended teaching mode based on the OBE concept provides new opportunities and challenges for the teaching reform of the Chinese Cuisine Culinary Technology course (Li & Hsieh, 2004). By exploring the blended teaching method under the OBE concept, this study aims to improve students' practical ability and comprehensive literacy through the teaching mode of combining theory and practice, in order to promote the overall improvement of teaching quality.

1. **Analysis of the current teaching situation of Chinese Cooking Technology**

As a core course of the culinary profession, Chinese Cooking Technology has long played an important role in vocational colleges and universities. With the development of the times and changes in social demand, the traditional teaching mode is facing many challenges. Although the existing teaching system still focuses on the combination of basic theoretical knowledge and practical operation, there are still certain deficiencies in teaching methods, content setting, and teacher strength. At present, the content of the courses mostly focuses on teaching basic skills, but the cultivation of students' independent learning ability, innovation consciousness and comprehensive quality is still weak. At the same time, due to the limitations of teaching resources and the singularity of teaching methods, students' understanding and mastery of Chinese cooking techniques vary in the learning process. Therefore, analyzing the teaching status quo of Chinese Cuisine Cooking Technology and proposing corresponding reform measures for the existing problems have become the key to improve the teaching quality and cultivate high-quality talents in line with the needs of the industry.

* 1. **Deviation between the curriculum and the actual training direction, not shaping students' catering thinking ability**

In the current "Chinese cooking technology" curriculum, although the course content involves the basic theory of Chinese food, cooking skills and food culture, but in the specific teaching arrangements, there is still a certain deviation. The curriculum focuses more on teaching at the level of technical operation, emphasizing the training of students' cooking skills, while the cultivation of catering thinking ability is relatively weak. While mastering basic skills, students lack an in-depth understanding of the overall operation of the catering industry, innovative thinking and market demand. This makes students rely too much on traditional methods when completing culinary operations, and they lack a sense of innovation and the ability to respond flexibly to problems. Especially in the face of the diversified needs of the modern catering industry, students are often unable to effectively translate the knowledge and skills they have learned into practical solutions in the workplace. Therefore, the curriculum needs to be better integrated with the needs of the industry, focusing on cultivating students' catering thinking ability, so that they can form a more comprehensive catering vision and innovation ability on the basis of technical operation, and adapt to the rapid changes and development of the catering industry in the future .

* 1. **The curriculum content is not closely connected with the actual work scene, and needs to be optimized and adjusted urgently**

Although the course "Chinese Cuisine Cooking Technology" covers the basic theories and skills requirements of cooking to a certain extent, the connection with the actual working scenarios is still insufficient. The content of the course focuses more on single cooking skills and operation steps, and fails to fully consider the complex and changing working environment and its actual needs in the catering industry. In the actual catering service, chefs not only need to master basic cooking skills, but also need to have the ability of efficient teamwork, innovative dish design and rapid response to solve problems. However, the traditional curriculum focuses too much on the repetitive training of skills and neglects how to flexibly apply these skills to actual work, especially in dealing with changes in customer demand, coping with work pressure during peak hours and other situations, students often lack the appropriate preparation and coping strategies.

In addition, the course covers less comprehensive content on management of the catering industry, menu design, cost control, etc. This has led to the fact that although students can master some cooking skills during the learning process, it is difficult for them to apply these skills to real work scenarios and to understand the business logic and operation process behind the cooking techniques. Therefore, there is an urgent need to optimize and adjust the course content of Chinese Cuisine Cooking Technology to be more in line with the actual working scenarios, to enhance students' vocational adaptability through simulating the real working environment, introducing lectures by industry experts, and strengthening internships and practical training, and to cultivate their comprehensive resilience in the complex catering environment.

* 1. **Lecture-type teaching is not interactive enough, and more practical inquiry links need to be integrated**

At present, many vocational colleges and universities still adopt the traditional didactic teaching method for the "Chinese Cooking Technology" course, in which teachers teach cooking knowledge and skills through classroom explanations and demonstrations. However, this teacher-centered one-way teaching mode lacks interaction and feedback with students, which easily leads to insufficient active learning. In actual teaching, students are often in the state of passive acceptance of knowledge, and the classroom atmosphere is relatively single, which is difficult to stimulate students' interest in learning and enthusiasm for participation. In addition, students' understanding of cooking technology often stays on the surface and lacks in-depth thinking about the principles and innovative applications behind the technology.

In order to improve the teaching effect, classroom teaching should gradually get rid of the single lecture mode, and integrate more practice and inquiry. Through situational simulation, group cooperation, case study and other ways, students' active learning and thinking ability can be stimulated. For example, while teaching cooking techniques, students can be allowed to explore and practice in groups, encouraging them to find problems and propose solutions in actual operation. At the same time, students are guided to design and produce innovative dishes in combination with what they have learned in the classroom, so as to cultivate their critical thinking and practical problem solving ability. Through more interaction and practice, students can not only improve their hands on skills, but also enhance their understanding of the principles behind cooking techniques, so that they can better transform what they have learned into practical abilities.

* 1. **The evaluation system of the course still adopts the written test, which is difficult to effectively assess students' practical and innovative ability**

At present, the evaluation system of the Chinese Cooking Technology course is still based on the written test, which is mainly used to assess students' learning outcomes through the written test. Although this evaluation method can examine students' mastery of theoretical knowledge, it cannot fully reflect students' performance and innovation ability in practice. In the highly practical subject of cooking, students' skill level and innovative thinking are often reflected in actual operation, while the traditional written examination form focuses more on the assessment of basic theory, making it difficult to assess students' actual cooking ability, the ability to design innovative dishes, and the ability to cope with unexpected situations.

Therefore, the existing evaluation system fails to accurately measure students' comprehensive ability in real work situations, especially in the face of complex cooking tasks, students' flexibility of thinking, operational efficiency and creativity often can not be reflected by the written test. For this reason, the evaluation system of the course needs to be optimized and adjusted, and practical evaluation methods, such as operational tests, dish creation and presentation, project training reports, etc., should be gradually introduced to comprehensively assess the students' hands-on ability and innovation ability. At the same time, students can be encouraged to self-reflect and learn from each other through the introduction of peer review, teacher feedback and other multi-dimensional evaluation means to enhance their practical ability and teamwork spirit. Through this diversified evaluation system, students' comprehensive quality can be reflected more comprehensively and objectively, laying a solid foundation for their development in the future catering industry.

1. **Blended Teaching Reform of Chinese Cuisine Cooking Technology Course Based on OBE Concepts**
	1. **The effectiveness of combining OBE and blended**

Under the background of modern education reform, the combination of OBE (Outcome-Based Education) concept and blended teaching mode provides a new opportunity for the teaching reform of Chinese Cuisine Cooking Technology course. OBE concept emphasizes the measurability of students' learning outcomes and focuses on the cultivation of students' abilities in real work scenarios, whereas blended teaching can effectively make up for the traditional teaching mode's weaknesses by providing flexible and diversified learning modes through the combination of online and offline teaching resources, and can effectively compensate for the traditional teaching mode's weaknesses. Blended teaching, by combining online and offline teaching resources, provides flexible and diversified learning methods, which can effectively make up for the shortcomings of traditional teaching mode. The combination of the two makes teaching no longer limited to a single classroom teaching, but through diverse learning paths to help students realize in-depth understanding of knowledge and comprehensive improvement of skills in a flexible learning environment.

Specifically, the OBE concept emphasizes the comprehensive ability of students in terms of knowledge, skills and quality, and focuses on the alignment between the setting of curriculum objectives and the actual outcomes of students. Blended teaching, on the other hand, through the combination of online learning platform and offline practice, enables students to review, supplement and expand their knowledge anytime and anywhere on the basis of theoretical learning, and at the same time, further consolidate their skills and cultivate their ability to solve practical problems through offline practice activities. Blended teaching not only meets the learning needs of different students and stimulates their enthusiasm for independent learning, but also enhances their practical ability and innovative consciousness through extracurricular practice and project-based learning.The combination of OBE and blended teaching makes students' learning outcomes not only reflected in classroom exams, but also through the real operational performance and actual innovative achievements, ensuring that students can cope with complex work in their future career. The combination of OBE and blended teaching enables students' learning outcomes to be reflected not only in classroom examinations, but also through real operational performance and practical innovation, ensuring that students can cope with complex challenges in their future careers and have strong professional competitiveness.

* 1. **Teaching Reform Ideas of Chinese Cuisine Cooking Technology Course**

The teaching reform idea of Chinese Cooking Technology should be centered on improving students' comprehensive ability, especially practical ability and innovation ability. Under the current traditional teaching mode, although the content of the course covers the basic skills of Chinese cooking, it lacks the cultivation of students' comprehensive quality, especially the catering thinking ability, innovative design ability and the ability to adapt to future changes in the industry. Therefore, the blended teaching reform based on the OBE concept should be comprehensively optimized in terms of course structure, teaching methods and evaluation system. The core objective of the reform is to realize the effective combination of theory and practice, focusing on cultivating students' practical operation ability and the ability to solve practical problems, and at the same time stimulating students' innovative thinking and independent learning ability through flexible teaching methods and diversified evaluation methods. On this basis, the course will pay more attention to the docking of industry demands and vocational standards, emphasizing students' learning and practice in real work scenarios to better adapt to the rapid changes and development of the catering industry.

* + 1. **Docking to industry development trend, dynamic optimization of course positioning**

With the continuous development of the catering industry and the diversification of consumer demand, Chinese cooking technology is also developing in the direction of higher level and more refined. In order to ensure that the Chinese Cuisine Cooking Technology course can keep pace with the development of the industry, the course positioning must keep up with the changes in the industry and be dynamically optimized. This means that the course content should not only cover traditional cooking skills, but also fully incorporate emerging technologies and trends in the industry, such as healthy eating concepts, nutritional matching, innovative application of ingredients and modern restaurant management. By accurately grasping the development trend of the industry, the course can adjust the teaching focus in time to ensure that the knowledge and skills learned by the students are in line with the current needs and development direction of the catering industry.

In addition, with the growing demand for high-quality professionals in the modern catering industry, the positioning of the course not only focuses on the transfer of skills, but also strengthens the cultivation of students' innovation ability, service consciousness, teamwork ability and management thinking. Through in-depth cooperation with industry-related enterprises, catering experts, etc., to carry out internship training, industry research and other activities, so that the course content is more in line with the actual needs of the work, and enhance the competitiveness of the students' employment. The dynamic optimization of the curriculum should also take into account the technological changes in the development of the industry, such as the application of artificial intelligence, big data and other applications in the catering industry, and introduce relevant knowledge in a timely manner, so as to provide students with comprehensive and cutting-edge industry information. In short, the teaching reform of the "Chinese Cuisine Cooking Technology" course must be closely integrated with the development trend of the industry to ensure that the content of the course is always at the forefront of the times, and to cultivate high-quality talents who are able to adapt to the changes in the catering industry in the future.

* + 1. **Break through the traditional indoctrination mode, create contextualized teaching modules**

The traditional teaching mode often focuses on the teacher's knowledge transfer and skills indoctrination, students in this mode are usually in a passive state of accepting knowledge, lack of active exploration and practice opportunities. In the teaching reform of "Chinese Cooking Technology" course, breaking through the traditional indoctrination teaching mode and creating contextualized teaching modules can effectively enhance students' participation and practical ability. Contextualized teaching emphasizes placing students in real or simulated work environments and promoting learning through practical operations and problem solving. This teaching method not only allows students to feel the actual needs of the catering industry in the learning process, but also helps them to combine theoretical knowledge with practical skills to enhance their comprehensive quality. For example, in classroom teaching, you can simulate the kitchen operation, menu design, meal innovation and other work scenes by designing industry-related case scenarios, so that students can participate in the actual work through teamwork, role-playing, problem solving and other ways. These contextualized modules not only help students understand the application of culinary techniques, but also develop their ability to solve complex problems, think creatively and collaborate with others. In this way, students can not only acquire knowledge in the classroom, but also improve their professionalism through practical operation and contextualized experience, and enhance their resilience and competitiveness when they enter the catering industry in the future.

The creation of contextualized teaching modules can effectively overcome the limitations of the traditional teaching mode and make the learning process of students more vivid, flexible and practical, so as to better cultivate their practical ability and innovation ability, and lay a solid foundation for future career development.

* + 1. **Cultivate students' core qualities by focusing on students' development**

The teaching reform of Chinese Cuisine Cooking Technology should be centered on students' development, focusing on cultivating students' core literacy, not only focusing on the teaching of skills, but also promoting the enhancement of students' comprehensive ability. The curriculum design should focus on the cultivation of students' innovation ability, problem solving ability, professionalism and teamwork ability. Through contextualized teaching and project-driven approaches, students are guided to closely integrate what they have learned with actual work demands, and develop their ability to cope with challenges in complex work environments. In addition, the course should also stimulate students' sense of independent learning and cultivate their ability for lifelong learning to ensure that students can maintain their competitiveness in the rapidly developing catering industry. Ultimately, through such a reform, students will not only master Chinese cooking techniques, but also have the core literacy to adapt to industry changes and promote innovation, laying a solid foundation for their future career development.

* + 1. **Strengthen the process-based evaluation system and establish a multi-dimensional assessment framework**

In the teaching reform of the Chinese Cooking Technology course, the traditional summative evaluation system should be transformed into a model that pays more attention to process evaluation in order to assess students' learning outcomes more comprehensively. Process evaluation can better reflect students' actual ability and growth trajectory through continuous tracking and feedback on their performance in the learning process. Courses should construct a multi-dimensional assessment framework, taking into account multiple dimensions such as students' performance in practical operations, the effectiveness of teamwork, the demonstration of innovative thinking and the motivation for independent learning. Through classroom observation, project assignments, practice reports, peer evaluation and other means, we can ensure that the evaluation is not only limited to the mastery of skills, but also covers the comprehensive quality and vocational ability of students, and promote the balanced development of students in all aspects. This evaluation system can not only stimulate students' learning motivation, but also help teachers adjust their teaching strategies in time to ensure the realization of teaching goals.

* 1. **Teaching Reform Implementation Cases**

In the teaching reform of the "Chinese Cooking Technology" course, the design and application of the implementation case is a key link in the reform process. Through specific cases of teaching reform, it is possible to demonstrate more intuitively how to combine the OBE concept with the blended teaching mode and realize the effective achievement of the course objectives. These cases not only involve the adjustment of course content and teaching methods, but also include the improvement of the evaluation system, student participation and the optimization of teaching resources. By analyzing specific cases, they can help teachers better understand the implementation path of the reform, and at the same time provide other educational institutions with experiences and operational suggestions that can be drawn upon. Various implementation cases also provide students with the space for practice and innovation, so that they can truly combine theory and practice in a dynamic learning environment, and enhance their practical working ability and industry adaptability.

* + 1. **Teaching Objective Setting**

In the teaching reform of the Chinese Cuisine Cooking Technology course, the setting of teaching objectives should be closely centered on the learning outcomes of students and the needs of the industry. According to the OBE concept, the objectives of the course should not only focus on students' mastery of cooking skills, but also emphasize students' comprehensive development in innovation, problem solving and teamwork. The teaching objectives should be specific and quantifiable, and be able to clarify the level of knowledge, skills and quality that students should achieve at the end of the course. At the same time, the setting of objectives should take into account the actual situation of students at different learning stages to ensure the rationality and operability of the objectives. By connecting the teaching objectives with the industry standards and vocational needs, the program can better prepare students to enter the catering industry, with the necessary vocational literacy and the ability to adapt to changes, as shown in Figure 1.

**Fig.1. Comparison of Teaching Objectives of “Chinese Cooking Technology” Course**

* + 1. **Teaching content design**

In the teaching reform of Chinese Cooking Technology, the design of teaching content should focus on the organic combination of theory and practice, and optimize around the comprehensive cultivation of students' ability. The teaching content should not only cover traditional cooking techniques and skills, but also incorporate knowledge and skills at the forefront of the industry, such as the concept of healthy diet, the innovative application of ingredients, catering management and the basis of nutrition, etc., in order to adapt to the changes and needs of the industry. The course content should be designed in phases and modules, from the cultivation of basic skills to the mastery of advanced culinary skills, and then to the design and practice of innovative dishes, to ensure that students can progress in layers and gradually improve throughout the learning process. At the same time, through contextualized teaching design, students are placed in a simulated actual working environment, which helps them understand the application background of skills and industry requirements, and promotes the transformation of students' theoretical knowledge and the enhancement of their practical operation ability. The continuous updating and adjustment of teaching content will ensure that the course keeps pace with the times and cultivates high-quality talents who meet the development needs of the future catering industry, as shown in Figure 2.

**Fig. 2. Distribution of the content modules of the course “Chinese Cuisine Cooking Technology”**

* + 1. **Teaching Strategy Implementation**

In the teaching reform of the Chinese Cooking Technology course, the implementation of teaching strategies should focus on flexible and diverse teaching methods to adapt to the learning needs and development goals of different students. Through the blended teaching mode, combining the advantages of online and offline, teachers can provide theoretical courses and resources through online platforms, online interactions and discussions to promote students' independent learning, while offline deepen students' understanding and application of knowledge through practical operations and situational simulations. During the teaching process, teachers are not only the transmitters of knowledge, but also the guides and supporters of learning. By designing diversified learning activities, such as group cooperation, task-driven, and project-based learning, students are encouraged to take the initiative to participate and to enhance their problem-solving and innovative abilities. Through continuous adjustment of teaching strategies, students are encouraged to accumulate experience in practice, and through continuous feedback and assessment, we ensure that students' learning outcomes are closely aligned with industry requirements and the enhancement of their practical abilities.

* + 1. **Assessment and Evaluation System**

In the teaching reform of Chinese Cooking Technology, the design of the assessment and evaluation system should emphasize comprehensiveness and diversity to ensure that it can truly reflect the students' performance in knowledge mastery, skill application and comprehensive quality. The traditional written test evaluation method is no longer able to comprehensively assess students' practical ability and innovative thinking, therefore, the course assessment should incorporate the performance of practical operation, innovative projects, teamwork, extracurricular practice and other multi-dimensional performance into the evaluation system. Through project evaluation, practical operation test, peer review, teacher feedback and other methods, the assessment not only examines the students' cooking skill level, but also evaluates their ability to solve practical problems and innovative thinking. Such an evaluation system can motivate students to continuously improve themselves in the learning process and lay a solid foundation for their career development after entering the catering industry.

* 1. **Evaluation of Teaching Reform Achievements**

The evaluation of the results of the teaching reform of Chinese Cuisine Cooking Technology should take into account the achievement of teaching objectives, the enhancement of students' ability and the improvement of teaching quality. The effectiveness of teaching reform can be clarified through the assessment of students' actual performance, innovation ability and comprehensive quality in the course. The evaluation not only relies on traditional examination results, but should also be measured comprehensively through multi-dimensional data such as students' practical operation, project results and teamwork performance. In addition, students' employment rate, industry recognition and enterprise feedback can also be used as an effective measure of the reform effect. Through the continuous feedback mechanism, teachers can continuously optimize the teaching strategies and contents to ensure that the curriculum reform continuously adapts to the development needs of the industry, and at the same time provide students with more practical and forward-looking vocational skills training, as shown in Figure 3.

**Fig. 3. Changes in students' comprehensive quality before and after teaching reforms**

1. **CONCLUSION**

The blended teaching reform of the Chinese Cuisine Cooking Technology course, based on the OBE concept, aims to improve students' practical ability, innovative thinking and comprehensive quality by optimizing the teaching content, methods and evaluation system. The implementation of the reform not only improves students' level in skill operation, but also pays more attention to the cultivation of their professionalism and industry adaptability. The exploration and practice of this teaching mode provides new ideas and methods for vocational education, and also cultivates more professionals with high quality and innovative spirit for the catering industry. In the future, with the deepening of teaching reform and changes in industry demand, the course content and teaching strategy will be further optimized and adjusted to better adapt to the development of the times and provide a more solid foundation for students' career.

**DISCLAIMER (ARTIFICIAL INTELLIGENCE)**

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of this manuscript.

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