Research on the Reform Path of Teaching "Fundamentals of Chinese-style Pastry" Course Based on the Cultivation of Innovative Practice Ability

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Abstract: This article explores the integration of cultivating innovative practice abilities into the teaching of the "Fundamentals of Chinese-style Pastry" course, proposing a reform approach for instruction. This method enables teachers to subtly integrate the development of innovative practice abilities while guiding students in acquiring basic knowledge and practicing fundamental skills in the cooking process of Chinese-style pastry. By emphasizing professional knowledge and skills as the foundation of learning, students can systematically enhance their innovative practice abilities. This systematic cultivation aims to be highly focused on specific development objectives, operationally feasible throughout the cultivation process, and effective in various dimensions and pathways.

1. Introduction

Article 5 of China's "Higher Education Law" clearly states: "The mission of higher education is to cultivate advanced specialized talents with innovative spirit and practical abilities." This undoubtedly sets the direction for the development of higher education, emphasizing the importance of cultivating professional and technical talents with innovative spirit and practical abilities. Under the guidance of the "Higher Education Law," how to cultivate vocational students' innovation awareness and innovation abilities has become a research focus for many experts, teachers, and educational administrators. Multiple surveys and studies have shown that vocational college students in China generally lack strong innovation awareness, have inactive innovative thinking, low innovation skills, and weak innovation foundations. However, today innovation has become an indispensable core competency in various industries, including culinary professionals. The existence of these issues not only hinders innovation and development in the culinary industry but also affects students' personal development [1-3].

In culinary education, the cultivation of innovative practice abilities should be based on the professional development needs of students, aiming to help them establish innovative practice abilities in culinary recipe development based on professional knowledge and skills, kitchen management method innovation, and other aspects. The cultivation of this ability requires the integration of innovative practice content into professional courses, allowing students to exercise
their innovative thinking and innovative practice abilities while mastering professional knowledge and practicing professional skills. Integrating the cultivation of students' innovative practice abilities into professional courses is an important path for the integration of professional and innovative practice abilities training. It provides a professional foundation for the cultivation of innovative practice abilities, addressing shortcomings in previous models of cultivating students' innovative practice abilities, such as hollow content, poor professional applicability, and lack of a comprehensive training system. This ensures that the cultivation of students' innovative practice abilities can truly be implemented and serve their future professional development [4-6].

This article will take the "Fundamentals of Chinese-style Pastry" course as an example to analyze the significance of cultivating students' innovative practice abilities in culinary practice course instruction and discuss the cultivation goals, pathways, evaluation methods, etc., for cultivating students' innovative practice abilities in culinary practice course instruction.

2. Course Overview

The course "Fundamentals of Chinese-style Pastry" is a compulsory foundational course for students specializing in Chinese and Western pastry arts within the hospitality and tourism sector of higher vocational education. It is centered on the theoretical knowledge of Chinese-style pastries and aims to equip students with essential operational skills in Chinese pastry making, including the use of common tools, dough preparation, and key techniques in Chinese pastry production, expanding on their comprehension of Chinese pastry theory. By completing this course, students in the field of Chinese and Western pastry arts will gain an understanding of the evolution of Chinese pastries, diverse regional pastry flavors, industry trends, and will acquire essential theoretical knowledge and basic skills in Chinese pastry production. This course establishes a robust theoretical and practical foundation for future modules focusing on Chinese pastry making.

The fusion of innovative practical skills with professional training is of great importance in contemporary higher education. By incorporating the "Fundamentals of Chinese-style Pastry" course, blending the development of innovative skills with the expertise in Chinese pastry making, students can enhance their proficiency and adaptability in the field. This integration enables students to gain a more comprehensive and industry-focused improvement in their innovative skills. Utilizing the "Fundamentals of Chinese-style Pastry" course for enhancing students' innovative skills aids in better comprehension and application of the professional knowledge in Chinese pastry making, fosters creativity, problem-solving skills, and boosts flexibility and creativity for future endeavors. Moreover, such training based on professional expertise enhances students' teamwork and communication skills, preparing them for varied work environments. In conclusion, the amalgamation of innovative skills with knowledge and skills in Chinese pastry making significantly enhances students' overall competency.

3. Cultivation Objectives and Pathways for Educational Reform

3.1. Cultivation Objectives

Through thorough research on the demands of innovative Chinese pastry professionals in the catering sector and the necessities for preserving and advancing Chinese pastry, the general aim of developing the innovative skills of professional Chinese pastry experts is determined. Subsequently, aligning with the core features of the "Fundamentals of Chinese-style Pastry" course, the fundamental objectives for nurturing the innovative skills of professional Chinese pastry experts are delineated within the existing framework.

Chinese pastry professionals must possess a comprehensive professional knowledge system,
critical for career development and fostering innovative thinking. By mastering basic skills, students can blend traditional elements with modern techniques to create unique pastry design and production concepts. Cultivating innovative practice abilities should emphasize boosting teamwork awareness to adapt to the collaborative work model prevalent in the culinary industry. It is vital to also break free from traditional educational constraints, awaken students' innovation consciousness, and establish the intellectual groundwork for developing innovative practice abilities. In the fast-evolving knowledge economy and technological landscape, lifelong learning has become crucial for nurturing innovative practice abilities, enabling students to keep abreast of industry changes and technological advancements. To navigate the emergence of new culinary trends, expanding professional perspectives and nurturing innovative practice abilities are essential for students in the Chinese pastry field. This approach empowers students to fully comprehend industry development trends, ignite their learning motivation, and elevate their professional practice capabilities.

3.2. Pathways for Educational Reform

The entire process of fostering the innovative practical skills of Chinese pastry professionals is integrated throughout the course "Fundamentals of Chinese-style Pastry". This integration allows for the development of students' innovative practical abilities to begin simultaneously with acquiring the fundamental knowledge and skills of Chinese pastry professionals, establishing a foundation of professional knowledge and skills for shaping innovative practical capabilities.

3.2.1. Integrating Online and Offline Teaching for Learning Habits Cultivation

To address the modern students' dual needs for traditional craftsmanship and innovative practices, we have implemented a blended teaching approach that integrates online and offline methods, using the "Fundamentals of Chinese-style Pastry" course as an illustration. By leveraging existing teaching resources, we aim to offer students a more comprehensive and profound learning journey.

Prior to classes, we leverage an online learning platform to assign pre-learning tasks, encouraging students to preview course materials. These tasks include watching instructional videos, reading relevant literature, and participating in online discussions to establish a foundational understanding of Chinese pastry theory and skills. This preparation enables students to identify questions and challenges in advance, facilitating deeper exploration during class sessions. During classes, we prioritize the development of students' practical skills and innovation mindset. Through live demonstrations, interactive Q&A sessions, and group discussions, we aim to ignite students' interest and involvement in learning. Furthermore, we foster an environment where students are encouraged to ask questions, engage in profound discussions, and exchange ideas with both peers and instructors. This interactive approach not only enhances students' comprehension of Chinese pastry-making techniques but also cultivates their practical abilities and creativity. Post-classes, we provide review materials and practice exercises to help students reinforce their understanding and establish a structured learning framework. Additionally, we maintain active communication with students through online platforms, addressing their queries promptly and offering tailored learning guidance. This continuous support aids students in progressing consistently on their Chinese pastry learning journey.

By employing the blended teaching model, we have effectively supported students in forming strong learning habits, laying a robust groundwork for advanced studies in Chinese pastry and the development of innovative practical skills. We are confident that this educational approach not only enhances students' professional capabilities and practical skills but also contributes positively to the preservation and propagation of Chinese culinary culture.
3.2.2. Highlighting student-centered approach to inspire inquiry-based learning

In teaching the "Fundamentals of Chinese-style Pastry" course, we prioritize a student-centered approach that values and encourages students' active engagement in professional learning and innovative practices. Before classes, instructors engage students by providing pre-learning materials, posing guided questions, and sharing historical backgrounds, cultural insights, or demonstrations of traditional Chinese pastry-making processes. This method fosters student curiosity and readiness for classroom activities. During classes, diverse teaching activities such as knowledge exploration, thematic discussions, and skill development are designed to spark students' enthusiasm and curiosity for inquiry. Beyond the classroom, teachers connect theoretical learning with real-world applications by assigning practical tasks and organizing activities that enhance skills through hands-on practice.

Through a blend of pre-class, in-class, and post-class teaching strategies, we guide students to willingly participate in fostering their professional and innovative skills, gradually cultivating their inquiry capabilities. This instructional approach not only enhances students' understanding and proficiency in Chinese pastry making but also supports their continuous personal growth and self-worth. To summarize, centering students and empowering their active involvement are the fundamental principles of teaching the "Fundamentals of Chinese-style Pastry" course. By carefully crafting teaching activities, promoting student engagement, and emphasizing practical application, we can effectively pique students' interest, fuel their curiosity, develop their professional skills, and establish a strong foundation for their future endeavors.

3.2.3. Implementing a group learning model to cultivate team consciousness

Throughout the teaching process, our focus extends beyond honing students' pastry-making skills to enhancing their teamwork and collaboration abilities through a series of inquiry-based learning tasks. This methodology aims to unearth students' leadership potential within a team, fostering a robust team consciousness and supplying methodological support for developing innovative practical skills in the future. To realize this objective, we have curated a range of inquiry-based learning tasks necessitating team collaboration. These tasks encompass fundamental pastry-making techniques to pioneering pastry product development.

By engaging students in activities like group discussions, inquiries, and skill practices, we facilitate learning through practical application and vice versa, thus nurturing teamwork, collaboration, and cultivating their innovation mindset. During group discussion sessions, students are encouraged to actively voice their opinions and share their pastry-making experiences and insights. These discussions not only deepen comprehension of pastry-making techniques but also cultivate communication and teamwork skills, enhancing their collaborative aptitudes. In group inquiry sessions, students are guided to delve into in-depth research on specific pastry products or techniques and propose enhancement strategies. This inquiry process not only deepens students' understanding of pastry-making principles and methods but also stimulates their innovative thinking and problem-solving skills. In group skill practice sessions, students engage in hands-on pastry-making exercises, refining their mastery of techniques and bolstering practical skills.

By partaking in these team teaching activities, students not only acquire foundational Chinese pastry-making skills but also fortify their team consciousness, teamwork capabilities, and innovative practical prowess. These proficiencies not only enrich students' academic endeavors but also positively impact their future career trajectories.

3.2.4. Encouraging autonomous learning to enhance innovation capability

We have implemented a blended learning approach that integrates online and offline methods,
along with a student-centered inquiry-based learning model, to not only enhance students' learning but also foster their skills in autonomous learning and innovation.

The blended learning method maximizes the benefits of modern technology, offering a flexible and diverse teaching approach. Online resources such as video tutorials, lectures, and interactive Q&A sessions are provided for students to access anytime and anywhere. In the offline component, practical exercises, group discussions, and teacher guidance are utilized to deepen students' understanding and mastery of traditional Chinese pastry-making techniques. Emphasizing student autonomy, we encourage active participation in inquiry-based learning, where students search for information, explore knowledge, practice skills, and solve problems through collaborative teamwork. This approach not only cultivates autonomous learning habits but also enhances teamwork and innovation capabilities. Students are encouraged to experiment with new pastry-making methods and flavors to stimulate divergent thinking and enhance cognitive abilities. These skills and mindset are crucial for students to continually demonstrate innovative practices in their future academic and professional pursuits. Furthermore, critical thinking and problem-solving skills are emphasized to help students adapt effectively to complex and dynamic work environments.

In the "Fundamentals of Traditional Chinese Pastries" course, we aim to not only impart knowledge but also nurture students' abilities for autonomous learning and innovation. We strongly believe that this teaching method will establish a strong foundation for students' future endeavors, assisting them in becoming exceptional individuals with an innovative spirit and practical skills.

4. Assessment of Learning Effectiveness

After fostering students' innovative practice ability in the "Fundamentals of Chinese-style Pastry" course, a blended evaluation approach of "process evaluation + outcome evaluation" is employed by multiple evaluators to gauge the efficacy of nurturing students' innovativeness. Process evaluation entails ongoing assessment and monitoring of students' performance and advancement during their learning journey. By evaluating students' problem-solving skills, classroom engagement, critical thinking, and teamwork demonstrated in class activities, a comprehensive assessment of students' endeavors, progress, and growth in enhancing their innovative practice ability in the "Fundamentals of Chinese-style Pastry" course is conducted. This exercise aims to oversee the evolution of students' innovative practice ability throughout the course and optimize the effectiveness of nurturing such abilities by adapting the cultivation strategies as necessary. Outcome evaluation, on the other hand, involves appraising students' knowledge, competencies, and skills acquired post-learning.

Through integrating the evaluation of students' innovative practice ability into the final theoretical and practical assessments, the impact of developing students' innovative practice ability over a semester is examined to ascertain whether they have attained the anticipated outcomes in improving their innovativeness in the "Fundamentals of Chinese-style Pastry" course.

5. Conclusions

In the rapidly expanding catering industry of today, the cultivation of students' innovative practice ability in culinary practice courses has become crucial. This process allows students to enhance their skills in alignment with industry expectations while laying a strong foundation for their future professional growth. The targeted development of students' innovative practice ability within professional courses is poised to serve as a key platform for skill enhancement. Culinary program instructors orchestrate a series of classroom activities to aid students in gradually honing innovative practice skills relevant to the culinary field. By integrating students' innovative practice ability with professional knowledge and skills, educators can effectively nurture students'
innovative practice abilities within culinary programs.

Integrating the cultivation of innovative practice ability tailored to the content of the "Fundamentals of Chinese-style Pastry" course can introduce students to cultivating this skill early in their exposure to the Chinese pastry industry. This approach sets the stage for developing students’ innovative practice abilities by blending innovative awareness, teamwork consciousness, innovative thinking patterns, and fundamental Chinese pastry knowledge and skills. This amalgamated approach to cultivating innovative practice ability alongside professional practice courses can embed innovative practice abilities into students’ professional qualities in Chinese pastry, instilling the concept of innovation in students’ minds and building the groundwork for them to evolve into forward-thinking, pioneering, and creative culinary professionals.

Cultivating innovative practice ability represents a significant objective in the training of future advanced culinary professionals. In forthcoming culinary education, students should be afforded ample room for creativity, encouraged to think creatively, explore, develop problem-solving skills, build confidence in resolving innovative challenges, and foster teamwork. These efforts will drive continuous enhancement of students’ innovative practice abilities within the culinary domain.

In conclusion, integrating the development of innovative practice ability with culinary education effectively nurtures students’ innovative practice skills. These initiatives not only stimulate students’ creativity and exploratory spirit but also bolster their problem-solving, teamwork, and practical proficiencies. With such guidance, it is anticipated that students will grow into innovative culinary professionals with forward-thinking, pioneering, and creative attributes, contributing to the legacy and advancements in Chinese culinary arts and the innovation of the catering industry.

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