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Research on the Mode Based on Mixed Practice Teaching—Take the Course of Coffee Making and Tasting as an Example

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Abstract: This paper takes the course "Coffee Making and Tasting" as an example to explore the hybrid practical teaching model. Through the analysis of this course and in conjunction with the theory of hybrid practical teaching, the research investigates how to integrate theory and practice in teaching to enhance students' learning experience and practical skills. The study finds that the hybrid practical teaching model has achieved significant effects in the "Coffee Making and Tasting" course, providing valuable insights for the field of education.

1. Introduction

With the development of society and changes in occupational demands, educational models are continuously innovating and adjusting. Hybrid practical teaching, as a teaching model that integrates theory and practice, has gradually gained widespread attention. This study takes the "Coffee Making and Tasting" course as an example to explore the impact of the hybrid practical teaching model on students' learning experience and practical skills, aiming to provide new perspectives and practical experiences for the field of education.

2. Overview of Blended Practical Teaching Theory

2.1. Definition of Blended Practical Teaching

Blended practical teaching is an educational approach designed to seamlessly integrate theoretical learning with practical application, enabling students to actively participate in hands-on activities during classroom learning. This teaching method emphasizes the integration of theoretical knowledge and practical experience, highlighting the application of learned concepts in real-life situations to enhance problem-solving abilities and practical skills. Blended practical teaching not only focuses on knowledge transmission but also emphasizes students' active engagement and accumulation of practical experience, providing a learning experience closely aligned with professional needs.

2.2. The Theoretical Foundation of Blended Practical Teaching

The theoretical foundation of blended practical teaching includes constructivist learning theory, behaviorist learning theory, and social cognitive theory. Constructivist theory posits that learning is a process of constructing knowledge, and blended practical teaching encourages students to construct knowledge structures relevant to real experiences through hands-on activities. Behaviorist theory emphasizes the formation of learning habits through feedback and reinforcement, and blended practical teaching provides timely feedback through practical applications to deepen students' impressions of knowledge. Social cognitive theory underscores the influence of the social environment on learning, and blended practical teaching offers creative social interaction scenarios, prompting students to learn through collaboration.

2.3. Current Applications of Blended Practical Teaching in the Education Field

Blended practical teaching is widely applied in the education field, spanning various disciplines such as medicine, engineering, and the arts. In medicine, students engage in practical activities such as simulated surgeries and real-life cases to develop practical medical skills, enhancing their ability to handle real medical environments. In engineering, the blended practical teaching model involves project-based learning, enabling students to apply engineering knowledge to solve real-world problems and cultivate engineering practical skills.[1]

This teaching model has demonstrated significant effectiveness in improving students' practical skills and problem-solving abilities. By integrating theoretical knowledge with practical experience, students gain a better understanding and application of what they have learned, enhancing their practical problem-solving skills. Blended practical teaching not only focuses on traditional classroom knowledge delivery but also emphasizes students' application of theory in real-world scenarios, facilitating the overall enhancement of comprehensive qualities.

This teaching method not only improves students' learning outcomes but also aligns with modern education's demand for cultivating practical application skills, laying the foundation for the development of more practically skilled professionals. The successful application of blended practical teaching across different disciplinary fields will further drive innovation and development in educational methods.

3. Design and Implementation of the "Coffee Making and Tasting" Course

3.1. Course Objectives and Content

3.1.1. Course Objectives and Fundamental Knowledge Mastery

The "Coffee Making and Tasting" course aims to cultivate students' in-depth understanding and practical skills in coffee making and tasting. Clear course objectives are set, including a comprehensive mastery of basic coffee knowledge. Students will delve into different types of coffee beans, origins, and roasting levels, providing them with a profound foundation for understanding coffee.

3.1.2. Skill Enhancement and Practical Operations

Next, the course design focuses on developing students' proficiency in coffee-making techniques. Students will learn the processes of grinding coffee beans, brewing coffee, and preparing different types of coffee. Through systematic practice, they will progressively enhance their skill levels in coffee making. Frequent practical exercises not only deepen students' understanding of theoretical

knowledge but also provide them with practical experience in coffee preparation.

3.1.3. Cultivation of Tasting Skills and Professional Insight

Lastly, through tasting activities, the course aims to cultivate students' ability to distinguish different coffee flavors and aromas, as well as sensitivity to coffee quality. Tasting activities will enable students to evaluate coffee quality with a professional perspective, further deepening their understanding of coffee. This process of developing tasting skills not only makes students coffee enthusiasts with a professional eye but also lays a solid foundation for future careers in related fields.

Combining these three aspects of course objectives, students will develop comprehensive abilities in coffee making and tasting through in-depth theoretical learning and frequent practical exercises. Through systematic training, students will not only have a profound theoretical understanding of coffee but will also be able to independently produce high-quality coffee by the end of the course.

3.2. Teaching Methods and Approaches

3.2.1. Integration of Lectures and Practical Application

One of the distinctive features of the "Coffee Making and Tasting" course is the integration of lectures and practical application. Through the organic arrangement of theoretical courses, students will systematically learn relevant knowledge about coffee, including characteristics of coffee beans and roasting processes. This theoretical knowledge provides students with a solid foundation for practical operations. Practical application allows students to apply theoretical knowledge in hands-on experiences, deepening their understanding of the coffee-making process.

3.2.2. Case Analysis and Project-Based Learning

Additionally, the course incorporates case analysis and project-based learning to foster students' application abilities. By solving real-world problems and completing projects, students will be able to apply their knowledge to practical situations. Case analysis enables students to learn problem-solving methods from real situations, while project-based learning cultivates their collaborative and innovative abilities, allowing them to better apply theoretical knowledge in practical situations.[2]

3.2.3. Laboratory Practices, Coffee Tasting Competitions, and Field Visits

In terms of teaching approaches, laboratory practices are indispensable. In the laboratory, students will operate coffee machines, grind coffee, and engage in other practical operations to enhance their skills. Coffee tasting competitions serve as a way to stimulate student interest and increase engagement. Through these competitions, students not only improve their sensitivity to coffee quality but also develop teamwork and competitiveness. Finally, field visits allow students to directly experience the coffee industry, understand industry dynamics, and provide practical insights for their future careers.

Through these methods and approaches, the course will provide students with comprehensive and systematic training in coffee making and tasting, allowing for their all-round development in theory and practice.

3.3. Integration and Utilization of Learning Resources

3.3.1. Rich Learning Materials

To support the teaching of the "Coffee Making and Tasting" course, diverse learning materials will

be provided. Students will access varied learning resources such as books, papers, videos, etc., enabling them to deepen their understanding of relevant content beyond the classroom. The richness of these learning materials will offer students a multi-faceted, multi-level understanding of coffee knowledge, assisting them in comprehensively grasping course content. Books provide in-depth insights into the history, culture, and characteristics of coffee beans from different origins. Papers offer an academic perspective, allowing students to understand the scientific principles of coffee roasting. Videos present the practical process of coffee making, helping students visualize operational techniques. Such rich learning materials will inspire students' interest and encourage them to actively engage in course learning.[3]

3.3.2. Collaboration with the Coffee Industry

Secondly, establish collaborative relationships with the coffee industry. Inviting industry professionals to share their experiences and provide real-world cases will enable students to gain in-depth insights into the latest developments in the coffee industry. These collaborative relationships will create a platform for students to interact with actual business professionals, providing practical experiences and advice for their future careers. Through interactions with industry professionals, students will gain a better understanding of the practical operations of the coffee industry and grasp market demands and trends. Professionals' case sharing will provide students with problem-solving strategies for real-world issues, allowing them to better apply theoretical knowledge in their studies.

3.3.3. Construction of an Online Learning Platform

Leveraging modern technological means, establish an online learning platform. Through this platform, students can access course materials, participate in real-time discussions, and conduct online experiments anytime, anywhere. This flexibility not only improves the convenience of student learning but also encourages them to actively participate in the course, aligning with their learning habits and needs. The online learning platform serves not only as an information source but also as a platform for student interaction and communication. Real-time discussions on the platform allow students to share experiences and resolve doubts with teachers and peers. Online experiments enable students to intuitively understand the principles of coffee making. Through this comprehensive online learning platform, students will be able to manage their study time more flexibly and participate more comprehensively in the course.

Through the integration of these three aspects of learning resources, students will acquire knowledge in a diverse learning environment and cultivate more comprehensive skills. This integrated learning resource approach will provide students with a more holistic and practical learning experience, enhancing their all-around understanding of coffee making and tasting.

4. Application of Blended Practical Teaching in the Coffee Course

4.1. Integration of Theoretical Knowledge and Practical Operations

Blended practical teaching in the "Coffee Making and Tasting" course seamlessly integrates theoretical knowledge and practical operations in an efficient manner, aiming to enhance students' overall capabilities. Firstly, the course emphasizes fundamental concepts such as coffee varieties, roasting levels, and grind size in theoretical knowledge. Through engaging lectures and in-depth reading materials, students establish a solid foundation in theoretical coffee knowledge, laying the groundwork for further learning.

Simultaneously, practical operations, as a core component of blended practical teaching, provide students with valuable hands-on experience. In a laboratory environment, students operate coffee

machines, engage in grinding, brewing, and other activities, translating abstract theoretical knowledge into practical operational skills. This close integration of theory and practice allows students to gain in-depth insights into various aspects of coffee making during practical operations.[4]

The teaching team designs meticulously planned experiments, enabling students to operate in simulated real-world scenarios. This not only improves their operational skills but also stimulates deep reflection on the coffee-making process. When faced with practical issues during experiments, students need to flexibly apply their theoretical knowledge, fostering problemsolving abilities. The interactive nature of theoretical knowledge and practical operations enables students to better understand and apply the concepts learned in the course.

Through extensive practical activities, students not only acquire knowledge at the theoretical level but also enhance their understanding and application of theory through practical operations. This blended practical teaching approach significantly improves students' overall capabilities, laying a solid foundation for their future professional development.

4.2. Increased Student Engagement

Blended practical teaching demonstrates a significant effect in increasing student engagement by introducing practical operations, allowing students to actively participate in the real-world scenarios of coffee making and tasting, thus sparking their interest and proactivity.

In course design, conducting practical projects through group collaboration is a crucial initiative. Students work together in small groups to complete a series of tasks, not only enhancing their teamwork skills but also promoting knowledge exchange and sharing. Through group collaboration, students can draw on each other's experiences, jointly solve practical issues, and create a positive learning atmosphere.

The introduction of practical operations also encourages students to actively participate in the course. Coffee making and tasting are no longer abstract theoretical knowledge but become concrete and interesting through hands-on practice. Students experience the practical application of theoretical knowledge during operations, making their understanding of course content more profound.

Furthermore, problems and queries arising from practical operations are promptly addressed through group interactions. This form of interactive communication not only enhances students' learning effectiveness but also encourages peer-to-peer communication and cooperation. By sharing their experiences and insights, students form a learning community, further improving the overall learning effectiveness.

In summary, blended practical teaching effectively increases student engagement through methods such as practical operations and group collaboration. Students, through active participation, better understand and apply course content, laying a solid foundation for their learning and career development.

4.3. Evaluation and Feedback on Teaching Effectiveness

Blended practical teaching establishes a comprehensive evaluation system for teaching effectiveness, moving away from traditional assessment methods such as exams and paper evaluations. Emphasis is placed on assessing students' performance in practical operations through periodic tasting competitions, laboratory reports, and other forms.

The introduction of tasting competitions is a crucial assessment method. Students showcase their tasting abilities during competitions while receiving evaluations from professional judges. This not only tests students' practical operational skills but also provides an opportunity for them to align with industry standards. The teaching team observes students' operations in the laboratory, listens to their experiences shared during tastings, and can promptly identify and correct any deficiencies in their

operations.

Laboratory reports serve as another assessment method, requiring students to systematically summarize the processes and experiences of practical operations. Through this method, students can reflect more deeply on their learning process, providing an opportunity for self-evaluation.[5]

In addition to teacher evaluations, peer evaluations are also part of the assessment of teaching effectiveness. Students learn and improve within their groups, sharing experiences and offering suggestions to each other, promoting better progress among peers. This peer evaluation mechanism not only encourages students to actively participate in learning but also fosters teamwork and academic exchange.[6]

Through this assessment and feedback mechanism, blended practical teaching not only helps students identify their shortcomings but also provides teachers with a basis for improving teaching methods, achieving continuous optimization and improvement of teaching effectiveness.

5. Student Learning Experience and Enhancement of Practical Skills in Coffee Making and Tasting

5.1. Student Feedback on Blended Practical Teaching

Student feedback plays a crucial role in evaluating the effectiveness of blended practical teaching in the "Coffee Making and Tasting" course. Through various methods such as anonymous questionnaires, group discussions, and individual interviews, collecting students' opinions and suggestions, feedback mainly focuses on learning experiences, teaching methods, and course design.

5.1.1. Improved Learning Experience

Students generally express that blended practical teaching has made their learning more engaging, emphasizing the close connection between theoretical knowledge and practical operations. Hands-on experience in practical operations makes the coffee-making process more vivid and interesting, enhancing memory retention and understanding of knowledge. By participating in practical projects and collaborating with classmates, students further improve learning effectiveness. The positive impact of group collaboration encourages students to actively engage in the course, creating a favorable learning atmosphere.

5.1.2. Recognition of Teaching Methods

In terms of teaching methods, students positively evaluate the teaching style of instructors. Teachers can present abstract theoretical knowledge in a lively and vivid manner, making it easier for students to understand and accept. Laboratory practices, coffee tasting competitions, and other activities also receive favorable reviews, with students finding these formats more interesting and challenging, aiding in the development of practical operational skills. Students state that these practical activities deepen their understanding of coffee making and tasting techniques, ultimately improving their practical operational abilities.

In summary, the positive feedback from students on blended practical teaching indicates that this teaching model has achieved significant success in enhancing students' learning experiences and practical operational skills. Increased student participation and a deeper understanding of course content lay a solid foundation for their future professional development.

5.2. Enhancement of Students' Practical Operational Skills in Coffee Making and Tasting

Blended practical teaching has demonstrated outstanding results in enhancing students' practical

operational skills in coffee making. Through laboratory practices in the course, students gradually master the fundamental skills of coffee making. This process includes operating professional equipment, such as coffee machines and grinding coffee beans, as well as adjusting critical parameters like water temperature and pressure.

5.2.1. Laboratory Practices: Developing Proficiency in Operations

Laboratory practices are a core component of blended practical teaching. In real production environments, students hone their coffee-making skills by operating professional equipment. This includes precise grinding of coffee beans, adjusting the water temperature and pressure of coffee machines, and other crucial steps. Through continuous practice, students progressively improve their proficiency in the coffee-making process, showcasing higher-level skills during practical operations.

5.2.2. Coffee Tasting Competitions: Cultivating Tasting Skills

Coffee tasting competitions are another essential activity for cultivating students' tasting skills. In a competitive format, students must not only discern the flavors and aromas of different coffees but also conduct comprehensive evaluations. This requires students to combine theoretical knowledge with practical experience gained during operations. Coffee tasting competitions not only stimulate students' sensitivity to quality but also enhance their tasting skills during practical operations.

Through these practical activities, students' practical operational skills in coffee making receive comprehensive enhancement. From learning theoretical knowledge to applying practical operations, students gradually develop a deep understanding of coffee making and high-level practical operational skills.

6. Conclusion

Through the study of the "Coffee Making and Tasting" course based on the blended practical teaching model, this paper concludes that this model effectively improves students' learning experiences and practical operational skills. Blended practical teaching brings new possibilities to the field of education and is worth exploring and promoting in more courses. Future research can further explore the application effects of blended practical teaching in different disciplinary fields, providing more empirical support for educational reforms.

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