MEDS Public Health and Preventive Medicine (2025)
Clausius Scientific Press, Canada

DOI: 10.23977/phpm.2025.050111
ISSN 2616-1915 Vol. 5 Num. 1

Suggestions and Practice Path Exploration for the Reform of the Course "Food Nutrition and Hygiene" in Colleges and Universities

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Keywords: Food nutrition and hygiene; Curriculum reform; Practical teaching; blended learning

Abstract: Food Nutrition and Hygiene is an important course for food science, public health, and related majors in universities. However, there are still problems in current teaching, such as a disconnect between theory and practice, outdated content, and a single teaching mode. This article combines advanced experiences at home and abroad to propose curriculum reform suggestions, including optimizing course content, innovating teaching methods, strengthening practical teaching, and improving the assessment system, in order to enhance students' professional literacy and practical ability, and adapt to the development needs of the food nutrition and hygiene field in the new era.

1. Introduction

With the increasing awareness of national health and the frequent occurrence of food safety issues, the importance of the course "Food Nutrition and Hygiene" in higher education is becoming increasingly prominent. However, the traditional teaching mode still relies mainly on theoretical lectures, lacking practicality and innovation, and is difficult to meet the needs of the industry. This article is based on the current status of the curriculum and combines the OBE (Outcome Based Education) concept to explore the direction of curriculum reform in order to cultivate more competitive professional talents.

2. Clarify the positioning of vocational education courses

Universities clarify the positioning of vocational education courses. The positioning of vocational education courses must comply with the training objectives of high skilled talents and the job requirements of relevant technical field vocational positions (groups); It plays a major supporting or significant promoting role in cultivating students' vocational abilities and professional qualities. The curriculum design philosophy and approach focus on vocational ability development, collaborating with industry enterprises to develop and design professional courses based on work processes, fully reflecting the requirements of professionalism, practicality, and openness. This course is aimed at nutrition and meal guidance positions in the hotel and food industries. Through learning, it cultivates students' ability to apply basic knowledge of human nutrition, food nutrition, and hygiene, and trains them to improve their ability to provide nutrition and meal guidance. The goal is to continuously

update their knowledge and enhance their development capabilities in order to become competent in the food and catering industry in the future. Therefore, establishing the principle of "putting the needs of employers at the center of everything", the standard for hotel employment is our standard for educating people, cultivating students into high-quality talents with advanced concepts, solid basic skills, outstanding special abilities, and the ability to adapt to the requirements of modern tourism hotels. This teaching philosophy should be integrated into curriculum design, teaching management, and faculty team construction, and implemented in all aspects of teaching and learning[1].

3. Starting from life experience can stimulate students' interest in learning and help them understand important concepts

The middle school biology textbook contains some abstract theoretical knowledge, which students know but cannot truly understand the meaning of the concepts. Therefore, in the teaching process, life experience should be fully utilized to bring abstract concepts closer to students and promote their understanding of knowledge through examples around them. For example, in the section on "Cell Life", the concept of matter is "matter is composed of molecules". The abstract concepts of matter and molecules are difficult for students to understand, especially since molecules are extremely small particles that cannot be seen or touched. In this section of the study, students are first asked to conduct an experiment on the dissolution of brown sugar in water. Through observation, students discover that the brown sugar substance has dissolved in water, which raises questions about where the brown sugar has gone? Students make a hypothesis about the disappearance of brown sugar substances in the experiment, stating that "brown sugar molecules continuously move into the gaps of water molecules". What types of molecules make up a substance? Subsequently, students were asked to knead fresh orange peels and personally experience the moisture and aroma substances contained in them. Pressing peanut seeds will result in the production of fat. By experiencing and feeling the material around them, abstract concepts that students cannot see are transformed into phenomena in their daily lives, facilitating their understanding of the abstract concept that 'matter is composed of molecules'. The first-hand information obtained through hands-on experiments left a deep impression on students and inspired them to observe the surrounding biological phenomena more seriously and apply biological knowledge to think[2].

4. Reform of teaching methods and means

Pay attention to the reform of teaching methods, and adopt different teaching methods and means for different teaching contents through repeated research and discussion of textbook content. For example, using teaching methods such as lecture, interactive, heuristic, case-based teaching, role-playing, discussion, simulation training, practical experience, project-based teaching, etc. Through flexible classroom organization, emphasis is placed on stimulating students' internal motivation, fully mobilizing their learning enthusiasm, initiative, and creativity, and improving their learning and innovation abilities; [3] (1) Flexible and diverse case teaching. Based on the practical experience of hotel service and management, present typical and real-life cases of catering enterprises to students in the classroom, and enhance their ability to analyze and solve problems through inspiration and discussion; (2) Organize classroom discussions. Related administrative departments collect data and conduct surveys on students, inspire and guide teachers, organize classroom discussions, and cultivate students' ability to analyze and solve problems; (3) Strengthen practical learning in classroom teaching. We need to take students to visit food enterprises, let them draw their own food production process flow diagrams, identify dangerous points, analyze key control points, etc; We organize students to go to the medical room or cafeteria for physical examinations or practical exercises on commonly used disinfection methods, achieving learning by doing and learning by doing.

5. Establish learning scenarios based on the laws of ability development

The reference point for curriculum design to achieve the transition from the action domain to the learning domain is the work process. For each typical job task, students accurately identify and describe the corresponding learning area, and then decompose the learning area into thematic learning units based on complete thinking and occupational characteristics to design learning contexts. Following the basic laws of cultivating students' vocational abilities, integrating and sorting teaching content based on actual work tasks, scientifically designing learning oriented work tasks, and combining teaching and practice.By completing 'work tasks', students acquire relevant knowledge, improve their work abilities, and become familiar with the corresponding job positions and work environments, laying a foundation for graduation.Through school enterprise cooperation, the following learning scenarios and tasks will be developed: (1) What is the relationship between nutrition and diet and body shape? Regarding the reform of the "Food Nutrition and Hygiene" course in higher vocational education, Ben Chunming. Abstract: Using the work process oriented vocational course design concept to reform the "Food Nutrition and Hygiene" course, we can break away from the traditional teaching method of having too much theoretical knowledge, boring content, and low student interest in learning. The primary goal of teaching is to cultivate students' vocational abilities and qualities. This requires curriculum construction in various aspects such as course positioning, content selection, teaching method reform, and advanced educational methods.

6. Full process and open assessment method

In order to comprehensively evaluate students' learning effectiveness, this course also adopts the teaching philosophy of "trinity" in its assessment method, abandoning the traditional one exam fixed assessment method and actively exploring a "full process, open" assessment system. (1) This course adopts a "three in one" assessment format, which combines process assessment with result assessment, theoretical assessment with skill operation assessment, and ability design assessment, and course assessment with vocational qualification assessment; (2) The practical skills examination of this course also adopts a "three in one" assessment method, which combines "practical training process assessment and result assessment", "course assessment and vocational skills appraisal", and "school assessment and enterprise practice assessment"; (3) We have established multiple evaluation methods, with theoretical knowledge accounting for 50% in the final exam and regular grades such as survey reports accounting for 50% (including attendance, coursework, learning attitude, etc.). [4] The assessment forms are diverse, which can comprehensively and accurately evaluate students' learning effectiveness and facilitate their comprehensive mastery of the knowledge and skills they have learned.

7. Encourage students to make full use of the life resources around them to conduct experimental classes

The new curriculum standard for compulsory education points out that "inquiry practice originates from curiosity, thirst for knowledge, and practical needs in the natural world, and the ability and character to solve problems in real situations or complete practical projects. Nature is the best classroom for students to learn biology, and we should encourage them to learn how to apply biological knowledge to the observation and experimentation of nature. This can not only fully tap into students' initiative, but also enable them to discover valuable research questions through hands-on practice, which is helpful for further scientific exploration. For example, when studying "Basic Scientific Research Methods in Biology - Observation Method", assigning homework to students is to select 1-2 seeds and observe the germination process. The students had a great imagination and

independently chose seeds from various plants, including mangoes, watermelons, apples, and seeds from various beans. During their independent experiments, they discovered many interesting experimental results and raised new questions. For example, some students may find that some seeds germinate quickly while others germinate slowly? Students further design experiments with questions to explore the factors that affect seed germination, and their interest in learning continues to grow through the process of exploration. In addition, many experiments in junior high school teaching can fully tap into students' autonomy, such as the production of fermented foods, detection of microorganisms in the environment, and the production of ecological bottles. Students can use the knowledge they have learned in biological experiments to cultivate their interest in learning and core subject literacy. This valuable experience and fun cannot be given to students by textbooks or problem-solving methods[5].

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