

# Reform and practice of vocational basic skills training course under the concept of curriculum ideology and politics

Haiyan Sun<sup>1\*</sup>, Hui Yu<sup>2</sup>, Haibo Chi<sup>1</sup>, and Gaofeng Yuan<sup>1</sup>

<sup>1</sup>College of Food and Medicine, Zhejiang Ocean University, Zhoushan 316022, China

<sup>2</sup>Faculty of Food Science, Zhejiang Pharmaceutical College, Ningbo 315504, China

**Abstract.** The curriculum ideology and politics of practice courses in the undergraduate specialty of food quality and safety were explored by taking the Vocational Basic Skills Training course as an example. The teaching content, teaching methods, assessment system and also other aspects of this course were reformed. Our practice and exploration have obtained some good results. The preliminary practical teaching was integrated and developed with ideological and political elements. To improve the training quality of innovative and applied talents of undergraduate specialty of food quality and safety in our university, we need to carry out long-term and continuous exploration and practice.

## 1 Introduction

Curriculum ideology and politics is a new thing explored in the field of higher education in China in the new era. Curriculum ideological and political education refers to a comprehensive educational concept that takes all kinds of courses and ideological and political theory courses in the same direction to build a pattern with whole staff, whole process and whole curriculum education, and takes "Building Morality and cultivating people" as the basic task of education [1]. Curriculum ideological and political education aims to integrate the ideological and political elements such as theoretical knowledge, values and spiritual pursuit into each curriculum, and to imperceptibly affect students' thoughts and behaviours [2]. This requires that all of the theory, practice and the second classroom should be unified with moral and intellectual education [3]. Therefore, it is necessary to reform the teaching methods and patterns under the concept of curriculum ideology and politics.

Food safety has become a major concern after population, resources and environment, and is the basic guarantee of building a harmonious society [4]. Food safety needs to be protected by relevant national laws and regulations, but also needs the moral restraint of food practitioners themselves. Under the new situation, it is particularly important for undergraduate specialty of food quality and safety to cultivate advanced applied professional technology and management talents who understand the law, know the law, learn the law and abide by the law for the society. In the present paper, the curriculum ideology and politics of

---

\* Corresponding author: [sunhy@zjou.edu.cn](mailto:sunhy@zjou.edu.cn)

practice courses in the undergraduate specialty of food quality and safety were explored by taking the Vocational Basic Skills Training course as an example in order to realize the organic integration of practical teaching and ideological and political elements. The final goal of our university is to cultivate students' professional ethics and students' craftsmanship spirit of pursuing excellence, and to improve the training quality of professional innovative and applied talents of undergraduate specialty of food quality and safety.

## **2 Existing problems in curriculum ideology and politic**

Vocational Basic Skills Training course is one of compulsory practical curriculum for the undergraduate specialty of food quality and safety. The teaching goal of this course is to train students to master modern food physical and chemical inspection technology and to be familiar with food related standards.

The objective of the curriculum ideology and politics in this course is to cultivate the good professional quality and craftsmanship spirit of undergraduate students. However, there are still some problems to be solved in the implementation of ideological and political education.

### **2.1 Understanding deviation in curriculum ideology and politics**

There exists the understanding deviation in curriculum ideology and politics [3]. The teachers' concept of introducing ideological and political ideas into the curriculum is vague. The teachers of our department often think that the ideological and political education is the main goal of the theory courses, especially the ideological and political theory courses.

### **2.2 Inappropriate teaching methods**

The experiment and practice courses are mainly implemented in the laboratory inside and outside the school. The teaching of experiment and practice courses is characterized by scattered sites, many operation links, long practical time and short explanation time, and lack of language communication on specific occasions [5]. Therefore, it has become the weak link in the implementation of ideological and political education.

### **2.3 Insufficient research on ideological and political elements**

Practical curriculum focuses on the cultivation and training of practical experimental ability and professional technical skills of our students [6, 7]. However, there lack of in-depth exploration and practice of ideological and political education in experimental and practical courses, which makes it difficult to form synergy effect with ideological and political education.

### **2.4 Inappropriate course assessment methods**

The assessment type and content of the practical curriculum lack of diversification. The students' experiment reports are used as the main evaluation material. Students pay more attention to write the experiment report, while they could ignore the preview of the practical curriculum and the thinking of the experimental process. It is difficult to objectively and accurately reflect the students' experiment ability. On the other hand, the students' professional quality assessment and rigorous scientific attitude are neglected.

Therefore, it is necessary to explore the ideological and political education of Vocational Basic Skills Training course, so as to better cultivate innovative and applied talents of undergraduate specialty food quality and safety.

### **3 Exploration path**

#### **3.1 Conceptual change in education and teaching**

The teaching objective of the course is to train students to master the modern food inspection technology, to be familiar with food related standards, to have good professional quality. In the process of teaching, it is necessary to unify the training process and knowledge teaching, to knowledge teaching and value guidance, and to strengthen the education of craftsman spirit and professional quality.

#### **3.2 Change the teaching methods to gradually improve students' professional comprehensive ability and professionalism**

The Vocational Basic Skills Training course focuses on the cultivation of students' ability and professional quality. According to the characteristics of this course, it adopts a fully open way of teaching. The course implements full open teaching on experimental time, experimental space, experimental equipment and experimental teaching process, etc. Students can carry out experiments according to their own choice and appointment time. In the teaching process, the independent teaching mode based on students' independent learning and assisted by teachers' guidance is adopted.

This open comprehensive experiment course was different from the general confirmatory experiment courses. The experimental content involved many others courses, such as food microbiology, instrumental analysis, food chemistry and food analysis. This course was scheduled to start after the end of the fourth semester. Students can practice the experimental operation repeatedly for specific experimental projects without limiting the course time and times, which can gradually improve students' experimental skills and practical ability. Compared with the previous simple confirmatory experiment, the open comprehensive experiment took a long time. While completing the experiment, we should pay attention to the cultivation of students' self-management ability and team division and cooperation consciousness, so as to ensure the smooth implementation of the experiment.

#### **3.3 Excavation and integration the elements of ideological and political education into the practical curriculum**

According to the characteristics of the undergraduate specialty of food quality and safety, some social practice or social reality problems related to the major, especially the hot issues in the field of food safety, were introduced as teaching cases. In the process of knowledge teaching and ability training, the socialist core values were carried forward, the positive energy of loving the party, patriotism and positive progress is spread, and the scientific spirit was cultivated. The course will guide students to form correct values.

The students were guided to learn the food inspection standards and detection methods and the relevant laws and regulations of food safety through the teaching and training of each unit project and the routine inspection items of typical food. The students were guided to use the conception and design method of engineering system to participate in the design and development of food safety engineering solutions, to analyse and evaluate their social, health, cultural, legal and safety impacts, and to understand their responsibilities.

The students were guided to evaluate the resource utilization efficiency, pollutant disposal scheme and safety precautions in the process of food detection and control during the teaching and training of each unit project and the routine inspection items of typical food. The students were guided to judge the potential hazards that may cause damage to human and environment during the teaching and training of each unit project and the routine inspection items of typical food.

The students were guided to learn national biosafety and laboratory safety according to food microbiological test items.

The students were guided to understand the production process and the actual detection items of the enterprise, to guide to learn rigorous and scientific working attitude, to develop a hard-working learning attitude and work style, and to lay a solid foundation for the follow-up study and work.

### **3.4 Innovation in the assessment methods**

Assessment includes procedural evaluation and practical evaluation. The procedural examination included usual performance and experiment report, accounting for 60% of total scores. Final practical test accounted for 40%. Typical unit operations in food inspection technology were selected in the final practical test. Students were required to complete the project operation, data processing and analysis during limited time. Final practical test simulated the test of professional qualification certificate and pay attention to the evaluation of the standardization of students' operation and professional quality.4 Safeguard measures for reform.

### **3.5 The guarantee from our university**

Our university attached great importance to the acceleration of ideological and political education in the curriculum. Our university introduces relevant policies and vigorously promotes the classroom teaching reform with the goal of ideological and political education in the curriculum. Our university continuously and deeply excavated the ideological and political education elements contained in various courses and the ideological and political education functions carried by them, and strived to build a great ideological and political pattern in which all courses and ideological and political theory courses are in the same direction and cooperate in educating people.

### **3.6 Safeguard measures for reform from our specialty**

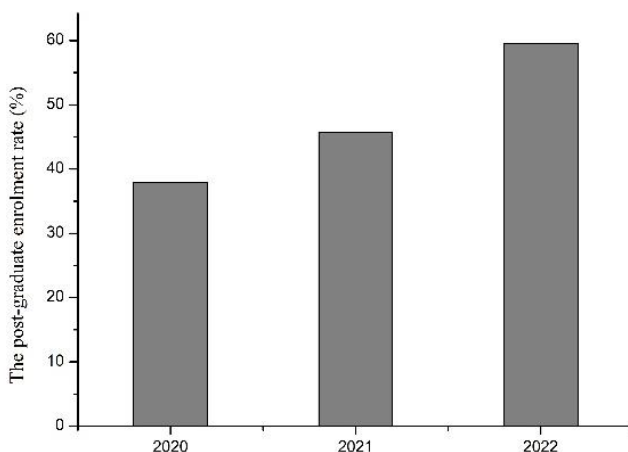
The undergraduate specialty in food quality and safety of our university has implemented the tutorial system for undergraduate for many years. The specialty innovates the safeguard measures from several aspects. A set of measures including life and professional enlightenment guidance for freshmen, basic skills guidance for sophomore, and one-to-one innovative practice guidance for junior and senior have been established [8]. All professional teachers participated in the second classroom education, which effectively ensures the development of ideological and political education of food quality and safety professional practice curriculum.

The guarantee at all levels was integrated with the ideological and political concept of the course and the teaching implementation of Vocational Basic Skills Training course.

## 4 Reform achievements

Through the reform, we can cultivate students' professional ethics of love and dedication. We can cultivate students' craftsmanship spirit of pursuing excellence, and promote the connotative development of classroom education quality. After communication and discussion with the students, the students can accept the appropriate ideological and political education in the practice course, and they think it is helpful to help them establish a correct world outlook, outlook on life and values, and cultivate their professional ethics and professionalism.

This study explores and reforms the teaching content, teaching methods and assessment system of the course of Vocational Basic Skills Training. We aroused the enthusiasm and initiative of students, improved the professional skills and practical ability of undergraduates majoring in food quality and safety, and improved students' employment rate and post-graduate enrolment rate (Figure 1) after reform and practice of Vocational Basic Skills Training course under the concept of curriculum ideology and politics.



**Fig. 1.** The post-graduate enrolment rate during the last three years.

## 5 Concluding remarks

Taking Vocational Basic Skills Training course as an example, the exploration of ideological and political education in the practice curriculum of food quality and safety specialty has obtained some good results. The preliminary practical teaching was integrated with the ideological and political elements. The cultivation level of innovative and applied talents of food quality and safety specialty in our university was improved. However, it is still necessary to carry out long-term and continuous exploration on the ideological and political practice curriculum, and to constantly solve the problems in teaching practice. Finally, the practical teaching will form synergy effect with the ideological and political course. The practical teaching will improve the cultivation level of applied talents in food quality and safety specialty.

## Acknowledgments

This work was supported by Industry-University Cooperation Collaborative Education Projects Ministry of Education in 2020 (202002187054, 202002187024), and Ideological and Political Teaching Research Project of Zhejiang Ocean University in 2021.

## References

1. S.Z. Guo. *Construction on curriculum ideological and political education of finance course*. Journal of simulation, **9**, 151-153 (2021)
2. X. Wang, Y. Shi. *The connotation, characteristics, difficulties and countermeasures of ideological and political courses in the new era*. Journal of Xinjiang Normal University, **4**, 50-58 (2020)
3. L. Wang, *Research on the Construction of ideological and political practice teaching system of logistics management specialty course*, Logistics Science and Technology, 1002-3100 (2021)
4. P.F. Rao, Foreword. Editor(s): Yasmine Motarjemi, Huub Lelieveld, *Food Safety Management*, Academic Press, 2014, Page xv, <https://doi.org/10.1016/B978-0-12-381504-0.00053-6>.
5. Y.Y. Cui, Z.W. W, Y.Y. Chen, et al., *Thinking on integrating engineering professional practice into "curriculum ideological and political" education*, China After-school Education, **9**, 2 (2020)
6. G.F. Yuan, X.B. Fang, X.E Chen, *Construction and exploration of professional curriculum system of food quality and safety based on industry demand*, China Light Industry Education, **1**, 81-83 (2015)
7. H.Y. Sun, X.B. Fang, X.E Chen, G.F. Yuan, *Construction and exploration of practical teaching system of "Ocean Characteristics" for food quality and safety specialty*, Journal of Zhejiang Ocean University (natural science), **32**, 89-92 (2013)
8. G.F. Yuan, X.B. Fang. *Exploration and practice of teaching talent training mode promoted by scientific research in food specialty*, Journal of Zhejiang Ocean University (humanities edition), **035**, 71-74 (2018)