https://ojs.bbwpublisher.com/index.php/ERD Online ISSN: 2652-5372

Print ISSN: 2652-5364

# Study on the Difference of Vocational Undergraduate Education Specialty Setting at Home and Abroad

#### Biying Zhou\*

China National Academy of Educational Sciences, Beijing 100888, China

\*Corresponding author: Biying Zhou, xidazhoubiying@126.com

**Copyright:** © 2025 Author(s), This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4,0), permitting distribution and reproduction in any medium, provided the original work is cited,

Abstract: This paper aims to explore the differences in the professional development of vocational education at home and abroad, to provide a reference for the country's vocational education reform. First of all, this paper analyzes the current situation, characteristics and development trend of professional settings in foreign vocational education. Then, through the comparative analysis of domestic and foreign vocational education systems, specialty settings, course content and teaching methods, revealing the characteristics and advantages of domestic and foreign vocational education in the specialty setting. Finally, the beneficial measures are analyzed and discussed, and the breakthrough direction in the subsequent vocational undergraduate education in China is analyzed and summarized.

Keywords: Vocational education; Specialty setting; Specialty construction; Comparative research

Online publication: March 11, 2025

## 1. Analysis of the characteristics of foreign vocational undergraduate majors

The successful experience of foreign vocational education in professional design provides useful enlightenment for the country's vocational education reform. It is important to draw on the advanced ideas and practical experience of foreign vocational education, strengthen the innovation of curriculum setting and teaching mode, deepen school-enterprise cooperation and the integration of industry and education, promote the cultivation of interdisciplinary education and innovation ability, and strengthen lifelong learning and career development guidance [1]. Through these measures, colleges can cultivate more high-quality talents with practical ability and innovative spirit, and inject new vitality into social and economic development.

# 1.1. The current situation of the professional setup of vocational education in foreign countries

(1) Curriculum setting and teaching mode

Foreign vocational education pays attention to practice-oriented curriculum design, emphasizing students'

practical experience in the actual working environment. The curriculum usually covers various skills required by the industry and is closely combined with market demand to ensure that students can find jobs smoothly after graduation <sup>[2]</sup>. In terms of teaching mode, foreign vocational education generally adopts project-based learning, work-study alternation and other methods, so that students can learn in practice and practice in study to better master skills,

The design of foreign vocational education focuses on the innovation of curriculum setting and teaching mode. In the course setting, foreign vocational education institutions usually adjust the major setting and course content flexibly according to the market demand and industry development trend. In terms of teaching mode, vocational education institutions adopt a variety of teaching methods and means, such as case teaching, project teaching, practice training, etc. to improve student's learning interest and practical ability [3].

#### (2) School-enterprise cooperation and integration of industry and education

Foreign vocational education attaches great importance to school-enterprise cooperation and the integration of industry and education. Schools and enterprises work closely together to develop courses, formulate teaching plans, carry out practical training and even participate in the teaching process. This mode of cooperation not only enables students to learn in a real working environment and improve their employment competitiveness but also helps enterprises recruit high-quality talents that meet their needs. The integration of industry and education further promotes the deep integration of education and industry and promotes technological progress and innovation.

#### (3) Interdisciplinary education and innovation ability training

Foreign vocational education is gradually showing an interdisciplinary trend, combining disciplines from different fields to cultivate students' comprehensive ability and innovative abilities. For example, entrepreneurship education has been integrated into vocational education to encourage students to start their businesses and cultivate their innovative thinking and entrepreneurial spirit. Such an interdisciplinary education model not only broadens students' knowledge horizons but also improves their comprehensive quality and competitiveness.

#### (4) Diversified educational models

Foreign vocational education models are diverse, such as the German "dual system" education, the British BTEC model, the United States CBE model and so on, German "dual system" model: German vocational education is famous for its unique "dual system" model, which is, students learn theoretical knowledge in school, while doing practical operation training in enterprises. This mode realizes the close cooperation between the school and the enterprise and effectively improves the students' practical ability and professional quality <sup>[4]</sup>. Australian TAFE system: Australia's TAFE (Technical and Further Education) system is known for its flexible and diverse curriculum and widely recognized academic qualifications. In terms of professional design, it pays attention to docking with industry standards to ensure that students can enter the workplace smoothly after graduation. American CBE model: The CBE (Competency-Based Education) model in the United States emphasizes competency-based education, focusing on cultivating students' practical operation ability and solving practical problems <sup>[5]</sup>. In terms of professional design, it emphasizes the practicability and pertinence of courses.

#### 1.2. The characteristics of foreign vocational education specialties

#### 1.2.1. Focus on market demand and industry orientation

The professional design of foreign vocational education focuses on market demand and industry orientation,

pays attention to practice, and emphasizes students' practical experience in the actual working environment. Flexible adjustment of major settings and course content according to market demand and industry development trends. Through internships, practical training and other means, students can apply what they learn in class to actual work scenarios, thereby deepening their understanding and mastery of professional knowledge. This way of design helps to improve students' employment competitiveness and professional literacy.

#### 1.2.2. Emphasize the cultivation of practical ability and professional quality

The professional design of foreign vocational education emphasizes the cultivation of practical ability and professional quality. Through case teaching, project teaching, practice training and other teaching methods and means to improve students' practical ability and professional quality. At the same time, foreign vocational education institutions also pay attention to cultivating students' innovative thinking and entrepreneurial spirit to adapt to the changing market demand <sup>[6]</sup>.

#### 1.2.3. Focus on international integration and international development

The professional design of foreign vocational education pays attention to international standards and international development. The internationalization level of vocational education should be improved by drawing on advanced international educational concepts and standards. At the same time, foreign vocational education institutions also actively carry out international cooperation and exchanges to promote the internationalization of vocational education.

## 1.3. The development trend of foreign vocational education majors

#### 1.3.1. Pursue diversified and personalized development

With the diversification of market demand and student demand, the professional design of foreign vocational education will show a diversified and personalized development trend <sup>[7]</sup>. Vocational education institutions will pay more attention to student's individual differences and interests, and provide diversified professional courses and teaching models to meet the different needs of students.

#### 1.3.2. Present digital and intelligent development

With the rapid development of information technology, digitalization and intelligentization have become a new trend in the professional design of foreign vocational education. Vocational education institutions actively use modern information technology means, such as virtual reality, big data, artificial intelligence, etc. to improve teaching effects and learning experience. At the same time, vocational education institutions will also strengthen the construction and management of digital teaching resources, promote the digital transformation of vocational education, and improve teaching effects and learning experiences.

#### 1.3.3. Internationalization and cross-cultural communication

With the further development of globalization, the professional design of foreign vocational education will show the development trend of internationalization and cross-cultural communication. Vocational education institutions will pay more attention to international standards and international development, and strengthen cooperation and exchanges with international vocational education institutions. At the same time, vocational education institutions will also focus on cultivating students' cross-cultural communication ability and

international vision to meet the demand for talents in the context of globalization [8].

# 2. Comparative study on the professional setting of vocational undergraduate courses at home and abroad

## 2.1. The current situation of the professional setting of vocational education at home and abroad

#### 2.1.1. Policy orientation

In recent years, the Chinese government has attached great importance to the development of vocational education and introduced a series of policy measures to promote the coordinated development of vocational education and general education. In terms of professional design, it attaches great importance to the connection with the needs of industrial development and encourages school-enterprise cooperation and the integration of industry and education.

#### 2.1.2. Curriculum system

In recent years, China's vocational education has made remarkable achievements, and professional design is constantly improving. The domestic vocational education curriculum system has been gradually improved, focusing on the combination of theory and practice. However, there is still a disconnect between the curriculum of some majors and actual work needs, which makes it difficult for students to quickly adapt to the workplace after graduation [9]. Some vocational education curriculum systems pay attention to the imparting of theoretical knowledge, but the practical teaching link is relatively weak.

#### 2.1.3. Teaching mode

With the deepening of education reform, domestic vocational education has gradually changed from traditional lecture-based teaching to project-based, task-based teaching models, emphasizing students' learning and growth in practice. The overall quality of domestic vocational education teachers needs to be improved, and some teachers lack practical experience and industry background.

# 2.2. Comparative analysis of professional Settings of vocational education at home and abroad

#### 2.2.1. Vocational education system at home and abroad

Foreign vocational education systems usually include multiple levels such as primary vocational education, secondary vocational education and higher vocational education, and are connected with the general education system. Among them, the dual system of vocational education in Germany is particularly outstanding, emphasizing the cooperation between schools and enterprises and paying attention to the cultivation of practical ability. China's vocational education system mainly includes two levels of secondary vocational education and higher vocational education, and in recent years, it has been actively exploring integration with general education. However, there are still some obstacles in the connection between vocational education and general education, which affect the attractiveness of vocational education [10].

# 2.2.2. Comparison of the contents and teaching methods of vocational education at home and abroad

The content of foreign vocational education courses emphasizes practicality and innovation, and the teaching

methods are flexible and diverse, including project teaching and case teaching [11]. These teaching methods help cultivate students' practical abilities and innovative abilities. The content of vocational education in the country emphasizes the imparting of theoretical knowledge to a certain extent, and the practice link is relatively weak. In terms of teaching methods, although we are actively exploring new teaching modes, traditional lecturing teaching still occupies a dominant position.

# 2.3. Analysis of the reasons for the differences in the professional setting of vocational education at home and abroad

#### 2.3.1. Educational concept

Domestic vocational education is still affected by the traditional education concept, focusing on the transfer of knowledge and ignoring the cultivation of practical ability. Foreign vocational education pays more attention to practicability and innovation, emphasizing the combination of theory and practice.

#### 2.3.2. Policy environment

The domestic vocational education policy environment is relatively closed, lack of enough flexibility and innovation. The foreign vocational education policy environment is more open and inclusive, and can quickly adapt to market changes and policy adjustments.

#### 2.3.3. Level of economic development

The relatively low level of domestic economic development restricts the investment and development of vocational education. The higher level of economic development in foreign countries can provide more resources and support for vocational education.

## 3. The enlightenment of vocational education professional setup in the country

### 3.1. Strengthen practice-oriented teaching reform

Based on the experience of foreign vocational education, China's vocational education should further strengthen the practice-oriented teaching reform. It is important to pay close attention to the changes in market demand, strengthen market research and prediction, timely adjust the major offering and course system, optimize the major offering, and improve the practicality and foresight of vocational education. By increasing practical teaching links such as internships and practical training, students' practical ability and vocational skill level will be improved [12]. To improve the professional quality and practical experience of teachers, strengthen teacher training and introduction, and build a team of high-quality teachers.

## 3.2. Strengthen innovation in curriculum systems and teaching models

Strengthen practical teaching, reform course content and teaching methods, and cultivate students' practical ability and innovation ability. Drawing on the experience of foreign vocational education, China's vocational education should further strengthen the innovation of curriculum system and teaching mode. Teachers should pay attention to the practicability and pertinence of the curriculum, as well as the diversity and flexibility of the teaching mode. Adopt a variety of teaching modes and methods to stimulate students' interest and enthusiasm in learning and improve teaching results [13]. Teachers will deepen cooperation with industrial enterprises and promote the integration of industry and education. Through the joint development of courses,

internships and employment opportunities, the school and enterprises can achieve close cooperation, improve the employment competitiveness of students and the recruitment efficiency of enterprises, and achieve a winwin situation for the school and enterprises.

#### 3.3. Promoting interdisciplinary and integrated development

Teachers will encourage the integration of vocational education majors with disciplines in other fields, and promote interdisciplinary and integrated development. To break the boundaries of traditional disciplines to cultivate comprehensive talents, enrich teaching content and methods to improve the quality of vocational education, and closely integrate with industrial development trends to promote industrial innovation and upgrading. To promote the development of interdisciplinary integration, interdisciplinary coordination institutions or committees have been established at the school level and interdisciplinary coordination mechanisms have been established [14]. Provide targeted interdisciplinary teacher training programs to strengthen teacher training and development. To build interdisciplinary laboratories and training bases, and increase investment in teaching resources. Through continuous exploration and practice, a sound interdisciplinary education system should be established to better serve economic and social development.

#### 4. Summary

Through comparative analysis of the status quo, characteristics and trends of professional design of vocational education at home and abroad, it can be found that there are obvious differences between them and can be used for reference. The professional design of foreign vocational education shows distinct characteristics in the aspects of diversification, interdisciplinary and integration, and close cooperation with the industry. Foreign vocational education design focuses on market demand and industry orientation, emphasizes the cultivation of practical ability and professional quality, and pays attention to international integration and international development. Remarkable results have been achieved in curriculum setting and teaching mode, schoolenterprise cooperation and integration of industry and education, evaluation system, and quality standards. These characteristics provide useful reference and inspiration for the reform of vocational education in China.

In the future, China's vocational education should further strengthen the practice-oriented teaching reform, strengthen the innovation of the curriculum system and teaching mode, promote interdisciplinary and integrated development, strengthen industry cooperation and the integration of industry and education, and improve the legal guarantee and financial support system, so as to meet the needs of economic and social development and improve the quality of talent training [15].

## **Funding**

China National Academy of Educational Sciences Basic Scientific Research Funding 2021 "Analysis on the Characteristics of Specialty Settings in Vocational Education at Undergraduate Level" (Project NO.: GYJ2021027)

#### Disclosure statement

The author declares no conflict of interest,

#### References

- [1] Wen Y, Ma Q, Shang H, 2023, Analysis on the Professional Setting and Development Prospect of Vocational Education in China. Journal of Hebei Normal University (Education Science Edition), 25(6): 56–63.
- [2] An J, Yang M, Zhang C, 2019, Logic and Path of Major Setting in Higher Vocational Education under the Background of Industrial Structure Adjustment. Vocational Education, 23(6): 15–19.
- [3] Xue D, Feng Y, 2024, On the Independent Setting of Professional Doctor in Vocational Education. Vocational and Technical Education, 45(13): 20–27.
- [4] Weng X, 2022, Research on the Coordination Between the Specialty Setting of Higher Vocational Education and Regional Industrial Development—A Case Study of Zhejiang Province, thesis, Tianjin University.
- [5] Xie L, Tang H, 2018, An Analysis on the Specialty Setting of Dual Vocational Education in Germany—The Classification, Structure and Standard of "Educational Profession." Modern Educational Management, 2018(3): 92–97.
- [6] Peng A, Xu J, 2019, The Value Implication, Logical Mechanism and Practical Path of Specialty Setting in Undergraduate Vocational Education. Journal of Vocational and Technical Education, 42(31): 6–12.
- [7] Wang B, 2018, The Logic of Professional Setting of Vocational Education in the Era of Accelerated Occupational Change. Education and Careers, 2018(17): 23–28.
- [8] Xu L, 2016, Analysis on Specialty Setting of Vocational Education and Adaptability of Industrial Structure. Education and Careers, 2016(3): 5–8.
- [9] Wang Y, 2023, Research on the Development of Professional Courses for Vocational Undergraduate Students from the Perspective of Technical Knowledge, thesis, Nanning Normal University.
- [10] Shi H, 2023, Research on the Construction of High-Quality Talents Training Model in Vocational Colleges, thesis, Hebei Normal University of Science and Technology.
- [11] Cao M, 2023, Research on Undergraduate Level Specialty Construction of Vocational Education, thesis, Anhui University.
- [12] Cheng X, 2022, Research on Optimization Path of Collaborative Mechanism for Talent Cultivation in Vocational Undergraduate Education, thesis, Hebei University of Science and Technology.
- [13] Zhang T, 2022, Research on Professional Construction of Undergraduate Level Vocational Education, thesis, Guangxi Normal University.
- [14] Yin H, 2021, Research on the Orientation of Undergraduate Vocational Education, thesis, Tianjin University.
- [15] Deng Z, 2022, Journal of Shenzhen Polytechnic of Information Technology, 20(6): 8–15.

#### Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations,