

# Survey and Analysis on Enterprises' Requirements for Vocational Undergraduate Accounting Students

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**Abstract:** Vocational undergraduate education emerged in 2019 in China, aiming to meet the demand of fast development of technology and economy in a big data era. Vocational accounting education at undergraduate level also emerged with the mission of cultivating accounting talents with both theoretical knowledge and practical skills. In order to understand and meet the business requirements for accounting talents at vocational undergraduate level, this study conducted a questionnaire survey on 140 companies and interviews 10 industrial professionals. The investigation includes four dimensions of business requirements which are quality, knowledge, skill and experience. The result reveals that enterprises have relatively higher requirements for personal and professional qualities, especially sense of responsibility and professional ethics. In terms of knowledge, the result suggests that accounting knowledge is the most important, but the interviewees tell us that knowledge can be learned and learning ability is essential. For the skills this study found that basic accounting skill, financial analysis skill and soft skills are given high importance. As to the experiences, both the survey and interviews suggest that internship and skills competitions are just bonus and work attitude is more valued. The recruitment data analysis also supports the findings.

**Keywords:** Vocational Education; Accounting Talents; Survey; Requirements

## 1. Introduction

As China has entered a new stage of development, industrial upgrading and economic restructuring are accelerating, and the demand for skilled technical personnel in all walks of life is growing. However, vocational education is still facing some practical problems, such as the lack of attraction and the lack of high-level technical and skilled talents. On the one hand, it is difficult for graduates to obtain employment. On the other hand, the supply of technical and skilled talents is insufficient especially with the advent of the digital economy. In this context, vocational undergraduate education emerged, aiming to meet the demand of fast development of technology and economics in the big data era.

Nevertheless, how to realize high quality development of vocational undergraduate education and help students prepare for future career is still the primary problem faced by vocational universities. For accounting vocational undergraduate education, intelligent finance and accounting have brought new challenges to the knowledge structure and skills of vocational accounting graduates. Only when employers' needs are fully understood, can university educators ensure that the curriculum system of professional education meets the requirements of industry and can make dynamic adjustments according to the development of science and technology.

The purpose of the study was to align accounting vocational undergraduate education outcomes better with employer demand.

This study investigates and analyzes the requirements of enterprises from four dimensions, including quality, knowledge, skills and experience. These four dimensions are usually used in the field of human resources to match talent with positions. Quality refers to both personal and professional qualities; Knowledge refers to the basic and professional knowledge required for the position; Abilities include general competencies and professional competencies; Experience is the time spent continuously applying a certain ability. The investigation methods used are questionnaire survey, firm expert interview and recruitment data analysis.

This study generates a greater understanding of the needs of employers and contributes to the growing

debates about the supply of vocational undergraduate accounting education and the need of vocational accounting talents. It also gives some insights and implications to the vocational undergraduate accounting educators to revise their training model. Finally, this study gives some specific and feasible countermeasures to narrow the gap between the needs of employers and the supply of vocational accounting talents.

## 2. Literature Review and Research Questions

### 2.1 Studies on Vocational Undergraduate Education

Literature on China's vocational undergraduate education began after 2005. Initial discussion is on the relationship among vocational education and regional economy, training mode, etc. It gradually expanded to the research on the development motivation, training objectives and development path of undergraduate vocational education. In June 2019, the Ministry of Education officially approved the first batch of 15 "vocational technical universities". The research became more active and the content is richer.

At the macro level, scholars have introduced vocational education experience in Germany, the United States, Britain, Japan, Australia and other countries. Topics include the background of the rise of undergraduate vocational and technical universities, the positioning of undergraduate vocational education, training mode and evaluation mechanism, system design and education quality<sup>[1][2][3][4]</sup>. At the micro level, scholars have dug into the construction of teaching staff, specialty setting and construction, teaching system and curriculum reform, teaching material construction and students' core quality training<sup>[5][6]</sup>.

Researches mainly adopts the theoretical research method, and has formed the following main points. Firstly, vocational undergraduate education should be positioned in the professional high-level technical skilled talents. Secondly, the training goal is to cultivate front-line, applicable and skilled compound talents. Thirdly, the training mode is the integration of industry and education with both theoretical learning and skill training. Recently, many studies have focused on the status quo, difficulties and countermeasures of vocational undergraduate education.

For example, Yuxiu Chen took the printing major of Guangzhou University of Science and Technology as an example, and pointed out the problems existing in the current education mode. Through investigation and analysis of the current situation of printing talent training and employment, he put forward the path of innovation and reform of the private vocational undergraduate printing talent training mode. Firstly, students choose courses and training programs in a certain direction according to their own interests and specialties. Secondly, he promotes students go to practice in enterprises and to carry out order type training for mutual benefit. Thirdly, he agrees to implement of practical teaching in the school and strengthen the training of teachers with both theoretical and practical experience<sup>[7]</sup>.

The research in other country mainly expounds the role, advantages and development status of vocational education. Martina Fuchs studied vocational education in Germany and found that a very important step in the nationalization strategy of German multinational companies is to deliver vocational education and training to global branches because vocational education is important to the improvement of technical practice ability<sup>[8]</sup>.

### 2.2 Studies on Accounting Vocational Undergraduate Education

As to the big data and accounting major, literature on professional accounting education at undergraduate level mainly focus on the specific aspects of big data and accounting talent training mode, curriculum system construction and so on. The research mainly took the theoretical research method and questionnaire survey method. And they reached the following point that vocational undergraduate accounting education is a bridge between vocational college accounting education and professional master accounting education. There are lots of problems to be solved. Existing studies put forward various measures to improve or reform the current training system.

For example, Guohua Zhang and Xiaohui Xu pointed out the problems that should be solved in the training of accounting talents in China, such as the connection between curriculum system and the cultivation of professional quality, knowledge and ability. Through analyzing the differences among vocational college accounting education, vocational undergraduate accounting education, professional master accounting education and professional doctor accounting education they put forward the orientation, training mode and implementation path of vocational undergraduate accounting education.

They believe that the essence of vocational education is to serve employment and entrepreneurship, and should be oriented to job demand. The training plan, curriculum and textbook construction should be different in different levels of vocational education<sup>[9]</sup>.

Guangzhi Wang and Qianhui Zhang took the big data analysis course of accounting major in Zhejiang Guangxia Construction Polytechnic University as an example. Taking account of the impact of big data technology on accounting major, they put forward the improved talent training plan of accounting major in vocational universities from the aspects of course nature, teaching purpose, teaching content, teaching platform, teaching methods, assessment standards, etc.<sup>[10]</sup>.

Rachel Wai-Yi Cheung documents that ethic elements in accounting vocational education can help accounting students to survive in this ever-changing world and benefits them through survey analysis on accounting practitioners working in Hong Kong, China. The practitioners investigated also voiced out that practical work experience such as internship is more important than knowledge learned<sup>[11]</sup>.

### ***2.3 Studies on the Requirements of Employers for Accounting Vocational Undergraduate Student***

Discussion on the skill training of accounting major students in Vocational Undergraduate education is mainly on the debate regarding the future direction of accounting education in general, gap between supply and demand of accounting vocational education and importance of vocational skills.

Douglas Howcroft explores whether the professional management accountancy body (CIMA), practitioner employers, and university educators have different expectations about vocational skill sets. University accounting educators see themselves not just as technical trainers for the accounting profession and practitioner employers, but rather as promoters of critical thinking, while employers want educators to promote undergraduates' problem-solving skills as well as technical skills<sup>[12]</sup>.

Jude Edeigba examines whether a gap exists between employers' skills expectations and the skills accounting students acquired during their undergraduate accounting program at several institutes of technology and polytechnics (ITPs) in New Zealand. Through online survey done by 181 accountants in business, the analysis shows some technical accounting skills provided by ITPs are consistent with employers' expectations including management accounting, financial accounting and accounting information systems, while others, such as tax accounting and auditing, are largely inconsistent with employers' expectations<sup>[13]</sup>.

Alshbili and Elamer investigate the relative importance of a set of vocational skills from accounting educators and final-year accounting students' opinions. Using a questionnaire method, they conclude that vocational skills required by accounting employers encompass not only technical and cognitive skills but also transferable skills such as communication, self-reflection, teamwork and organizational skills<sup>[14]</sup>.

However, enterprises' needs have never been explored in vocational undergraduate accounting education in Chinese mainland. Based on the above analysis, this study focuses on the following research question:

RQ1: What kind of qualities do employers require for vocational undergraduate accounting students?

RQ2: What kind of knowledge do employers require for vocational undergraduate accounting students?

RQ3: What kind of skills do employers require for vocational undergraduate accounting students?

RQ4: What kind of experiences do employers require for vocational undergraduate accounting students?

RQ5: How do industry experts assess the vocational undergraduate accounting students?

RQ6: What strategies can be employed to enhance and strengthen existing vocational university accounting education?

## **3. Materials and Methods**

### ***3.1 Research Design and Data Collection***

#### ***3.1.1 Questionnaire Survey***

In order to explore RQ1 to RQ4, this study has done questionnaires among accounting practitioners.

The questionnaire mainly investigates what qualities, knowledge, technical skills and experiences vocational undergraduate accounting talents are required to possess. The recruitment specialist of the enterprise has made an importance judgment on these aspects. Importance level is divided into 5 levels, with 5 indicating very important and 1 indicating unimportant. The specific qualities, knowledge, abilities, and experience are presented in table 1.

This study specifically focuses on the four dimensions since this talent assessing frame is frequently used in human resource field. This frame is also quite comprehensive and suitable for big data analysis. In order to avoid industry and company scale bias, the questionnaire is done on various job fairs in Shanghai for Shanghai is an international big city where companies from different industries and with various scales aggregate.

By deliberately choosing participants who are more familiar with accounting positions, this study set up a question about participants job title. Only participants from financial department or human resource department of companies are selected.

The questionnaire can be done in 3-5 min. It's with 20 questions in total and all are choices so that participants will be willing to do it. A total of 190 companies' recruitment specialists have done the questionnaire through scanning the QR code of the Wenjuanxing on mobile phones. 40 Samples from the sales and production departments are deleted. Additionally, this study removed samples from 10 companies that outsource their financial work, leaving 140 valid samples at last. 57.8% of the respondents are from the human resources department and the remaining are from financial department.

*Table 1 Specific qualities, Knowledge, Skills, and Experience*

Qualities	Skills
Physical and mental health	Accounting
Diligent and dedicated	Financial analysis
responsibility	Cost management
Professional ethics	Budget and performance evaluation
Confidentiality awareness	Tax planning
Self-learning	Risk management
Knowledge	Ability to understand and apply policies and regulations
Professional accounting knowledge	Innovation
Economic law	Teamwork
Tax laws	Communication and interpersonal skills
Management	Ability to apply foreign languages
Risk management	Ability to apply office software and management software
Statistical analysis	Ability to apply financial software
Information technology	Ability to collect, identify, and analyze big data
Experience	
Skill competitions	
Corporate Internship	
Volunteer Service	
Club activities	

### 3.1.2 Interviews

To explore RQ5, this study applied a qualitative research design with one-on-one interviews. In total, 10 interviews were conducted and strategically organized for analytical purposes. Each interviewee represents a different profession from different companies. They are deliberately selected with high occupation in their companies. The interviewed companies include accounting agencies, accounting firms, banks, securities firms and technology companies. The main purpose of the interview is to gain a deeper understanding of the demand of employers for professional undergraduate accounting talents. Their opinions and suggestions on accounting talent cultivation are appreciated. All interviews average 30 min in length and result in an extensive dataset of nearly 6500 words.

### 3.2 Sample

The questionnaire sample features wide ranged to avoid sample bias. Except for mining and water conservancy, environmental and public facility management which rarely made public recruitment on job fairs, all other industries are involved, with the manufacturing industry being the most involved, accounting for 39.33%. Those omitted industries are mainly governmental firms and have nation-wide

examination to recruit new members. Most of the samples come from small and medium-sized enterprises, with large-sized enterprise accounting for 12%. In order to gain a better understanding of the job market, we have conducted preliminary research on the level of digitization in enterprises. The results show that more than half of the enterprises have basically or completely achieved digitization, with 48% basically digitized, 14.67% fully digitized, 28.67% small-scale digitized, and a very small number not digitized.

Practitioners are deliberately selected as interview partners because they have extensive experience with accounting practice and accounting talents employment. On average, the interviewees are 40 years old ( $SD=5.21$ ). Despite differences in years of professional experience ( $M=10$ ,  $SD=8$ ), all participants had sufficient familiarity with accounting talents, ensuring that their insights reflect real enterprise needs. Year of professional experience indicate active participation in practical training, distinguishing the interviewees from university educators. The majority achieved a master diploma. They are professional auditor, consultant, chief financial officer and chief human resource officer. Their companies represent ten different companies, varying in size and industry. They are auditing firm, consulting firm, medical technology firm, financial service firm, paper making firm, environmental protection plastic firm and other manufacturing firms.

### 3.3 Data Analysis

The questionnaire part's analysis methodology is STATA software. The interviews were conducted using two separate interview guides tailored to the varying roles and insights of participants. Accounting experts were asked about the quality, knowledge, ability and experience they require for new employees from the perspective of vocational university students' long-run career development. The talks with accounting experts also involve their suggestions for the vocational university cultivation. Correspondingly, human resource officers were asked for their observations of specific cooperative practices with vocational universities, their personal experience with these activities, their attitudes towards vocational university students and their recommendations for potential improvements.

## 4. Results and Analysis

### 4.1 Results of Questionnaire

We have a general description of the 140 samples. Based on the previous situation, 114 out of 140 enterprises have recruited graduates from vocational colleges for accounting positions, accounting for 81.43%. Among the 114 enterprises that have recruited graduates from vocational colleges, 88 are small and medium-sized enterprises, indicating that small and medium-sized enterprises are the main employment direction for vocational college graduates.

In order to understand the satisfaction of existing enterprises with the students trained by vocational schools, we found that most enterprises are satisfied, accounting for 47.86%. Although there are currently no graduates from vocational universities, many companies have expressed their demand for such talents. Over 80% of enterprises are willing to accept vocational undergraduate students for internship, indicating that the employment prospects of vocational universities are promising.

Moreover, through the questionnaire survey, we have a comprehensive understanding of the requirements of the enterprise from the four dimensions of quality, knowledge, ability and experience.

#### 4.1.1 Analysis of Qualities of Students Required by Employers

Table 2 Enterprises' Requirement of Talents' Quality

Variable	Obs	Mean	Std. Dev.	Min	Max
Diligent and dedicated	140	4.49	1.43	0	5
responsibility	140	4.43	1.40	0	5
Professional ethics	140	4.43	1.35	0	5
Confidentiality awareness	140	4.29	1.40	0	5
Physical and mental health	140	4.26	1.46	0	5
Self-learning	140	4.20	1.44	0	5

According to the degree of importance, if the full score is 5, the average score of diligent and dedicated quality is 4.49. The variables' standard deviations are all around 1.4, indicating considerable differences in the extent of digital transformation among firms. Then it is responsibility and professional

ethics, both with a score of 4.43, indicating that the enterprise has high requirements for quality. The results are shown in table 2. That is to say, the enterprise requires employees to be diligent, responsible, complying with the law, honest and trustworthy.

#### 4.1.2 Analysis of Knowledge of Students Required by Employers

Knowledge is quantified from two aspects which are professional courses and related certificates. They are also scored according to the degree of importance shown in table 3. It shows that enterprises score the highest on accounting professional knowledge and tax laws, both with a score of 4.13.

In terms of certificates, 12 professional related certificates are listed, including those developed by some enterprises in the implementation of the "1+X certificate" system which is academic certificate plus several vocational skill level certificates promoted by the Chinese Ministry of Education in 2019. Among these certificates shown in Figure 1, 72.86% of enterprises value primary accounting professional certificate, which is the highest. The second is the certificate of certified public accountant(CPA), accounting for 37.14%, and then the qualification certificate of tax agent, accounting for 27.14%. Enterprises do not attach much importance to 1+X skill certificates, and some enterprises believe that accounting expertise and language skills are very important to students.

Table 3 Enterprises' Requirement of Talents' Knowledge

Variable	Obs	Mean	Std. Dev.	Min	Max
Professional accounting knowledge	140	4.13	1.64	0	5
Tax laws	140	4.13	1.6	0	5
Statistical analysis	140	4.03	1.54	0	5
Management	140	4.00	1.6	0	5
Risk management	140	3.95	1.68	0	5
Economic law	140	3.91	1.65	0	5
Information technology	140	3.85	1.58	0	5

A refers to primary accounting professional certificate; B refers to CPA(Certified Public Accountant) or ACCA(The Association of Chartered Certified Accountants);C refers to Tax certificate; D refers to Computer certificate; E refers to CET4(College English Test Band 4);F refers to CMA(Certified Management Accountant);G refers to Certificate of Big Data Financial Analysis vocational skill level certificate; H refers to Finance and Accounting Robot Application vocational skill level certificate; I refers to Internal auditor; J refers to Financial sharing service vocational skill level certificate; K refers to Asset appraiser; L refers to Competition Award-winning certificates.

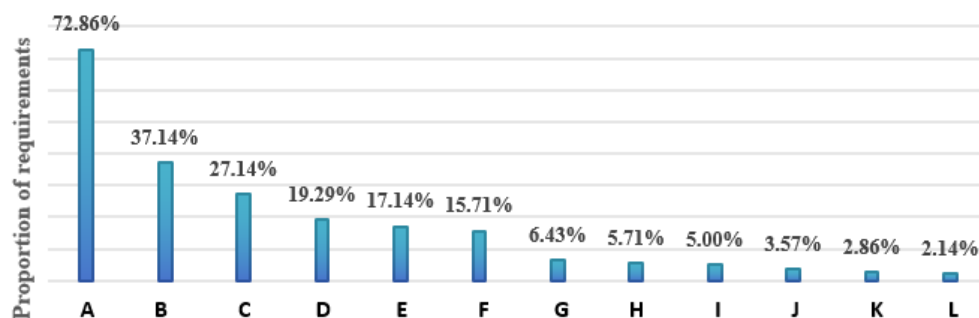


Figure 1 Enterprises' Requirements of Certificates

#### 4.1.3 Analysis of Skills of Students Required by Employers

The skills refers both soft skills and hard skills. Soft skills include innovation, teamwork and communication skills. Hard skills include accounting skill, financial analysis skill, cost management skill et al. as shown in table 4. Similarly, enterprises scored according to the degree of importance. The highest scores are given to basic hard skills which are financial analysis, accounting and financial software application skill and soft skills which are communication and interpersonal skills and Teamwork. Hard skills are given 4.20,4.19 and 4.11 respectively. Soft skills such as communication and interpersonal skills and Teamwork are given 4.14 and 4.11 respectively.

*Table 4 Enterprises' Requirement of Skills*

Variable	Obs	Mean	Std. Dev.	Min	Max
Financial analysis	140	4.20	1.48	0	5
Accounting	140	4.19	1.52	0	5
Communication and interpersonal skills	140	4.14	1.56	0	5
Teamwork	140	4.11	1.63	0	5
Ability to apply financial software	140	4.11	1.57	0	5
Risk management	140	4.09	1.49	0	5
Cost management	140	4.09	1.59	0	5
Ability to understand and apply policies and regulations	140	4.02	1.56	0	5
Budget and performance evaluation	140	4.01	1.60	0	5
Ability to apply office software and management software	140	3.98	1.63	0	5
Tax planning	140	3.94	1.63	0	5
Innovation	140	3.79	1.58	0	5
Ability to collect, identify, and analyze big data	140	3.75	1.66	0	5
Ability to apply foreign languages	140	3.52	1.56	0	5

#### **4.1.4 Analysis of Experiences of Students Required by Employers**

Experience is mainly investigated from the activities that students can participate in, including enterprise internships, volunteer services, club activities, and accounting skills competitions. As shown in table 5, the overall score is not as high as that of quality, knowledge and skills. The highest score is for enterprise internships, with an average score of 3.91, indicating that companies do not place too much emphasis on other experiences besides internship experience.

*Table 5 Enterprises' Requirement of Experience*

Variable	Obs	Mean	Std. Dev.	Min	Max
Corporate Internship	140	3.91	1.58	0	5
skill competitions	140	3.34	1.75	0	5
Club activities	140	3.07	1.75	0	5
Volunteer Service	140	2.99	1.77	0	5

## **4.2 Interview Results**

For questionnaire the authenticity and quality of survey data cannot be guaranteed. Therefore, this study conducted face-to-face interviews.

One senior auditor has pointed out that for fresh graduates work attitude is the most important. They would see whether they are serious, responsible, down-to-earth and willing to work hard without fear of hardship, as well as their learning ability. Communication skills are also important because it's all about teamwork. For auditors CPA or ACCA certificates is required. Internship experience is just bonus because there is training available for new employees in the office and as long as they have strong learning abilities they can start from scratch. A professional consultant emphasized that dedication and diligence are very important. Knowledge will be acquired after graduating from university. Skills can be acquired after working. Certificates can be taken after work. Work attitude is everything. A personnel Manager also marked that sense of responsibility is very important. And professional knowledge and certificates are highly valued.

From interview, we got additional information that soft skills are more important for students.

## **5. Supplementary Analysis**

### **5.1 Recruitment data Collection and Analysis**

In order to further confirm the survey results, this study manually collected job postings related to accounting and finance on recruitment websites. 1000 recruitment announcements from recruitment websites such as Zhilian recruitment and Boss direct recruitment are collected from four dimensions as well. The sample are from different industries in the Yangtze River Delta region, 57.8% of which are small and medium-sized enterprises with less than 300 employees.

### 5.2 Supplementary Results based on Recruitment Announcements

Table 6 presents the proportion of samples that have requirements on qualities, knowledge and skills. Consistent with previous results, this study found that corporate recruitment announcements value responsibility and diligence most, accounting for 82.9% and 80.2% respectively. Although only 55.7% of job postings emphasize professional ethics, it has been widely regarded as a common sense.

As for knowledge, professional accounting knowledge is the most frequently mentioned. The requirements for tax, statistics, management, and other knowledge vary among different positions. For example, financial analysis positions place greater emphasis on statistics and information technology.

As for, software skills and teamwork are placed the highest mentions. The proportion of samples that mention basic office software and teamwork skill is 84.20% and 81.30% respectively. Requirements of other skills varies among accounting positions.

In term of experience, 53.7% of the announcements did not mention it. Except for the position like accounting supervisor, most accounting related positions do not require experience, which is consistent with the results of the questionnaire and corporate interviews.

*Table 6 Proportion of Requirements on Qualities, Knowledge and Skills*

Quality item	Proportion	Skill item	Proportion
Responsibility	82.90%	Ability to apply office software and management software	84.20%
Diligent and dedicated	80.20%	Teamwork	81.30%
Self-learning	68.50%	Ability to apply financial software	76.80%
Professional ethics	55.70%	Financial analysis	70.50%
Physical and mental health	16.20%	Accounting	68.40%
Confidentiality awareness	5.20%	Communication and interpersonal skills	66.00%
<b>Knowledge item</b>		Ability to understand and apply policies and regulations	59.30%
Professional accounting knowledge	89.30%	Cost management	44.10%
Statistical analysis	54.00%	Budget and performance evaluation	27.30%
Information technology	51.20%	Tax planning	22.50%
Management	41.90%	Risk management	17.90%
Economic law	39.70%	Ability to collect, identify, and analyze big data	15.10%
Tax laws	36.50%	Ability to apply foreign languages	8.10%
Risk management	19.40%	Innovation	3.20%

## 6. Conclusions and Countermeasures

Vocational undergraduate accounting education plays an irreplaceable role of vocational education in the education system and economic development. The construction of vocational undergraduate accounting majors should orient towards the profession and the broader career development of students in the future. From the perspective of enterprise needs, this article provides educators with directions for improvement and reform.

The questionnaire findings show that being responsible and diligent is super important. The interview also emphasizes the essential of quality. For knowledge and skills, both the questionnaire and interview indicate fundamental accounting knowledge and financial software practice are important. Learning attitude versus communication skill are of equal importance. Work experience is important but not first important for vocational undergraduate student because it can be accumulated after graduation.

This study provides university educators with directions to modify their education mode. This is RQ6 of this study. What strategies can be employed to enhance and strengthen existing vocational university accounting education?

Firstly, school education could be moistening students silently through diligent and responsible daily work. When teaching professional knowledge, teachers can be patient to inspire students. Secondly, education director can combine the curriculum and training program with the specific professional position and certificates. Moreover, competition can be combined with the relative courses to strengthen



the training of students' professional knowledge and skills. Thirdly, integrate industry with education to let students enter enterprises for short-term practice. It'll help students better adapt to the position in the process of employment and help teachers modify the curriculum and improve the quality of education.

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### References

- [1] Jun Guo. *Development mode and Enlightenment of undergraduate level vocational education in developed countries*[J]. *Journal of Jiujiang Polytechnic* 2024(2): 13-18.
- [2] Calmand J., Giret J.F., Guégnard C.. *Vocational bachelor graduates in France: labour market integration and social mobility*[J]. *International Journal of Manpower*.2014,35 : 536-552.
- [3] Han Xu. *The Basic Characteristics of the Talent Training Mode of the Dual System University in Baden Wuerttemberg, Germany -- Also on the Reconstruction of the Talent Training Mode of China's Undergraduate level Vocational Education*[C]. *Vocational Education Forum*.2022,38: 121-128.
- [4] Shiliang Yan, Jianguo Xia, Xiaowen Li. *Research on the Development History of Japanese Undergraduate Level Vocational Education -- Taking the University of Technology and Science as an Example*[J]. *Higher Education in China*,2019, 2: 78-80.
- [5] Lili Xu, Xiaoping Huang. *Integration of German Vocational Education with General Education and Higher Education: Governance Mode and Internal Logic*[J]. *China Vocational and technical education*.2023, 3: 86-96.
- [6] Liyin Chen, Zhang Hui, Xianhui He. *Research on the Training Mode of Accounting Professionals to Meet the Needs of the Development of Modern Service Industry in Suzhou*[J]. *Modernization of Shopping Malls*.2019, 18 : 86-87.
- [7] Yuxiu Chen. *On the Reform and Innovation of Private Vocational Undergraduate Talent Training Mode -- Taking the Printing Major of Guangzhou University of Science and Technology as An Example*[J]. *Journal of Hubei Open Vocational College*,2022,35: 47-49.
- [8] Martina Fuchs. *MNCs' Open International Strategy-local Dynamics: Transfer of German "Vocational Education and Training" to Emerging Economies*[J]. *Critical Perspectives on International Business*,2020, 18: 97-114.
- [9] Guohua Zhang, Xiaohui Qu. *Orientation of Accounting Vocational Education System and Training of Professional Undergraduate Accounting Talent*[J]. *Monthly Journal of Accounting*.2024, 45: 46-51.
- [10] Guangzhi Wang, Qianhui Zhang. *Analysis and Practice of Curriculum Standard of Big Data Analysis Foundation Course in Vocational Colleges*[J]. *Journal of Harbin Institute of Technology*.2023, 2: 58-60.
- [11] Rachel Wai-Yi Cheung. *Ethics Study in Professional and Vocational Education: Voices from Practitioners*[J]. *International Journal of Humanities. Arts & Social Sciences*. 2020,6: 63-68.
- [12] Douglas Howcroft. *Graduates' Vocational Skills for the Management Accountancy Profession: Exploring the Accounting Education Expectation-Performance Gap*[J]. *Accounting Education*.2017,26 : 459-481.
- [13] Edeigba Jude. *Employers' expectations of accounting skills from vocational education providers: The expectation gap between employers and ITPs*[J]. *The International Journal of Management Education*, 2022, 20(3).
- [14] Ibrahim Alshbili and Ahmed A. Elamer. *The vocational skills gap in accounting education curricula: empirical evidence from the UK*[J]. *International Journal of Management in Education*, 2020, 14(3).