

# A Study on the Educational Model of Connecting Vocational and Undergraduate Education in Finance and Accounting Majors

Yikun Xu, Lizhu Xue, Fan Xu\*

Chengdu Vocational University of the Arts, Chengdu 610100, Sichuan Province, China

\*Corresponding author: Fan Xu, 18184040241@163.com

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**Abstract:** This article studies the educational mode connecting vocational education and undergraduate education in finance and accounting majors, in response to the weak cultural foundation and poor course integration faced by current vocational school graduates after entering vocational undergraduate education. By adopting empirical research methods and selecting vocational college students majoring in finance and accounting and ordinary high school students as research objects, this study implements a series of teaching reform measures and conducts tracking surveys on the short-term and long-term effects of educational reforms. As a result, it was found that in the final survey of graduation destinations, 34 vocational and technical college students were engaged in related work in their majors, accounting for 45.9% of all vocational and technical college students. This proves that the proposed transitional education model can effectively enhance the cultural foundation of vocational college students and provide new ideas for the cultivation of talents in finance and accounting majors.

**Keywords:** Vocational education; Vocational undergraduate program; Connecting education models; Curriculum reform; Professional ethics

**Online publication:** October 23, 2024

## 1. Introduction

As an important support for economic and social development, the connection and integration issues within the education system of finance and accounting majors are becoming increasingly prominent. There are differences in training objectives, curriculum design, and teaching modes between vocational education and vocational undergraduate education, leading to many challenges faced by vocational college graduates when they enter vocational undergraduate education. These issues not only affect students' academic progress but also constrain the quality and efficiency of talent cultivation in finance and accounting majors. Although previous literature has explored this issue, comprehensive and effective solutions have yet to be proposed, especially in the seamless connection between vocational and undergraduate education, which still faces

many challenges<sup>[1]</sup>.

Vocational undergraduate education provides new opportunities for the operation and development of vocational schools, changing the single development model of vocational school students who can only find employment after graduation. This study explores the educational model for the transition between vocational and undergraduate education in finance and accounting majors, in order to address the existing problems in the current education system. This study adopts empirical research methods to compare and analyze the differences in academic performance, professional ethics, and other aspects between vocational college students and ordinary high school students, and explore effective connection strategies. This study aims to provide new ideas and methods for the connection between vocational education and undergraduate education and promote the improvement of the quality of talent cultivation in finance and accounting majors. At the same time, this study provides useful reference and guidance for the educational integration of other majors, with certain theoretical value and practical significance.

## 2. Literature review

The study by Achatz *et al.* used sequence analysis to explore the complex transition patterns of German students from school to work, with a particular focus on transitional measures to supplement the conventional vocational education and training system<sup>[2]</sup>. A study by Haltia *et al.* in Finland focused on higher education students who entered through vocational pathways and found that these students were mostly mature students with lower educational backgrounds than their parents<sup>[3]</sup>. They had longer learning paths and different experiences of belonging to the higher education community. McGrath and Yamada reviewed the research literature in the field of vocational education and training and proposed five types of vocational education and training<sup>[4]</sup>. Barrera-Osorio *et al.* conducted a randomized evaluation of the impact of excess employment training programs on skills and labor market outcomes and found that vocational training can improve labor market outcomes, especially in formal employment<sup>[5]</sup>. Wang believed that the “3+2” model should be adopted for vocational education to meet students’ career planning and re-education needs. She also emphasized that in the modern vocational education system, financial intelligence transformation should be combined to cultivate comprehensive accounting talents with “new financial thinking”<sup>[6]</sup>.

The above research provides rich data and in-depth insights when exploring the field of vocational education and training, but its applicability to other countries or regions needs further verification. Therefore, this article focuses on the specific field of finance and accounting majors, and explores in depth the connection educational model between vocational schools and vocational undergraduate programs, aiming to provide practical and feasible suggestions for solving the problems existing in the current vocational education system.

## 3. Methods

### 3.1. Issues in the process of connecting vocational education with vocational undergraduate education

In the process of connecting vocational education with vocational undergraduate education, there are a series of urgent problems that need to be solved.

### 3.1.1. Weak cultural foundation knowledge among vocational school students

Vocational schools focus on cultivating vocational skills, so cultural courses have fewer class hours, relatively simple content, and lax assessments, which leads to students' weak grasp of cultural basic knowledge. When students enter undergraduate programs, this weak foundation is particularly evident, especially in cultural foundation courses such as mathematics and English, which affects their subsequent course learning. Therefore, the connection between vocational education and undergraduate education requires more detailed and scientific planning in terms of educational content and methods.

### 3.1.2. Disconnected teaching mode

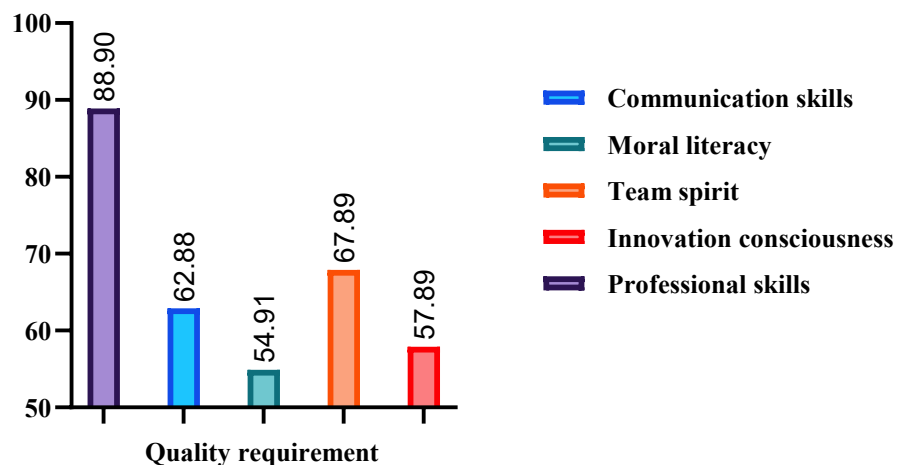
Undergraduate colleges mainly cater to ordinary high school students and follow traditional teaching models. However, when formulating vocational undergraduate talent training programs, the differences between high school students and vocational school students are often not fully distinguished. In addition, the teaching mode has not been well matched with the existing knowledge and skills of vocational school students, resulting in a disconnect between actual teaching and expected goals<sup>[7]</sup>.

### 3.1.3. Unreasonable arrangement of teaching plan

The lack of consistency between the secondary vocational education curriculum system and the vocational undergraduate curriculum system has led to problems such as unreasonable curriculum structure, repetitive curriculum settings, and a disconnect in practical skills. Particularly, excessive repetition of course content not only wastes educational resources but also seriously affects the quality of talent cultivation.

## 3.2. Educational objectives for financial and accounting majors

The goals and teaching content of vocational undergraduate education can meet the expectations of society for vocational positions. Professional ethics, as the root of a career, mainly consists of three core contents: professional beliefs, professional knowledge and skills, and professional behaviors and habits. In order to gain a deeper understanding of the manifestation of these elements in financial and accounting education, a detailed survey of graduates and employers of financial and accounting majors was conducted. Data on the quality requirements emphasized by 32 employers who recruit finance and accounting majors were collected. The research results are shown in **Figure 1**.



**Figure 1.** The quality requirement emphasized by financial and accounting recruitment units

From **Figure 1**, it can be seen that financial and accounting employers tend to hire personnel with professional skills, followed by those with team spirit. Therefore, in education reform, emphasis should be placed on cultivating students' qualities in these two aspects.

### **3.3. Vocational and undergraduate education model for finance and accounting majors**

In the field of finance and accounting, the connection between secondary vocational education and vocational undergraduate education is an important issue that involves the connection and integration between different levels within the education system. Therefore, emphasis should be placed on the integration of different levels in the teaching process of this major <sup>[8]</sup>.

#### **3.3.1. Training objectives and curriculum alignment**

There are significant differences in the training objectives between vocational schools and vocational undergraduate programs, and teaching models and training plans need to be designed based on social needs and technical application skills <sup>[9]</sup>. Vocational schools emphasize the cultivation of frontline skilled talents, while undergraduate programs focus on the cultivation of middle-level management and technical talents. Therefore, in course design, emphasis should be placed on cultivating practical skills and achieving effective integration between vocational and undergraduate courses.

#### **3.3.2. Integration of teachers and teaching resources**

Vocational schools and vocational undergraduate schools can establish a teacher-sharing mechanism, promoting communication and cooperation among teachers and improving teaching quality through mutual teaching and joint research projects. At the same time, integrating teaching resources from vocational and undergraduate schools, including libraries, laboratories, training bases, etc., can provide students with richer learning resources and practical opportunities.

#### **3.3.3. Connection between practice and employment**

Strengthening the cooperation between vocational and undergraduate schools and enterprises provides students with more opportunities for off-campus practice and enables them to learn, grow, and improve through practice <sup>[10]</sup>. Establishing a comprehensive employment guidance system can provide guidance and services for students in career planning, job-seeking skills, and other aspects, helping them smoothly achieve employment.

## **4. Results and discussion**

### **4.1. Research on the effect of short-term education reform**

This study aims to explore the practical application effectiveness of the proposed method in vocational undergraduate education. The study selected 147 students majoring in finance and accounting who enrolled in a vocational college in 2020 as the research subjects. These students were composed of students who entered middle and vocational schools and those who entered ordinary high schools. Among them, there were 74 students who entered middle and vocational schools. The study first investigated the academic differences between these two groups of students (all subjects were scored on a percentage scale) and presented the specific data in **Table 1**.

**Table 1.** Comparison of grades before education reform

Average	General high school students	Secondary and higher vocational students	Difference
High numbers	81.9	57.3	24.6
Accounting	82.9	45.4	37.5
Statistics	68.9	50.4	18.5
English application (1)	76.9	47.4	29.5
Financial management	77.9	54.3	23.6

After the implementation of a three-month teaching reform, the study once again tracked and investigated the gap in academic performance between vocational and high school students and ordinary high school students, in order to evaluate whether they are suitable for the transitional education method proposed in this study (**Table 2**).

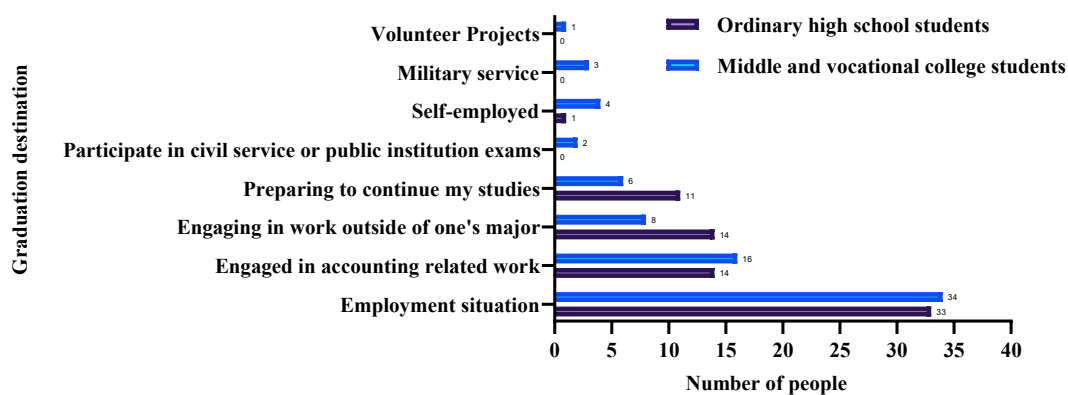
**Table 2.** Comparison of grades after education reform

Average	General high school students	Secondary and higher vocational students	Difference
High numbers	78.9	71.4	7.5
Accounting	74.9	69.3	5.6
Statistics	79.9	73.4	6.5
English application (1)	76.9	65.4	11.5
Financial management	79.9	71.2	8.7

Comparing **Table 1** and **Table 2**, it is clear that after three months of education reform, the grades of middle and vocational college students have significantly improved. Among them, in the study of professional courses such as accounting and statistics, the difference in grades between the two types of students is the lowest, and the average score of vocational and middle school students in all subjects has reached a passing grade.

#### **4.2. Research on the effect of long-term education reform**

The primary goal of vocational undergraduate education is to ensure that students can meet the specific requirements of enterprises in society for related professions. Therefore, this study also tracked the employment situation of students who enrolled in 2020 and graduated in 2024, in order to further examine whether their professional ethics meet the standards of enterprises. The investigation results are shown in **Figure 2**.



**Figure 2.** The direction of graduates majoring in finance and accounting in 2024

Based on **Figure 2**, there is not much difference in the employment situation of 2024 graduates in their respective majors. Thirty-three ordinary high school students applied for jobs related to their major, accounting for 45.2% of all ordinary high school students. There are 34 students in vocational colleges, accounting for 45.9% of all vocational college students.

## 5. Conclusion

Through exploring the educational model for the transition between vocational and undergraduate education in finance and accounting majors, it was found that optimizing courses, reforming teaching models, and integrating teaching resources can significantly improve the academic performance and professional ethics of vocational college students during their undergraduate studies. These major findings not only confirm the effectiveness of the transitional education model but also provide strong support for the deep integration of vocational and undergraduate education. Compared with previous literature, the connection strategy proposed in this study focuses more on practicality and pertinence, effectively solving the problems of weak cultural foundation and poor curriculum connection faced by vocational school students after enrollment. The research results are of great significance for improving the quality of talent cultivation in finance and accounting majors and promoting seamless integration between vocational and undergraduate education.

## Funding

2024 Project of Chengdu Vocational and Undergraduate Education Association “Research on the Curriculum System Convergence of ‘Vocational Education–Undergraduate Education’ in Financial and Accounting Majors Based on the Progressive Development of Vocational Competence” (GZZZ2024-15)

## Disclosure statement

The authors declare no conflict of interest.

## References

- [1] Lei J, Hu Y, Huang B, et al., 2024, “3+2” Linkage Education between Secondary and Higher Vocational Education and Its Problems, Reasons, and Countermeasures. *Journal of Wuhan Shipbuilding Vocational and Technical College*, 23(02): 41–46.
- [2] Achatz J, Jahn K, Schels B, 2022, On the Non-Standard Routes: Vocational Training Measures in the School-to-Work Transitions of Lower-Qualified Youth in Germany. *Journal of Vocational Education & Training*, 74(2): 289–310.
- [3] Haltia N, Isopahkala-Bouret U, Jauhiainen A, 2022, The Vocational Route to Higher Education in Finland: Students’ Backgrounds, Choices and Study Experiences. *European Educational Research Journal*, 21(3): 541–558.
- [4] McGrath S, Yamada S, 2023, Skills for Development and Vocational Education and Training: Current and Emergent Trends. *International Journal of Educational Development*, 102(1): 102853–102854.
- [5] Barrera-Osorio F, Kugler A, Silliman M, 2023, Hard and Soft Skills in Vocational Training: Experimental Evidence from Colombia. *The World Bank Economic Review*, 37(3): 409–436.
- [6] Wang L, 2024, Exploration and Practice of Vocational and Secondary Vocational Connection in Drug and Food Inspection Major. *Intelligence*, (29): 169–172.
- [7] Deng H, Zeng Y, 2023, Research on the Connection Path between Art Colleges and High School Career Development Education Based on the New College Entrance Examination Reform. *Knowledge Library*, (10): 92–94.
- [8] Zheng M, Zou D, 2022, Research on the Quality Evaluation System of Talent Cultivation in the Connection of Middle and Higher Vocational Education—Taking Food Testing Majors as an Example. *Food Industry*, (07): 90–92.
- [9] Jiang D, 2021, Research on the Construction of Evaluation Index System for the Connection between Vocational and Technical Colleges in the Mechanical and Electrical Technology Application Major. *Science and Technology Vision*, (26): 109–110.
- [10] Dai J, Xi Z, Yuan H, et al., 2021, Innovation and Practice of Collaborative Cultivation of High Quality Farmers through Skill Training and Vocational Education: A Case Study of Jiangsu Agricultural and Animal Husbandry Technology Vocational College. *Farmer Science and Technology Training*, (08): 32–34.

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