

Research on the Integrated Curriculum System of "3+2" Collaborative Education for Higher Vocational Undergraduate Education: A Case Study of Accounting Major in Guangdong Province

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Abstract: As one of the models for promoting the construction of the national vocational education system and exploring the long-term education system to cultivate high-end technical and skilled talents, the "3+2" collaborative education between vocational and undergraduate education has achieved some achievements and experience since its implementation. This article takes the "3+2" collaborative education project for higher vocational undergraduate accounting majors in Guangdong Province as the research object. It explores the problems in constructing the "3+2" integrated curriculum system for higher vocational undergraduate education from three aspects: talent training objectives, curriculum standards, and teacher team. Furthermore, it proposes feasible optimization suggestions such as accurately positioning talent training objectives, establishing an integrated curriculum system through curriculum standards, and strengthening teacher team construction.

Keywords: Higher Vocational Undergraduate "3+2"; Integrated Curriculum System; Curriculum Cohesion; Talent Training Objectives; Teaching Team

1. Introduction

With the transformation and upgrading of China's social economic structure and industrial development mode, high-end technical talents have become the sought-after names for many enterprises. The accounting industry is facing the impact of financial information reform, and a large number of repetitive accounting work is gradually transitioning to financial robots. What

enterprises need more is to provide financial decisions for their production and operation. Accounting talents who help enterprises create economic benefits, not just those who master the basic accounting skills [1]. At present, the vocational skill level of accounting graduates in higher vocational colleges is difficult to support them to create economic value for enterprises, which does not meet the needs of long-term development goals of enterprises.

The "3+2" collaborative education project for higher vocational undergraduate education is different from the traditional "college to undergraduate" education form. The traditional "college to undergraduate" is that after three years of study in higher vocational colleges, students who are not satisfied with their academic level independently prepare for the college to undergraduate examination and enter the University for two years of study. In this form of teaching and training, the higher vocational and undergraduate education system is completely independent, and the training effect is poor. In order to overcome this disadvantage, improve the proportion of national professional and technical talents, and improve the employment competitiveness of vocational school graduates, the "3+2" collaborative education project for higher vocational and undergraduate education came into being. At present, the "3+2" collaborative education project for higher vocational colleges is a talent training program jointly formulated by the undergraduate colleges and higher vocational colleges. After three years of study in higher vocational colleges and passing the assessment, students can enter the undergraduate colleges for two years of study [2]. This new form of education has greatly improved the training effect and strengthened the employment competitiveness of students

after graduation.

As the most developed province in China, Guangdong Province took the lead in carrying out the higher vocational undergraduate collaborative education project in 2013 to explore a more effective path for the cultivation of vocational skilled talents. By

2023, a total of 13 Application-oriented Undergraduate Colleges and 13 Higher Vocational Colleges in Guangdong Province had carried out the "3+2" collaborative education project for accounting majors, as shown in Table 1.

Table 1. List of Cooperative Training Colleges for Higher Vocational and Undergraduate Education in Accounting in Guangdong Province

Year	Undergraduate institution	Higher vocational college	Number of undergraduate institutions	Number of higher vocational colleges
2020	Guangdong University of Finance & Economics	Shunde Polytechnic	1	1
2021	Guangdong University of Finance & Economics	Shunde Polytechnic	2	2
	Guangdong Polytechnic Normal University	Guangdong Aib Polytechnic		
2022	Guangdong University of Finance & Economics	Shunde Polytechnic	6	6
	Guangdong Polytechnic Normal University	Guangdong Aib Polytechnic		
	Guangdong Baiyun University	Guangzhou Songtian Polytechnic College		
	Dongguan University of technology	Dongguan Polytechnic		
	Guangzhou Huali College	Guangzhou Huali Science and Technology Vocational College		
	Guangzhou Xinhua University	Guangdong Nanhua Vocational College of Industry And Commerce		
2023	Guangdong University of Finance & Economics	Shunde Polytechnic	13	13
	Guangdong Polytechnic Normal University	Guangdong Aib Polytechnic		
	Guangdong Baiyun University	Guangzhou Songtian Polytechnic College		
	Dongguan University of technology	Dongguan Polytechnic		
	Guangzhou Huali College	Guangzhou Huali Science and Technology Vocational College		
	Guangzhou Xinhua University	Guangdong Nanhua Vocational College of Industry And Commerce		
	Shaoguan University	Guangdong Construction Polytechnic		
	Lingnan Normal University	Guangdong Women's Polytechnic College		
	Zhaoqing University	Guangdong Polytechnic of Science and Technology		
	Guangdong University of	Guangdong Polytechnic		

	Petrochemical Technology			
	Guangdong Technology College	Guangdong NanFang Institute of Technology		
	Guangzhou College of Applied Science and Technology	Guangdong Polytechnic of Science and Trade		
	Guangdong University of Science and Technology	Guangdong Innovative Technical College		

In the accounting major of Guangdong Province, the "3+2" collaborative education project was first launched by Guangdong University of Finance and Economics and Shunde Polytechnic in 2020. In the following three years, the number of colleges and universities participating in the "3+2" collaborative education program began to increase dramatically, from the initial one undergraduate college to a total of 13 undergraduate colleges and universities participating in 2023. At present, the second batch of colleges and universities that carry out the "3+2" applied accounting training programs for higher vocational undergraduates in Guangdong Province is the most frequent, and the first batch of colleges and universities that enroll students is only Guangdong University of Finance and Economics. At the same time, the applied accounting collaborative education program between Guangdong University of Finance and Economics and Shunde Polytechnic is also the longest and most effective collaborative training program for accounting majors in Guangdong Province.

2. Problems Existing in the Collaborative Education Curriculum System of Applied Accounting Higher Vocational Undergraduate in Guangdong Province

2.1 Deviations in Talent Training Objectives

The different cognition of "3+2" cooperative training goal in higher vocational undergraduate leads to the deviation in the orientation of talent training goal. Most of the professional training objectives of higher vocational colleges are oriented by the characteristics of vocational positions and have obvious employment adaptability. The "3+2" undergraduate period is the deepening of employment-oriented education. Through further learning of accounting professional theoretical knowledge and training of practical

skills, students can improve their employment competitiveness, so as to provide students with a better career development platform. The major training goal of undergraduate colleges is to cultivate high-quality comprehensive application talents. On the basis of sufficient practical experience of graduates of higher vocational colleges, it is necessary to further deepen their understanding and mastery of the theoretical knowledge of accounting. In addition, it is necessary to pay attention to the cultivation of students' innovation consciousness, innovation ability and dialectical ability, so as to broaden their employment choices and increase their career development potential [3]. This cognitive difference leads to differences between the two sides in the setting of accounting major. Vocational college majors are mainly divided according to industry or vocational post. However, undergraduate universities mainly set up majors according to the discipline system [4]. At the same time, the two sides each implement the talent training program set up by their own schools, and the span between the curriculum systems carried out is large, which is easy to make students from higher vocational colleges to undergraduate colleges have learning discomfort, affecting their learning interests.

2.2 Curriculum Bridging Standards are Inconsistent

Curriculum development is the main way for students to learn knowledge, and the effectiveness of its connection directly affects the quality of students' learning and the realization of the goal of talent training. However, at present, there are still some deficiencies in the classification, integration and optimization of courses at the undergraduate stage of higher vocational accounting major, resulting in duplication, obsolescence and singleness of some course contents. In addition, existing higher

vocational and undergraduate colleges and universities have formed their own talent training mode, talent training program and curriculum system in the actual teaching of accounting major. The quality requirements of personnel training and the basic conditions of education and teaching lead to the divergence between the two sides in the curriculum standard, which leads to the repetition of the curriculum content, the unclear division of the curriculum boundary, and their own politics and chaos. Inconsistent curriculum cohesion standards are a major obstacle in the convergence of accounting majors [5].

2.3 The Cohesion of the Teaching Staff is not Sufficient

As the leader of teaching activities, teachers play an important role in determining the training objectives and designing training programs of "3+2" cooperative education for higher vocational undergraduate students. However, the "3+2" training program of applied accounting higher vocational undergraduate in Guangdong Province is a relatively new program, and the theoretical development in all aspects is still in the stage of exploration. Most untrained teachers are at a loss for this educational concept and training objectives. Secondly, due to the regional differences in the teaching of higher vocational colleges, the communication between the two sides is less [6], and the teachers at the undergraduate stage do not know enough about the learning situation of students in higher vocational colleges, and it is difficult to achieve hierarchical teaching. Moreover, teachers from both sides of the project have different emphases in teaching methods and knowledge learning directions. Teachers in higher vocational colleges lay emphasis on teaching and training of practical skills, while teachers in undergraduate colleges lay emphasis on teaching and research of theoretical knowledge [7].

3. Suggestions to Optimize the Construction of "3+2" Integrated Curriculum System for Applied Accounting Higher Vocational Undergraduate in Guangdong Province

3.1 Accurate Positioning of Talent Training Objectives

Different levels of higher education have

different requirements for personnel training. The "3+2" collaborative education project for higher vocational college undergraduates involves the education and teaching activities of the two institutions, and its personnel training objectives have certain particularity, which should be carefully determined by considering various factors when formulating.

3.1.1 Professional setting corresponds to career development needs

School education, on the one hand, is to improve students' ideological knowledge literacy, help them establish a correct outlook on life, values, world outlook, and more importantly, a purpose is to transport talents for the economic modules of various regions of the society. Therefore, in the setting of majors, the future development situation of the target profession should be taken into account, and the differences between the requirements of the industry's development situation and the current training specifications should be scientifically predicted [8]. The main line of development should be the vocational ability of the post, and the talent training goals should be built in line with the needs of social and economic development.

3.1.2 Personnel training specifications meet the needs of the post

The education and training system of applied accounting talents is a three-dimensional system, including professional knowledge learning, professional skill learning and professional skill practice. In the construction of talent training objectives, we should join hands with enterprises to understand the current situation of accounting employment and the quality requirements of accounting talents. Starting from the requirements of accounting positions, we should clarify their job responsibilities, work content, and ability requirements [9], analyze their knowledge structure and skill characteristics, and refine the quality requirements of students in different aspects to fully reflect the characteristics of "position". Ensure that graduates can meet the employment needs of enterprises [10].

3.1.3 The goal of higher vocational undergraduate talent training is cohesive

The "3+2" collaborative education of applied accounting higher vocational undergraduate students is not only the superposition of two learning periods, but its more important

purpose is to enable students to realize the breakthrough and sublimation of ideas, knowledge and ability through different stages of education and learning. Therefore, when constructing talent training goals, higher vocational colleges and undergraduate colleges should fully consider the characteristics of junior education, combine the actual learning situation of graduates in higher vocational colleges, clarify the differences in the training goals of junior talent training specifications in the three dimensions of thought, knowledge and ability, and achieve the gradient connection of talent training goals.

3.2 Establish an Integrated Curriculum System by Implementing Curriculum Standards

3.2.1 Implement curriculum standards

When designing the "3+2" collaborative education curriculum standard, we should pay attention to the different characteristics and tendencies of higher vocational college undergraduate training, and appropriately strengthen the cultivation of professional theoretical knowledge learning ability of higher vocational college students and the cultivation of practical ability of undergraduate students. On the one hand, it can prevent the inadaptability of higher vocational graduates to theoretical teaching when they enter the undergraduate college. On the other hand, it can also make the graduates of the undergraduate stage have a stronger ability to work. Secondly, the setting of curriculum standards should follow the law of students' physical and mental development, take the

requirements of post ability as the guidance, analyze the hierarchy, logic and continuity of different knowledge step by step, and jointly explore and develop by higher vocational colleges and undergraduate colleges to ensure the unity and operability of curriculum standards.

3.2.2 Establish an integrated curriculum system

Curriculum design should take into account the sequential nature of students' physical and mental development. The curriculum is set up in accordance with the logical sequence of course contents, with vocational ability training as the main line, from low-level to advanced, and from simple to complex. From the higher vocational stage, the teaching of primary accounting and financial accounting courses is mainly carried out to lay the accounting professional thinking structure for students, to the undergraduate stage, a series of courses related to career derivatives and positions are carried out to advanced accounting. Deepen the content of professional courses in sequence. At the same time, due to the homogeneity of some courses in terms of content, repetitive content of courses should be eliminated in the course arrangement, the course structure should be optimized and systematic integration among courses should be carried out, the integrated course system should be built (see Table 2), the goal of the course system should be defined (see Table 3), the course time should be reasonably arranged, and the learning efficiency of students should be improved.

Table 2. Integrated Course System Structure and Some Reference Courses

Higher vocational stage			
Course category	Nature of curriculum	Course module	Course name
Common course	Required course	Foundation of information technology	
		English	
		Language	
		Maths	
		Physical Education	
General Education Course	Optional course	Legal system and society	Financial literacy education
		Thinking and method	Accounting informatization reform
		Literature and art	Public art
		Sports and health	Psychology and life
		Nature and technology	How do people learn
Basic subject course	Required course	Elementary course	Basis of statistics
			Fundamentals of economic law

Specialized course	Required course	Specialized basic course	Introduction to the accounting profession
			Basic accounting skills
			Elementary accounting
			Cashier position practice
			Financial accounting
			Revenue position practice
			Expense post practice
			Cost accounting
	Comprehensive practice course	Professional Skills Training (1)	
		Professional Skills Training (2)	
Optional course	Professional option	Enterprise internship	
		Industrial accounting	
			Accounting statements
Undergraduate stage			
Course category	Nature of curriculum	Course module	Course name
Common course	Required course	Ideological and political course	
		Physical education	
		The application of EXCEL in economic management	
		College English	
		Higher mathematics	
		College Chinese	
General Education Course	Optional course	Innovation and Entrepreneurship	Life and financial management
		Innovation and Entrepreneurship	Innovative thinking and methods
		Expression and Communication	English reading and retelling
		Expression and Communication	language arts
		Thinking and Methods	Data collection and analysis
		Thinking and Methods	Management communication methods
		Thinking and Methods	Stress management
		Thinking and Methods	Thesis writing
		Legal System and Society	The Economics Of Life
		Legal System and Society	The Economy from the Perspective of Big Data
Subject Basic Course	Required course	Basic courses	Statistics
			Principles of economics
Specialized course	Required course	Specialized basic course	Advanced accounting
			Management accounting
			Tax accounting
			Statement accounting
	Integrated application course	Comprehensive accounting training	
		Graduation practice	
		Graduation thesis	
	Optional course	Professional option	Financial English
Financial big data analysis and application			

			Financial software
			auditing
			Government and non-profit accounting
			Tax planning
			Big data accounting

Table 3. Three Dimensional Objectives of Curriculum System

Quality objectives	Knowledge objectives	Capability objectives
(1) Ideological quality: have a correct world outlook, outlook on life and values, abide by the law, and have a sense of social responsibility and sense of responsibility. (2) Professional quality: familiar with the basic accounting professional ethics and accounting standards. (3) Physical and mental quality: have good physical quality, strong psychological pressure resistance ability, can quickly adapt to different environments, and have the courage to meet challenges.	(1) Master the basic theories, methods and skills of economics, management and accounting; (2) Master the accounting principles of accounting work, and understand the accounting ideas and methods. (3) Familiar with domestic and foreign accounting related policies, regulations and international accounting practices.	(1) Have good verbal communication skills, interpersonal skills, information acquisition and analysis skills, and proficient in accounting. (2) Master the ability of information acquisition, information collation and information analysis. (3) Have the ability of scientific research and innovation.

3.3 Strengthen the Construction of the Teaching Staff and Establish a Teacher Communication Mechanism

An excellent team of teachers is an important guarantee for the smooth development of the "3+2" collaborative education project, especially in the training of accounting major, which is highly practical, the importance of double-qualified teachers is more prominent. At the same time, Accounting major is a discipline with rapidly changing knowledge, which requires teachers to always pay attention to changes in regulations and policies. Therefore, higher vocational colleges should regularly carry out teacher training activities and encourage full-time accounting teachers to participate in the practice of enterprise. At the same time, in order to strengthen the connection of higher vocational college teachers, we should regularly carry out interactive activities such as joint lesson preparation, teaching competition, topic research exchange, etc., to improve the understanding of the "3+2" cooperative education concept of higher vocational college students and jointly explore more suitable talent training programs. In addition, college and vocational colleges should set up a joint teaching team of teachers, and establish an interactive mechanism of education and

teaching. Teachers of vocational colleges should carry out practical operation skills training courses, and teachers of undergraduate colleges should carry out theoretical knowledge courses.

4. Conclusion

With the development of China's science and technology and the transformation and upgrading of industrial structure, enterprises need more high-quality applied accounting talents, which will bring great challenges to China's traditional vocational education. To carry out collaborative education projects for higher vocational undergraduates is an important way to alleviate the contradiction between supply and demand in the talent market. This paper explores the problems existing in the construction of application-oriented accounting integrated curriculum system education for higher vocational colleges in Guangdong Province, analyzes the causes, and puts forward targeted suggestions such as correctly establishing professional talent training objectives, unifying curriculum standards and strengthening the construction of teachers when constructing curriculum system for higher vocational colleges. It is hoped to provide teaching reform direction for applied

accounting vocational education in Guangdong Province and theoretical basis for the development of domestic vocational education.

In the future, with the strong support of the country for the development of vocational education, more students of different levels will enter vocational colleges to study, which may put forward new requirements for talent cultivation goals, course content, and curriculum integration. Therefore, continuously verifying and timely adjusting the collaborative training course system for applied accounting undergraduate courses in practice will be a continuous process.

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