

# **Development and Implementation of School-enterprise Double Course System under Modern Apprenticeship System**

—Taking Accounting Major of Hainan Vocational and Technical College as an Example

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**Keywords:** Modern apprenticeship; curriculum system; development; implementation

**Abstract:** At present, there is a big gap between the quality of accounting personnel training and market demand in Higher Vocational Colleges in China. Modern apprenticeship system is a talent training mode to meet the requirements of economic development and industrial restructuring. The key is to improve students' post skills and adaptability through in-depth cooperation between schools and enterprises and joint teaching of teachers and teachers. The key to implement this model is the development and implementation of the school-enterprise dual curriculum system. Based on the problems faced by the development of the school-enterprise dual-course system, this paper explores the path of the development of the school-enterprise dual-course system, and takes the accounting major of Hainan Vocational and Technical College as an example to construct a school enterprise that is implemented in stages, levels, and positions. Double course system.

## **1. Introduction**

After experiencing the practice of “work-study combination and school-enterprise cooperation”, China's modern vocational education has ushered in a new round of reform and innovation [1]. That is to implement the modern apprenticeship system, promote the deep cooperation between the school and the enterprise, combine the teaching knowledge of the school teachers and the skills taught by the enterprise masters, and implement the “joint enrollment and joint training” [2]. Achieve the goal of “enrollment is recruitment, graduation is employment”. In the modern apprenticeship system, teachers and teachers are important supporting forces, they directly impart skills to students [3]. The curriculum system is not only an important means of imparting knowledge and skills to students, but also a bridge between school teachers and enterprise teachers [4-6]. Therefore, the development and implementation of the school-enterprise dual curriculum system is the key to the successful implementation of the modern apprenticeship personnel training model [7].

## **2. Problems in the Development of School-Enterprise Double Course System for Accounting Major**

As we all know, Hainan's economy is dominated by agriculture and tourism services, with fewer enterprises and fewer enterprises willing to provide “apprenticeships” for Vocational colleges [8]. In the past, “work-study combination, school-enterprise cooperation” also mostly stayed in the form, students can not get the actual operation skills training, let alone master [9]. In order to remedy this defect, the accounting specialty of Maritime Vocational College has implemented the “integration of theory and practice” teaching, and has also developed corresponding courses and textbooks, but still stays at the level of manual simulation training [10]. Only by implementing the modern apprenticeship training mode, students have the opportunity to train in a real corporate environment and improve the operational skills of the actual position. Such a talent training model requires the development of a suiTable curriculum system. The current development problems are mainly in the following aspects.

First, the investigation and analysis of corporate accounting positions and post groups is not

thorough, and the developed courses are not satisfied, and even do not meet the needs of professional jobs.

Second, the training objectives of higher vocational colleges must meet the requirements of vocational education, but also meet the training objectives of higher education. The masters of the enterprise have strong practical experience, and the courses developed often cannot meet the needs of students' professional accomplishment.

Third, the development of previous courses is generally based on college teachers, basically developing courses according to the knowledge system, resulting in the development of the curriculum is not very operative, can not meet the needs of the enterprise master in the process of imparting skills.

### **3. The Way to Develop the Dual Course System of School and Enterprise for Accounting Major**

In view of the problems faced by the development of the two-course system under the modern apprenticeship system, this paper combines the characteristics of accounting specialty and the characteristics of enterprise's own post demand. On the basis of the "integration of theory and practice" teaching, the accounting specialty of Marine Vocational College formulates post standards, quality control standards and corresponding implementation plans suiTable for the law of education, and the joint ventures develop core professional courses based on the content of accounting post respectively. In this way, we can expand the professional assistant courses for the application of post skills in enterprises, thus forming a professional curriculum system based on typical work process. The specific development path is as follows: First, the school and enterprise start from the industry standards, job requirements and teaching needs, clarify the purpose of the curriculum system development, and initially determine the curriculum architecture. Second, the school-enterprise masters jointly study the teaching direction, refine the curriculum system structure, and carry out the overall design on the basis of this, determine the specific curriculum standards and teaching plans, and be responsible for implementation. Third, the school and the enterprise evaluate the implementation effect of the course, adjust the course teaching direction in time according to the evaluation results and feedback opinions, and revise the course structure system.

### **4. Development and Implementation of the School-enterprise Double Curriculum System for Accounting Majors in Hainan Vocational and Technical College**

#### **4.1 School and enterprise discuss exchanges**

In accordance with the professional qualification standards for accounting posts promulgated by the state, the needs of the accounting posts of small and medium-sized enterprises are taken as the research object, and a comprehensive analysis of the job descriptions of each accounting position is carried out. It also predicts the skills development trend of enterprise accounting posts and post groups, seeks the specific content of each work item in the post and the professional qualities required, formulates curriculum standards, and determines the teaching direction. The accounting positions of SMEs are shown in Table 1.

Discuss the construction of curriculum system according to the curriculum standard determined by the school-enterprise consultation, determine the core curriculum and the person in charge of the specialty, implement the responsibility system of the person in charge of the curriculum, and set up the teaching team by the person in charge of the curriculum.

After discussion and exchanges between schools and enterprises, Hainan Vocational and Technical College initially determined the school-enterprise dual curriculum system as shown in Figure 1:

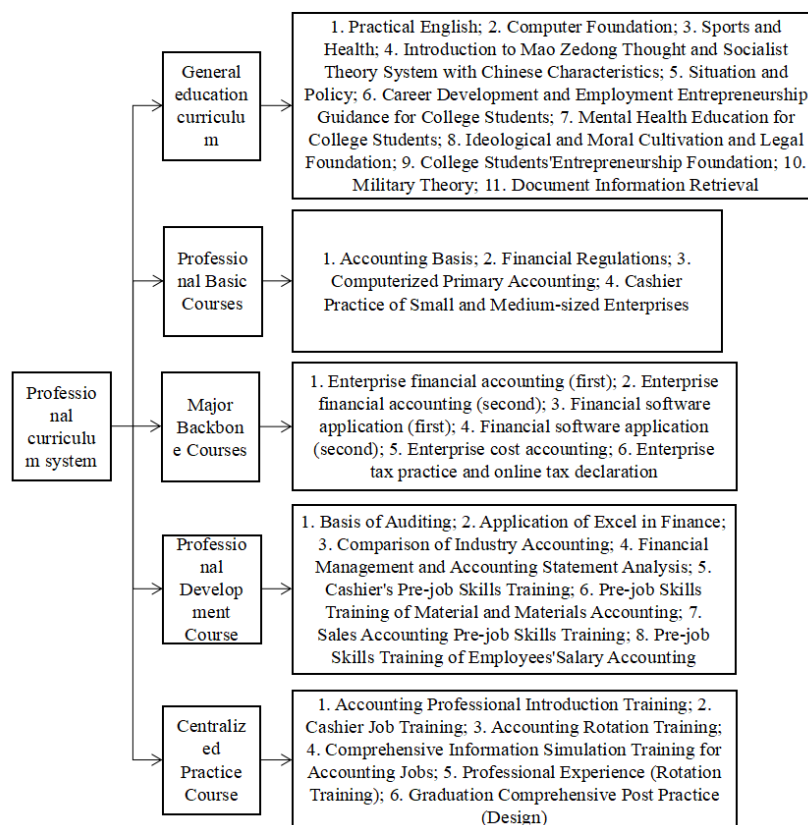


Fig.1. School-enterprise dual curriculum system

The entire accounting professional apprenticeship training is based on the general accounting positions of SMEs in China, based on the implementation of five core project courses. The course implementation process is based on the work process, and the in-house full-time teachers and enterprise masters complete the process guidance and assessment. The whole project curriculum implementation teaching place is integrated from the school to the outside of the school, from the classroom to the enterprise according to the needs. The course implementation process is infiltrated into the practice stage and practice training according to the project implementation needs. The specific core project curriculum introduction and implementation are shown in Table 2.

#### 4.2 Teaching Arrangement of School-enterprise Double Curriculum System for Accounting Majors in Hainan Vocational and Technical College

Schools and enterprises jointly built a modern apprenticeship training model of “work-learning alternation”. The Haiyuan Institute adopted the method of “study internship, concentrated internship, and segmented education” to arrange the development of the school-enterprise dual curriculum system. All courses adopt the “Reliable and Integral” teaching materials to implement the project evaluation. The professional knowledge is taught and assessed by the teachers in the school. The professional skills are taught and assessed by the company's masters. Students begin with a 1.5-year foundation study, during which they have at least two weeks of business internships per semester. After becoming an apprentice, according to the modern apprenticeship personnel training program, the fourth semester enters the enterprise rotation internship, the fifth semester returns to school to expand professional knowledge, the sixth semester to the enterprise post internship as a “prospective employee”, the apprentice graduates and then gets employment.

In the first semester, students mainly complete the general education courses prescribed by the state. They mainly learn and master the knowledge and skills of two basic professional courses: Basic Accounting and Cashier Practice for Small and Medium-sized Enterprises. The students are mainly in school, but the internship time to enterprises is not less than 4 weeks.

In the second semester, students' learning is mainly professional basic courses and core courses. Among them, the specialized basic courses “Economic Law” and “Computerized Primary

Accounting” are to be completed in this semester. The other two core courses, Enterprise Financial Accounting and Application of Financial Software, are completed in this semester. Students account for 50% of the school hours in both schools and enterprises.

In the third semester, students should complete the study of core professional courses, master the core professional knowledge and core professional skills comprehensively, and possess certain comprehensive vocational ability. The core courses offered in this semester are Enterprise Financial Accounting, Application of Financial Software, Enterprise Cost Accounting and Enterprise Tax Practice and Online Tax Declaration. Students occupy 50% of their school hours in schools and enterprises.

In the fourth semester, the students have more comprehensive accounting professional knowledge, grasp certain post vocational skills, have been “quasi-apprentices”, arranged for enterprises to practice in rotation, the first eight weeks of students in non-accounting positions (professional experience). In the next 10 weeks, the accountants will practice in rotation, and the assessment at this stage will be carried out by the enterprise master.

In the fifth semester, students position their career positions based on their personality traits and professional knowledge. After returning to school, the students choose the professional development courses according to their intentional professional positions, and the optional courses are detailed in the “School 1 School and Enterprise Double Curriculum System”. The first four courses are mainly studied in the school, and are taught and assessed by the school teachers. The last six courses are mainly internships in the corresponding accounting positions of the enterprise, and the professional skills are taught and assessed by the enterprise master. This arrangement is to achieve “precise training, accurate supply.”

In the sixth semester, the student will go to the enterprise as a “quasi-employee” to conduct a postgraduate internship. The full authority is assessed by the enterprise master, and the examination is qualified, and the employee is transferred to a formal employee to realize the apprenticeship and employment.

## **5. Conclusion**

The fundamental starting point for implementing the modern apprenticeship training model is to further clarify the training objectives, improve the quality of student training, meet the needs of enterprises for talents, and achieve “precise training and precise supply” to achieve a win-win situation for both schools and enterprises. The key to achieving this goal is the development of the curriculum system. This requires deep cooperation between the school and the enterprise. The government and all sectors of the society participate in the work together to cultivate high-quality and high-skilled talents that meet the needs of enterprises and society.

## **Acknowledgement**

This paper is a phased research result of the project “Modern Apprenticeship Personnel Training Model Based on Accounting Factory Practice” (Project No. Hnjg 2019ZD-28), which is the key funding project of Hainan Province's higher education and teaching reform research in 2019.

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Table 1 Accounting Post Analysis Table for Small and Medium-sized Enterprises

Post	Typical tasks	Responsibilities	Professional quality	Vocational ability
Accounting post	Accounting work environment recognition, study relevant job system according to relevant financial laws and regulations, and set up accounting process	Accounting Professional Cognition; Learning Accounting Methods	1. Have a work style of adhering to principles, rigorous and realistic, meticulous; 2. Have the qualities of loving and dedicating to work, loyalty to duty, honesty and trustworthiness and good professional ethics; 3. Have the physical and mental qualities of adapting to work and living environment, daring to compete and meet challenges; 4. Have team spirit and sense of cooperation, have the ability of coordinating work and organizational management; 5. Have strong innovation. Consciousness and Service Consciousness	1. Be able to correctly understand the relevant activities of the accounting working environment; 2. Be able to correctly use the basic working methods of accounting; 3. Be familiar with financial laws and regulations.
	Asset Accounting, Liability Accounting, Owner's Equity Accounting, Income Accounting, Cost Accounting, Profit Accounting and Statement Preparation	Business Accounting of Enterprises by Post		1. Can clearly distinguish the correctness, completeness, rationality and legitimacy of various original economic business documents; 2. Can correctly judge the content, nature and type of economic business reflected by various original documents; 3. Can correctly measure various economic business according to accounting standards;
	Tax calculation and declaration, fiscal fee calculation and declaration	Tax calculation and payment in tax accounting posts		1. Be able to smoothly handle tax-related business such as enterprise tax registration and invoice purchase; 2. Be able to calculate all kinds of taxes and fees payable according to national tax laws and regulations and relevant policies; 3. Be skilled in online tax declaration.
	Cost calculation object determination, cost project determination, cost	Cost calculation and analysis for cost calculation posts		1. Ability to correctly calculate the cost of products and services by flexible and reasonable methods in accordance with

	calculation method selection, factor cost collection and allocation, cost analysis			the characteristics and requirements of various products, services and enterprises' operation and management; 2. Ability to correctly prepare cost statements; 3. Ability to analyze the causes of cost increases and decreases according to cost statements.
	Disclosure of accounting statement preparation, annotations and other relevant information	General Account Statement Post Prepares Enterprise Financial Report and submits it in time		1. Be able to prepare accounting statements correctly; 2. Select and disclose the annotated information of relevant statements; 3. Be able to submit financial reports to users of relevant information by written and network system in time according to regulations.
Cashier post	Handle cash receipt and payment in stock and bank settlement business; register journal; count and check money; check cash in stock and bank deposits, etc.	Cash receipt and payment management; Bank deposit management; Keeping relevant seals, blank receipts and checks, etc.		Ability to handle cash receipt and payment business and bank transfer business skillfully; 2. Ability to distinguish the authenticity of settlement bills; 3. Ability to keep cash and settlement bills; 4. Ability to register journals in accordance with regulations; 5. Ability to check cash in accordance with regulations; 6. Ability to correctly handle various errors.
Accounting management position	Accounting Information System Setting, General Account, Statement, Inventory, Fixed Assets, Current Account, Sales and Salary Management	Accounting information operation		1. Be proficient in operating financial software to achieve integrated management of enterprise financial business; 2. Be able to correctly use ERP resource management system to store and export enterprise resource information; 3. Be able to help enterprises achieve information management and timely provide decision-making information.
	Debt-paying ability analysis, capital structure analysis, profitability analysis, cash flow analysis, cost-cost analysis	Analysis of Enterprise Financial Statements		1. Familiar with the indicators of statement analysis; 2. Understand the meaning of various indicators; 3. Calculate various financial indicators; 4. Describe the status of the enterprise according to the results of the calculation of indicators.

Table 2 Introduction and Implementation of Core Courses

Course title	Curriculum requirements	Major Knowledge and Skills	Assessment method
Accounting Foundation (Including Practice in Post of Basic Accounting)	Students are required to have the ability to analyze and judge the economic business of enterprises, to be proficient in accounting methods and work flow, and to have the basic skills of accounting reflecting the economic information of enterprises, so as to lay a foundation for subsequent study.	There are seven main items in the course: recognition of enterprise accounting work; basic knowledge of cognitive accounting; preparation of accounting vouchers; registration of accounting books; preparation of financial statements; collation of accounting files and appendices.	Teachers in school: Final examination (40%); Enterprise Teacher: Process Project Assessment (30%) + Enterprise Post Professional Core Competence Assessment (30%) Final examination: for comprehensive training operation, comprehensive knowledge testing and other content, generally at the end of the term unified, centralized arrangements, using the form of computer examination or closed-book written examination, the time is generally 60-90 minutes. Procedural project assessment: pay attention to individual skills, and take into account knowledge, assessment methods can be used in training operations, scenario simulation and other ways.
Cashier Practice of Small and Medium-sized Enterprises (Including Cashier Post and Post Practice)	Students are required to correctly grasp the writing requirements of financial accounting, skillfully complete and identify bills, skillfully fill in and examine all kinds of bills and vouchers, master the capital business process, and collate cashier information.	This course mainly trains students to correctly write financial figures; ticket points; RMB identification, bills identification and audit; learn the cashier post of the fund business, master the Journal registration, and so on.	Enterprise post Occupational Core Competence assessment: peacetime self-management ability, communication and cooperation ability, problem-solving ability, professional core comprehensive skills and other aspects of assessment and evaluation.
Enterprise financial accounting (including financial accounting post rotation practice);	Students are required to have the comprehensive application ability of accounting system thinking and the ability of dealing with complex business.	Mainly study the accounting of financing, purchasing, production, sales, investment and other economic business in the daily business processing of enterprise accounting posts, as well as the end-of-accounting business processing.	
Enterprise Cost Accounting (Including Cost Accounting Post Practice)	Students are required to learn and use the method of cost collection and allocation to calculate product cost correctly and to compile and analyze cost statement..	This course mainly studies the basic principles and methods of enterprise cost calculation, including variety method, batch method, step-by-step method, and the preparation and analysis of cost statements.	
Financial Software Application (Including Accounting Information Post Rotation Practice)	Students are required to learn the basic structure of financial software and the operation methods of subsystems such as general ledger, statement, salary, fixed assets, transactions, inventory, etc. so that they can use the software to provide services for enterprise accounting management.	It mainly studies and trains the basic structure of financial accounting software, system management, general ledger management, statement management, salary management, fixed assets management, accounts receivable and payable management and other subsystems.	