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Research on the Construction of "Three Types and One High" Talent Cultivation Curriculum System for Vocational Undergraduate E-Commerce Professional Group

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Abstract: With the formal implementation of the newly revised Vocational Education Law, vocational undergraduate education has become an important part of higher vocational education, whose core lies in cultivating "knowledgeable, skilled, innovative" high-level technical and skilled talents (referred to as "three types and one high" talents). Taking the e-commerce professional group as the research object, this paper focuses on the "three types and one high" talent cultivation goal, analyzes the differences in curriculum systems between vocational undergraduate education, general undergraduate education, and vocational college education, and proposes a curriculum system construction framework led by the "three cores" of "basic support capability, professional capability, and innovation capability". It also elaborates on its implementation paths, research methods, and characteristics, and prospects the promotion and application prospects, aiming to provide theoretical and practical references for the curriculum system construction of vocational undergraduate e-commerce professional groups.

1. Introduction

With the in-depth development of the digital economy, the e-commerce industry has transformed from the traditional online transaction model to an intelligent, ecological, and globalized direction, leading to an explosive growth in demand for high-level technical and skilled talents [1]. The newly revised Vocational Education Law in 2022 clearly incorporated vocational undergraduate education into the higher education system, marking that China's vocational education has entered a new stage of "undergraduate-level" development [2]. The construction of vocational undergraduate e-commerce professional groups needs to break the binary opposition between the "skill-oriented" of traditional vocational education and the "academic-oriented" of general undergraduate education, and build a "three types and one high" (knowledgeable, skilled, innovative, high-level) talent cultivation system that integrates knowledge depth, skill precision, and innovation height. As the core carrier of talent cultivation, the scientificity and adaptability of the curriculum system directly

determine the quality of talent cultivation [3-4].

Based on the type positioning of vocational undergraduate education and the development needs of the e-commerce industry, this paper focuses on the "three types and one high" talent cultivation goal and explores the construction path of the "three-core leadership" curriculum system, aiming to provide a practical paradigm for the construction of vocational undergraduate e-commerce professional groups.

2. Orientation and Connotation of "Three Types and One High" Talent Cultivation

The "three types and one high" talents in vocational undergraduate e-commerce professional groups refer to high-level technical and skilled talents who adapt to the needs of the digital economy industry, possess solid e-commerce theoretical knowledge (knowledgeable), exquisite technical skills (skilled), and outstanding innovative application capabilities (innovative), and can undertake complex technical application and management functions in the industrial chain. Their core characteristics are reflected in "three-dimensional integration":

In the knowledge dimension, they need to master interdisciplinary knowledge such as e-commerce platform operation, data analytics, and cross-border e-commerce compliance, forming a composite knowledge structure of "technology + business + management"; in the skill dimension, they need to possess core skills such as intelligent store operation, live streaming e-commerce planning, and supply chain digital management, and be able to solve complex technical problems in industrial practice; in the innovation dimension, they need to have innovative capabilities such as business model design, technical application optimization, and industrial resource integration, and adapt to the speed of industrial iteration.

The positioning of "three types and one high" talents are not isolated but form a progressive capability system: knowledge is the basic support, skills are the core carrier, innovation is the value sublimation, and "high-level" is reflected in the ability to control complex tasks. The differences in talent positioning between vocational colleges, general undergraduate education, and vocational undergraduate education are shown in Table 1.

Table 1 Comparison of Talent Cultivation Orientation at Different Levels of E-commerce

Educational Level	Knowledge Requirements	Skill Requirements	Innovation Requirements	Industry Adaptation Fields
Vocational colleges	Focus on post operation knowledge with a narrow system	High proficiency in single post skills	Mainly skill imitation	Grassroots execution positions (e.g., customer service, warehouse management)
General undergraduate	Complete theoretical knowledge system with strong academic nature	Superficial skill training, focusing on principles	Mainly theoretical innovation	Research positions, planning positions
Vocational undergraduate	Composite knowledge system, balancing depth and breadth	Capability of integrated application of complex skills	Mainly technical application innovation	Mid-chain management positions (e.g., e-commerce operation supervisor, data analyst)

3. Construction Framework of "Three-Core Leadership" Curriculum System

3.1 Construction Logic

Based on the "Three Types and One High" talent orientation, the curriculum system is constructed with "Basic Supporting Ability, Professional Core Ability, and Innovation Development Ability" as the three core pillars (referred to as "Three-Core Guidance"), forming a

dynamic structure of "Platform + Module + Project". Among these, "Basic Supporting Ability" corresponds to the cultivation of knowledge-based talents, "Professional Core Ability" corresponds to the cultivation of skill-based talents, and "Innovation Development Ability" corresponds to the cultivation of innovation-based talents. These three are integrated through the linkage mechanism of "Course Group-Practice Chain-Evaluation Loop", as shown in Figure 1.

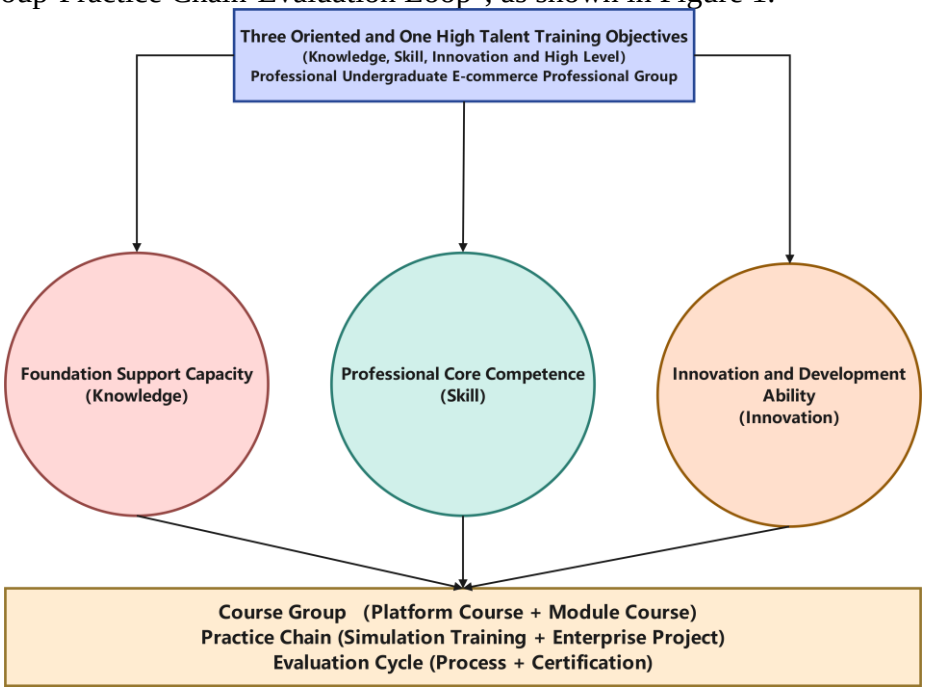

Figure 1 Logical Framework of Three-Core Leadership Curriculum System

3.2 Curriculum Structure Design

The curriculum system is divided into three levels: "public basic platform", "professional core module", and "innovative practice project", with a total credit of 170-180, among which the proportion of practical credits is not less than 50%. The specific settings are shown in Table 2.

Table 2 Curriculum System Structure of Vocational Undergraduate E-commerce Professional Group

Curriculum Level	Core Goal	Examples of Main Courses	Credit Proportion	Practical Form
Public basic platform	Consolidate knowledge foundation	Higher Mathematics (Business Application), Introduction to E-commerce, Python Programming	30%	Course experiments, case analysis
Professional core module	Strengthen professional skills	Intelligent Store Operation, Cross-border E-commerce Practice, Data Visualization	40%	Simulation training, 1+X certification
Innovative practice project	Enhance innovation capability	E-commerce Entrepreneurship Design, Industrial Project Research, Enterprise Rotation Internship	30%	Entrepreneurship competitions, real enterprise projects

4. Implementation Paths of the Curriculum System

4.1 Teaching Model of Integrating "Post-Course-Competition-Certificate"

With reference to typical positions in the e-commerce industrial chain (such as operation

supervisor, data analyst, cross-border e-commerce manager), the job capability requirements are disassembled into curriculum knowledge points and skill points; combined with the competition standards of the National Vocational College Skills Competition (e-commerce events) and the "Internet +" Innovation and Entrepreneurship Competition, curriculum practice tasks are designed; aligned with the standards of 1+X certificates such as "E-commerce Engineer" and "Cross-border E-commerce Operation", the certificate assessment content is integrated into the curriculum modules [5-6]. The integration path of the three is shown in Figure 2.

Figure 2 Integration Path of "Post-Course-Competition-Certificate"

4.2 Construction of "Dual-Teacher Collaboration" Faculty Team

A "dual-teacher team" composed of in-school teachers and enterprise mentors is established. In-school teachers need to have dual qualifications of "lecturer + senior e-commerce engineer", and enterprise mentors need to be middle-level or above managers of e-commerce enterprises (such as operation directors, technical supervisors) [7-8]. The faculty structure is shown in Table 3.

Table 3 Structure of "Dual-Teacher Team" in E-commerce Professional Group

Faculty Type	Proportion	Core Responsibilities	Ability Requirements
In-school teachers	60%	Curriculum teaching, theoretical research, teaching design	More than 5 years of teaching experience + 1+X certificate training capability
Enterprise mentors	30%	Practical guidance, project development, post cognitive teaching	More than 8 years of experience in the e-commerce industry
Industry experts	10%	Industrial trend lectures, competition guidance, talent standard formulation	Senior executives of national e-commerce associations or leading enterprises

4.3 Dynamic Adjustment Mechanism

A curriculum adjustment mechanism based on industrial data is established: joint e-commerce industry associations release the "White Paper on Talent Demand in the E-commerce Industry" every year to analyze changes in job capabilities; revise curriculum modules and practice projects through enterprise research and graduate tracking every semester [9-10]. For example, in response to the explosive growth of live streaming e-commerce, a new course module "Live Streaming Operation and Short Video Production" is added; in response to the upgrading of cross-border e-commerce compliance requirements, the content of the course "International Trade Practice

(Cross-border E-commerce Direction)" is updated.

5. Guarantee System

5.1 Resource Guarantee

"Virtual-real integration" training bases are built, including the on-campus "E-commerce Comprehensive Training Center" (equipped with intelligent customer service systems and cross-border e-commerce simulation platforms) and off-campus "Enterprise Practice Bases" (co-constructed with enterprises such as Alibaba and JD.com); an "e-commerce curriculum resource database" is developed, integrating digital resources such as micro-lectures, case databases, and virtual simulation projects.

5.2 Evaluation Guarantee

A three-dimensional evaluation system of "process evaluation + summative evaluation + certification evaluation" is adopted: process evaluation accounts for 50% (including classroom performance and practical tasks), summative evaluation accounts for 30% (including course papers and project reports), and certification evaluation accounts for 20% (1+X certificates or competition awards).

6. Conclusion

The construction of the "three types and one high" talent cultivation curriculum system for vocational undergraduate e-commerce professional groups needs to be oriented by industrial demand, framed by "three-core leadership", and realize the organic unity of knowledge, skills, and innovation capabilities through paths such as the integration of "post- course- competition-certificate", "dual-teacher collaboration", and dynamic adjustment. The practical value of this system lies in not only filling the talent cultivation gap between vocational colleges and general undergraduate education but also providing high-level technical and skill support for the e-commerce industry. In the future, it is necessary to further strengthen interdisciplinary integration (such as collaboration with computer and international trade professional groups) to enhance the ecological adaptability of the curriculum system.

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