Research on New Business Supply Chain Curriculum Under the Framework of School-enterprise Co-construction

Li Zhou¹ and Bin Zhou²,*

¹Cooperation Office, Zhaoqing University, Zhaoqing, Guangdong Province, China
²Teaching Affairs Office, Hunan Financial and Industrial Vocational-Technical College, Hengyang, Hunan Province, China
*Corresponding author
hyccgyzb@163.com

Keywords: Supply chain, School-enterprise cooperation, Co-construction curricula.

Abstract. The economic status of China's supply chain industry is increasing day by day, which is very important for the cultivation of talents in the supply chain industry. By discussing the core content of supply chain curriculum of school-enterprise co-construction and the basic path of new business supply chain curriculum reform, this paper suggests that Chinese universities need to carry out in-depth development of talents with school-enterprise co-construction from the perspectives of the supply chain, the reform of science and technology industry, the integration of global industrial system and the balanced development of global industry. Meanwhile, from the perspective of China, extension in three levels of strategic layout with high starting point, high-level strategic integration and forward-looking technology application, should be carried out so as to lay a solid foundation for the leap-forward development of the supply chain industry and provide important talent support for China's global competitiveness improvement.

Introduction

The competition among enterprises has not been the competition among individual enterprises, but the competition among supply chains. Faced with the challenges of economic globalization, how to use information technology to enhance the enterprises’ capabilities of technological innovation and management innovation, improve the core competitiveness of enterprises, and then construct a self-directed supply chain, is a strategic issue of great importance.

The supply chain is a network chain formed in the process of production and circulation, involving upstream and downstream enterprises that provide products or services to end-user activities. It is a functional network chain structure mode that connects suppliers, manufacturers, distributors, retailers, and end users together. Supply chain industry is a penetrating industry that reconstructs the global industrial structure. With the profound changes in the global economic industry layout, its development and transformation will not only affect the production efficiency of traditional three main industries, but will also profoundly affect people's work and lifestyle.

The supply chain curriculum is aimed at cultivating professionals who master the basic laws, theories, methods and practical application of supply chain construction, operation, and management. In the development of teaching resources, optimization of teaching process and improvement of teaching quality, colleges and universities urgently need to adjust their talent training strategies to overcome the problems of overlapping learning content, serious fragmentation of teaching and low integration of information technology and teaching for students. By introducing school-enterprise co-construction mode, enterprise practice resources can be fully utilized to participate in curriculum development and design, to introduce advanced equipment to create a real simulation environment, and to adopt multi-dimensional dynamic teaching method to establish a project curriculum system, and to improve the quality of supply chain curriculum teaching with flexible and diverse assessment methods.
Literature Review

Yang Pengqiang points out that collaborative innovation and development of university and regional cross-border supply chain is popularized educative collaboration of undergraduate colleges and higher vocational colleges for applied talents. The key is to cultivate the all-embracing and adventurous spirits of talents by adopting diversified flowing exchangeable cultivation methods such as study abroad, project training and survival development so as to enable international talents to develop in a scene-like environment.

Huang Juan puts forward that the supply chain management, as a kind of new modern enterprise management technology, has been achieved great effect in the practice of many enterprises, which provides great enlightenment and reference for the practice of talent training in higher vocational colleges. In the practice of higher vocational talent training, new model of vocational talent training is explored by reforming the management system of running schools, innovating the teaching operation mechanism, creating an information sharing platform and realizing talent order-oriented training, based on push-pull supply chain, bullwhip effect and agile supply chain theories.

Hou Shuxia and Zhong Min propose that the cultivation of applied undergraduate talents is an urgent requirement for the adjustment and upgrading of China's economic structure and industrial structure. The applied undergraduate talent training mode is to establish a "three-element training mechanism" including the target mechanism, operational mechanism and guarantee mechanism under the whole process of supply chain management.

Guo Yue and Tao Jing find that the "seamless joint" talent training mode, a higher vocational educative mode fully satisfying the society, employer and student, will be the development direction of higher vocational colleges in the 21st century.

Zhang Shuai proposes that traditional teaching mode can no longer meet the requirements of enterprises for the work ability of higher vocational students under the new situation. The course of higher vocational supply chain operation practice is the core course of logistics curriculum and is an important aspect in the reform of higher vocational talent training mode. It is necessary to reform the thinking of the construction of the supply chain operation course system and the design of the curriculum system. Practical teaching should be highlighted to enhance students' practical ability. Teaching mode should be enriched to improve students' enthusiasm for class and their specialty literacy in logistics management.

Core Content of the Supply Chain Curriculum of School-enterprise Co-construction

Cooperation in Running School

Fully integrate and optimize the high-quality extensive educational resources of the government, universities, industry and society, and deeply explore the cooperative education mode of school-enterprise negotiation, co-construction and sharing, in order to provide and effectively implement the integration of production and education for universities in line with national strategic emerging industry development and to set up an industrial college with “multi-subject co-construction”. Started from the construction principle of the ecosystem, the coupling between the university organization and the supply chain industry system is promoted. From the perspective of talent training in the supply chain industry, an open “university-enterprise-industry” talent training system and a clustering industry talent cultivation complex with high degree of specialization are formed which involve the cultivation of teacher of “dual abilities”, the construction of related curriculum, the improvement of practical teaching reform and service system in related field, and the creation of a comprehensive practice training platform for global supply chain and cross-border e-commerce talent training with industrial characteristics and influence, in the realm of global supply chain and cross-border e-commerce.
Curriculum Construction

Relying on the industrial resources in upstream and downstream of enterprise global supply chain, with the overall target of “promoting employment and encouraging innovation and entrepreneurship”, a triple win for the industry, enterprise and school can be achieved such as accelerating the vocational transformation for students in school, strengthening the professional ability of graduates, improving the curriculum construction for schools, revising and improving the evaluation and standardization of professional qualifications for the industry as well as employing urgently needed talents easy to get started for enterprises. Based on the usage and the functional transformation of available training rooms and studios in school, completeness of teaching function is embodied, and meanwhile, real business post need of enterprises is taken into account. Introduce Enterprise Innovation Entrepreneurship and Employment Practice Teaching System including Modern Circulation Industry Supply Chain Practice Base course pack, Modern Circulation Industry Practitioner Vocational Ability course pack, Modern Circulation Industry Enterprise Operation and Innovation Practice: Enterprise Innovation and Entrepreneurship University-industry-enterprise Cooperation LEADER course pack, New Retail Store Operation: Enterprise O2O Entity Management course pack, Supply Chain and O2O Operation Base course pack, and O2O New Retail Operative Management course pack. Courses packs matched with enterprise platforms in use, industrial typical enterprise data, enterprise tutors and enterprise molecular companies business, are introduced to schools.

Internship and Employment

Enterprises get involved in students’ study and introduce their projects to classes, which makes students able to apply the knowledge they have learned in school to the projects. By the innovative mode of school-enterprise cooperation and curriculum co-construction such as jointly establishing a school-enterprise talent training program and developing curricula, talents required by enterprises can be trained in schools. To eventually build an international demonstration teaching base integrating new business and new engineering, new business practice teaching and education of innovation and entrepreneurship promote the co-construction of industry-school-research-innovation fusion, enterprise operation and sharing service center, new business panorama simulation offline experience center, international-oriented experimental research and development base, modern educational technology research institute and new business curriculum development center.

Teaching Team

The mode of teacher training consists of teacher’s going to enterprise, master worker’s coming to school and training class organized by industry and enterprise. Courses of teacher training include cognition, use of platform, case study, teaching content and method as well as online and offline live-action entrepreneurship and employment with enterprise. The other forms are: enterprise executive’s lectures, master worker’s leading teachers and students to complete the enterprise task, backbone teachers invited to participate in teaching and scientific researches like researches on industrial and enterprise subjects. For the global supply chain and cross-border e-commerce, teacher of “dual abilities” should be cultivated, related curriculum should be constructed, and practical teaching reform and service system in related field should be improved, so as to jointly create a comprehensive practice training platform for global supply chain and cross-border e-commerce talent training with industrial characteristics and influence.

Practice Environment

Enterprises help to enhance the traditional innovation and entrepreneurship training room of the universities. And build up comprehensive supply chain operation studio, campus productive training base, living O2O supermarket and new retail online operation studio etc., and thus create a comprehensive practical training platform for talent training in the global supply chain with industrial characteristics and geographical influence. By introducing real quick-action marketing of the enterprise and carrying out multi-enterprises and multi-industries brand marketing activities can help
to create campus atmosphere for innovation and entrepreneurship. The project practices such as supermarket operation, cross-school marketing competition, panoramic practice and teaching of chain operation as well as innovative management, functionally transform the available innovation and entrepreneurship training rooms and network studios in school, which not only embodies the completeness of teaching function, but also takes the real enterprise business post need into account.

**Curriculum Reform of New Business Supply Chain**

The supply chain curriculum system consists of courses such as ERP Principle, Production and Operation Management, Supply Chain Management, Purchase and Marketing as well as E-commerce. How to cultivate different levels of enterprise information talents through these courses is the research focus. There are problems existing in the design of traditional supply chain curriculum system. In the curriculum system, the relationship among the knowledge points of main courses is analyzed by the method of quality function deployment and a research on curriculum design and relevant experiments is carried out.

Introduce Innovation Entrepreneurship and Employment Practice Teaching System including Modern Circulation Industry Supply Chain Practice Base course pack, Modern Circulation Industry Practitioner Vocational Ability course pack, Modern Circulation Industry Enterprise Operation and Innovation Practice: Innovation and Entrepreneurship School-industry-enterprise Cooperation LEADER course pack, New Retail Store Operation: O2O Entity Management course pack, Supply Chain and O2O Operation Base course pack, and O2O New Retail Operative Management course pack. Courses packs matched with platforms in use, industrial typical enterprise data, enterprise tutors and molecular companies business, are introduced to schools.
Summary

There are five keywords required by business talent training: new connotation, new technique, new curriculum, and new curriculum as well as new talent. The emergence of “new business” brings about a historic reform of business talent market and the cultivation of business talents in colleges and universities are confronted with important choices. New business breeds new profession while new profession requires strong views of new business. More enterprises and schools should be encouraged to unite and to jointly cultivate new talents suitable for today’s demands by constructing new business curriculum. Universities and enterprises should cooperate in aspects such as constructing curriculum system, designing and developing curriculum, improving teaching with mutual help of teachers in schools and enterprises as well as applying and developing emerging technology in educational field, so as to make students have good scientific literacy, professional literacy, practical working ability and innovation ability. A student-centered supply chain which can break the barriers between school and enterprise should be constructed to jointly achieve the deep breakthroughs in school-industry cooperation and the target of higher education supply-side reform from a new starting point.

References

[1] Yang Pengqiang, Study on Innovation of Cultivation Mode of Cross-border Supply Chain Talents, Logistics Technology, 10 (2015) 195-200.

[2] Huang Juan, Vocational Talented Personnel Development Model based on Supply Chain Management, Vocational & Technical Education Forum, 08 (2013) 65-67.

[3] Hou Shuxia, Zhong Min, An Exploration of Applied Undergraduate Talents Training Mode Based on the Thought of Supply Chain Management, Journal of Inner Mongolia Finance and Economics College, 06 (2011) 5-8.

[4] Guo Yue, Tao Jing, Research on the Talented Personnel Development Model in Vocational Colleges: Based on Supply Chain Model, China Soft Science, 12 (2006) 130-136.

[5] Zhang Shuai, Reform of Supply Chain Operation Practice Course based on the Working Process, Liaoning Higher Vocational Technical Institute Journal, 04 (2018) 67-70.

[6] Blaug M., Common Assumption about Education and Employment, The Education Dilemma, New York: Pergamon Press, 1980.

[7] Grubb N., The Convergence of Educational Systems and the Role of Vocationalism, Comparative Education Review, 04 (1985) 526-549.