Based on the Background of Transformation and Development, the Exploration of the Integration Mode of Industry and Education in Local Higher Vocational Colleges

Yinxin Shan
Collage of Business Administration, Heilongjiang Polytechnic, Haerbin, Heilongjiang, 150080, China
Syx523@Yeah.Net

Keywords: Integration of Production and Education, Collaborative Education, Logistics Management

Abstract: “Integration of Production and Education, Collaborative Education” is One of the Main Directions of the Development of Higher Vocational Education. In View of the Problems in the Current School Enterprise Cooperation, the Paper Puts Forward the Reform Ideas of the Talent Training Mode of Logistics Management Specialty, and Puts Forward the Talent Training Mode of “Integration of Production and Education, Collaborative Education”, Including Flexible Curriculum Body, in Combination with the Practice of the Reform of Logistics Management Specialty of Gansu Transportation Vocational and Technical College Department, Diversified Cooperation Mechanism, Personnel Training Security System and a Series of Reform Programs.

1. Introduction


2. Problems in the Training of Logistics Management Talents in Higher Vocational Colleges

2.1 Teaching Content is out of Line with Industry Enterprises

New technology, new process and new equipment are emerging, and the requirements for post skills are increasing. These new developments and changes are not reflected in the practical education of logistics management major in Colleges and universities[3]. In Colleges and universities, due to the lack of communication and cooperation with industries and enterprises, the actual education content and production process are disconnected, which is quite different from the
work of enterprises.

2.2 The Construction of Practice Base Can Not Meet the Development Needs of Industrial Enterprises

There are some problems in the practical infrastructure construction of colleges and universities, such as the modernization of equipment, limited quantity, logistics production technology, incomplete training conditions and so on, which affect the quality of practical teaching to a certain extent[4]. However, in the construction of practice foundation outside the school, the lack of deep cooperation mechanism between the school and the enterprise, and the unstable process of foundation construction affect the development of students' practice. Due to the lack of guidance from system and enterprise engineers, it is also difficult for students to study.

![Diagram](image.png)

Fig.1 The Module Diagram of the Principle and Application of Single Chip Microcomputer in the Classroom to Cultivate Students' Ability

2.3 The Construction of Teachers' Team Needs to Be Strengthened

At present, the problems of practical teachers in Colleges and universities are mainly manifested in the weakness, unreasonable structure and young teachers. Most of the teachers have higher academic qualifications, but they become teachers directly after graduation, lack of practical experience, and their technology needs to be improved[5]. Moreover, there are almost no part-time teachers in the actual teachers, and there is a lack of front-line engineers and skilled craftsmen.

2.4 The Cooperation between School and Enterprise is Not Deep Enough and Closely Related

University enterprise cooperation is a common mode of running colleges and universities, but there are some problems in-depth cooperation. On the other hand, school enterprise cooperation is limited to the surface, without depth and width. It is mainly reflected in the fact that universities provide graduates to enterprises, and the company provides graduates training for students. The relationship with enterprises is not sufficient, there is no sound coordination mechanism and system, the responsibilities of schools and enterprises are not clear, and it is difficult to maintain a long-term stable cooperative relationship.

3. Thoughts on the Reform of Talent Training Mode of Logistics Management

In view of the current new situation and existing issues, the logistics management specialty of Gansu communication college proposes to reform the talent training mode and establish the regional economic training mode with university characteristics[6]. Innovative thinking, innovative spirit, innovative consciousness and ability, innovative thinking and innovative entrepreneurship to meet the needs of logistics management talents. The general idea is as follows.

3.1 Integration of Production and Teaching

Through the introduction of physical enterprises, the unification of production and education, in order to achieve the unification of practical classrooms and production sites, in order to realize the production activities of enterprises and the practical education activities of universities as far as possible, in order to unify the school enterprise cooperation, the appeal of suffering and
contradiction, is the solid foundation for the common education of schools and enterprises[7]. Our university offers two ways for enterprises to enter the campus. That is, to enter the production and Education Park and jointly build a productive training base. The first is that the sustainability and stability of enterprise production can be recognized by more enterprises.

As the president of Gansu National Transportation Vocational Education Group, since 2016, hundreds of industrial enterprises have been introduced to complete the basic concept of entering campus enterprises. For example, we signed a cooperation agreement with SF's logistics company.

3.2 Project Planning and Personnel Training Coordination

After entering the campus, an agreement should be signed to clarify the coordinated educational relationship between the two sides, but specific cooperation projects are also needed to promote personnel training[8]. Many floor tile production projects, for the position and task of students' skill training, can provide enterprises with the wrong match between project time and route time, which are good waste and cooperation projects, “win-win” opportunities. Therefore, after the appropriate enterprise project is submitted to the University by the partner company, the university will compile the training plan and arrange the teaching schedule reasonably to solve the problem of time inconsistency. SF Logistics Co., Ltd. is responsible for cooperating with university logistics management teachers to describe the project arrangement in their training plan.

3.3 The Teacher Enters the Classroom and the Course Teaching is Practical

Enterprise environment and enterprise plan are important resources for the common education of schools and enterprises, but the organization of university education activities will not only reduce the efficiency of the use of these resources, but also lead to the loss of resources[9]. In addition, the experience and knowledge accumulated by all levels of talents in the enterprise is an important resource for the common education of schools and enterprises. On this basis, the University as a master classroom to introduce talents, and guide them in the process of enterprise standards and evaluation methods can be combined, the trend of route education and practical combat units, to achieve better learning desire of students. At the same time, the training of professional quality, the education of various routes are unified, the formation of special personality, the completion of students' learning process, and the immediate support from the transformation of students' future employee identity, in order to better adapt to the society. The lecture hall for managing large-scale logistics management personnel, adult Management Director, and the classroom invited students' business experience and industry experience to tell me that in order to complete the necessary professional knowledge and guide students, enterprises in the industry are ready to enter. In addition, forklift, transportation, business training, etc., the front desk attendant of the production and education line of the park's enterprises, and invited to participate in the daily education evaluation. Teachers and enterprise training teachers jointly complete the education and evaluation business to realize practical education.

4. Experience Summary and Enlightenment

In view of the long-term practice and remarkable results of the talent training mode of “integration of production and education, collaborative education”, the author believes that this mode has relatively universality and strong practical value, which can provide reference for brother colleges and related professional teaching, and help to solve some problems encountered in the process of cooperative education of enterprises in higher vocational colleges. In order to express the specific ideas and practices more concisely, we summarize the experience and enlightenment as follows.

4.1 Implement the School Running Mode of Multi-Agent Participation

Introduce two industry guidance units, the Ministry of transport of Gansu Province and the post office of Gansu Province, and introduce large-scale logistics companies as the representatives of Lanzhou Chunnong Logistics Co., Ltd. to train talents for major industries and enterprises. At the
same time, industries and enterprises can actively participate in all aspects of professional construction, establish a new common education model, and enable banks, schools and enterprises to actively participate in the construction of schools. From the height of industry and the breadth of enterprises, this paper puts forward feasible suggestions to improve the level of international school education and explore a more diversified school education model. The development trend of the international logistics industry, according to the national strategy, provides the unique advantages of higher vocational education with regional economic contribution, fully demonstrates the positive international exchange and management cooperation, and promotes the group based and mixed investigation of all schools. At present, it has signed cooperation agreements with seven foreign universities, including the International University of science and technology, visra University, Poland University and Warsaw University.

### 4.2 Construction and Cooperation of Human Body System

The school enterprise cooperative education system has been established on the platform of transportation vocational education group. First, change the concept, according to the traditional concept of the university is only the people who receive education. The innovation of practical education concept strengthens the whole process of artists' training in industrial companies, in order to allow industrial companies to work closely. At the same time, we should train students' practical and innovative ability together[10]. The form of the system has been fixed. The second is to introduce industry and enterprise experts and establish a professional construction and Operation Committee of logistics management. In order to formulate the construction objectives of the major, the professional construction and Operation Committee shall guide you to establish professional courses based on the company's positioning and organize training based on the production methods of the enterprise. Under the active promotion of the industry office, further connected with enterprises, implemented various training forms such as order training and modern apprenticeship training, and held a school enterprise cooperation promotion meeting aimed at changing blind training in universities. Establish education standards that meet industry and education standards, jointly develop teaching materials, and establish training bases at home and abroad. Finally, establish a good school enterprise cooperation and communication mechanism. On the premise of making the best use of school and enterprise resources, we should establish a sustainable school enterprise cooperative relationship and a stable cooperative foundation. Through comprehensive exchange, schools and enterprises will continue to strengthen detailed cooperation in equipment, technology, talent and foundation, so as to strengthen the basis of cooperation and close cooperation and realize complementary advantages.

### 4.3 Determine the Personnel Training Plan for Coordinated Education of Banks, Universities and Enterprises

Focusing on ability training, the training system is constructed with the skill spiral of “point, line and area”. Under the guidance of professional ability requirements, through the acquisition of “point” ability, slowly, according to the “plan” guidance, the “beauty” function guides the “line” ability and penetrates the “line” ability. Please match the target work ability with the system's “appearance” ability, solve logical problems, and focus on solving the problem of students' ability target mismatch.

### 5. Conclusion

Fully investigate the production process and production posts of the enterprise, build a teaching system of “two courses, two teaching cycles, and five in one” to solve the problems of mismatching of time and depth of work study alternation. According to the needs of enterprises, we should realize the deep integration of explicit courses and implicit courses, the organic integration of quality courses and vocational courses, the internal and external teaching cycles, and the internal and external teaching cycles, so as to form multiple rounds of work study alternation, integrate teaching into production, and integrate teaching, learning, doing, training and competition, so as to
improve students' skills, quality and comprehensive ability. The main core courses are set with three teaching modules: enterprise research, enterprise main post experience and enterprise job rotation. Theoretical knowledge is transferred through classroom teaching, perceptual knowledge of students is increased through enterprise research, operation skills are improved through in class integrated teaching, skill application is strengthened through enterprise post experience, and comprehensive quality, professional skills and innovation and entrepreneurship are cultivated through various in and out of school competitions.

References


