

# Development and Practice of "Modular" Automobile Manufacturing Supply Logistics Training Project in Off-campus Training Base of Logistics Management Major in Higher Vocational School

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**Abstract**—Hunan Modern Logistics College has established in-depth cooperation with Hunan Shunjie Logistics Co., Ltd. to develop and practice the "modular" automobile manufacturing supply logistics training project in off-campus training base of logistics management major in higher vocational school. The meaning, theoretical basis, objectives, process, application effects and other aspects are discussed in this paper.

**Keywords**—*training base; modularization; training project*

## I. INTRODUCTION

In August 2013, Hunan Modern Logistics College and Hunan Shunjie Logistics Co., Ltd. established a strategic partnership. Under the guidance of the Hunan Federation of Logistics and Purchasing, the two parties carried out extensive cooperation in school-enterprise cooperation and logistics personnel training. Hunan Shunjie Logistics Co., Ltd. became the first batch of off-campus training base construction cooperation enterprise of Hunan Modern Logistics College, and carried out in-depth cooperation on the development and practice of "modular" training projects.

## II. SIGNIFICANCE OF RESEARCH AND PROMOTION OF PROJECT

This project is based on the establishment of a complete "modular training project" system for the extracurricular training base of logistics management major in higher vocational, which is of great significance for the development of students, deep cooperation between schools and enterprises, and the development of logistics management in higher vocational schools:

- The project breaks through the previous situation of developing a training project based on the actual situation of the off-campus training base (enterprise), and strives to cover the entire post of the logistics management professional through the modular training project of the top-level design system to make the off-campus training programs more

comprehensive and diverse, and truly enable graduates to be employed with "zero distance".

- The project completely changes the shortcomings of the current vague off-campus training base training program, enables the school and enterprise to cooperate and jointly build off-campus training bases to achieve the clarification of goal and the materialization of actual training project, which will solve the current situation where the logistics management professional off-campus training base in higher vocational colleges has repeated construction, and the training projects are repeatedly opened and the contradictions in the one-sided and insufficient training programs, so as to promote the deep cooperation and healthy development of the school-enterprise joint training base.

## III. THE THEORETICAL BASIS, GOALS AND METHODS

### A. Theoretical Basis

The theoretical basis of this project is: modern apprenticeship theory, supply chain theory, work-study combination theory, and action-oriented theory and so on.

### B. Research Objectives

Through the development of the "Modular Training Project" system of the off-campus training base, the resources of the off-campus training base will be integrated, the potential of the training will be fully utilized, and the effectiveness of the off-campus training base will be improved. At the same time, the graduates of the logistics management major will pass the corresponding "modular training project" and truly realize the "zero distance" employment, and it can also carry out "pre-job training" for the corresponding posts for other professional graduates or employees of the enterprise.

### C. Research Methods

The research methods used include: literature research method, investigation research method, comparative research method, and action research method.

## IV. THE PROJECT RESEARCH AND PRACTICE PROCESS

### A. Conducting Extensive Research on Logistics Industry and Talent Demand

Since the project was initiated, Hunan Logistics Purchasing Federation of the project team has conducted extensive logistics industry research and logistics research on the logistics talents of the logistics departments of logistics enterprises and trade enterprises in Hunan Province and well grasp the current situation of the development of logistics industry in Hunan province and the characteristics of the demand for logistics talents, which laid the foundation for the smooth development of the research.

In view of the research of this subject, it has established a deep cooperative relationship with Hunan Shunjie Logistics Co., Ltd. to carry out the development and practice of this project in all aspects.

### B. Conducting In-depth Theoretical Research

In order to grasp the current research status of the relevant theories of this topic, the team members of this project carried out detailed and in-depth literature research, learn and refer to the research projects that the relevant experts have already obtained, and lay a solid theoretical foundation for the research of this topic.

### C. Study of Peer Universities

In order to further grasp the construction of the logistics management professional training base and the establishment of training programs in the peer universities, broaden the horizons of the members of the research team and earnestly study the advanced experience of peer universities, the research team actively adopted the measures of "going out" to conduct research and study activities in logistics management major higher vocational colleges with off-campus training base training programs. In-depth understanding of several peer universities in the training base teaching, management and other aspects and the in-depth thinking and research on the learning situation after returning to school provide reference for the study of this topic.

### D. Top-level Design of "Modular" Off-campus Training System of Logistics Management Major

Hunan Modern Logistics College and Hunan Shunjie Logistics Co., Ltd. take the high-level logistics management professional technology application talents as the training goal, play the synergy effect of the off-campus training base, and make the top-level design of "core module + subsidiary module" training base training project. The training program of "core module + sub-module" logistics management professional off-campus training base in higher vocational school refers to designing the "core module" composed of three logistics functions of "transport, warehousing,

distribution" based on supply chain management on the premise of meeting the professional training objectives and developing the "subsidiary module" that integrates four functions of "circulation processing, loading and unloading, packaging, and information" according to the characteristics of the cooperative enterprise.

The "modular training project" system of the off-campus training base of the logistics management major in higher vocational school includes seven first-level modules and more than twenty second-level training sub-modules. Each sub-module includes basic skills training programs, professional skills training programs, and technology application or comprehensive skills training program.

### E. Using Modern Apprenticeship Theory to Guide the Development and Practice of the "Automobile Manufacturing Supply Logistics" Module Training Project

- It is necessary to carry out in-depth study of the middle-level management positions of GAC Shunjie Logistics Co., Ltd., and clarify the three position responsibilities including "manager of distribution department", "manager of warehouse department" and "field team leader".
- Training guide for developing three modules

According to the operation specifications and standards of the three position in GAC Shunjie Automobile Manufacturing Supply Logistics: "distribution", "warehousing" and "on-site operation", combined with relevant theoretical knowledge, the school developed the training guide for three training modules: "Component Distribution Operation Training Guide of GAC Shunjie Automobile Manufacturing Supply Logistics", "Storage Training Guide of Guangzhou Shunjie Automobile Manufacturing Supply Logistics", "Field Operation Training Guide of Guangzhou Shunjie Automobile Manufacturing Supply Logistics". Then school provided standardized guidance for the whole course. Since this training guide covers the relevant commercial and operational management secrets of the company, it has not been published, just for internal internship training.

### F. Establishing a Dual Tutor System Based on Modern Apprenticeship

The project was implemented, and a "double tutor" training teaching team inside and outside the school was established. In the theoretical teaching level of the school, senior teachers from the fields of "distribution" and "warehousing" set up a team of instructors on campus. At the Hunan GAC Shunjie Training Base, the senior managers and operators of the company also set up "enterprise tutors" team, and set clear mentors responsibilities, mentor selection criteria, student counseling standards and other systems.

### *G. Teaching Management and Evaluation System Using "Integration System" to Design "Modular" Training*

In order to ensure the collaborative implementation of "modular" practical teaching and theoretical teaching, each modular training project needs to be incorporated into the professional teaching plan, organically integrated into professional teaching course training, professional post training, graduation design and comprehensive training. According to the difficulty level of the training program, the degree of importance, the degree of completion of the training, etc., different "points" are given, the process of training is also the process of continuous "getting points", and management system of professional practice teaching is established to evaluate the effectiveness of practical teaching.

## V. INNOVATION POINT OF PROJECT

### *A. Establishing a "Modular" Training Project System for the Off-campus Training Base of Logistics Management Majors in Higher Vocational*

It breaks through the previous situation of developing a training project based on the actual situation of the off-campus training base (enterprise), and makes top-level design of "core module + subsidiary module" training base training program. Based on supply chain management, the "core module" consisting of three logistics functions of "transport, warehousing and distribution" is designed. According to the characteristics of the cooperative enterprise, "auxiliary module" of the four functions of "circulation processing, loading and unloading, packaging, and information" is developed. It covers the entire positions of the logistics management major, so that the students' off-campus training programs are more comprehensive and more diverse, which can truly realize the graduates' employment with "zero distance".

### *B. Innovative Designing and Implementing the "Automobile Manufacturing Supply Logistics" Module Training Project of Hunan GAC Shunjie Logistics*

Hunan Modern Logistics College and Hunan Shunjie Logistics Co., Ltd. cooperated deeply and developed and implemented modular training projects based on the requirements of the job responsibilities and competence of middle-level logistics management positions including "manager of distribution department", "the head of the warehouse" and "the team leader" according to the talent demand of GAC Shunjie and the talents training orientation of the college.

### *C. Establishing a Perfect "Enterprise Tutor" Selection and Student Counseling System, and Promoting "Double Tutor System"*

Guided by relevant theories such as the modern apprenticeship system, GAC Shunjie Logistics has developed a rigorous "enterprise mentor" selection criteria and process, student counseling standards, coaching performance evaluation and assessment, and instructor incentive mechanism, and jointly carried out practical

teaching of modular practical training projects with the "college tutor".

### *D. Innovatively Proposing a Teaching Management and Evaluation System That Uses "Integration System" to Design "Modular" Training*

In order to ensure the collaborative implementation of "modular" practical teaching and theoretical teaching, each modular training project needs to be incorporated into the professional teaching plan, organically integrated into professional teaching course training, professional post training, graduation design and comprehensive training. According to the difficulty level of the training program, the degree of importance, the degree of completion of the training, etc., different "points" are given, the process of training is also the process of continuous "getting points", and management system of professional practice teaching is established to evaluate the effectiveness of practical teaching.

## VI. PROMOTION AND APPLICATION EFFECT OF THE PROJECT

### *A. Students' Practical Ability and Management Ability Have Been Significantly Improved*

Since 2014, more than 300 students from the Logistics College have been to Hunan Shunjie Logistics Co., Ltd. to participate in the three modular training of "Manager of Distribution Department", "Warehouse Leader" and "Field Team Leader". The students' ability has been significantly improved. At the same time, more than 50 students have been employed in Hunan Shunjie Logistics Co., Ltd., show good management ability in the work and are quickly promoted in the company. Currently, more than 15 people take charge of related middle-level management positions such as "products distribution", "warehousing" and "on-site operations". They manage the team with more than 30 people averagely.

### *B. Effective Improvement of the School-running Level*

Through two years of practical application, the project has promoted the development of many works in the school. In 2015, Hunan Modern Logistics College successfully established Hunan vocational education upgrade key project: "modern logistics management demonstrative major groups. The construction of the training base and the development of the training project is one of its key construction contents. The development and practice of this project lays a solid foundation for the construction of the training base of the "modern logistics management demonstrative major groups" project and the development of the training project, effectively promoting the improvement of the school-running level.

### *C. Promoting the Reform of the Talents Training Mode of Modern Apprenticeship System in Schools*

Based on the research and practice of this project, the systemization of modern logistics apprenticeship enterprise standards, assessment standards, and teacher training

standards is improved in the construction of Hunan modern logistics management demonstrative major groups, which is integrated into the daily talent training process to form talent training curriculum system, technical skill system and assessment system and widely used in the flexible order training process to further improve the quality of personnel training and further deepen the flexible order talent training model based on modern apprenticeship.

## VII. CONCLUSION

The development and practice of “modular” automobile manufacturing supply logistics training project in off-campus training base of Hunan Modern Logistics College and Hunan Shunjie Logistics Co., Ltd.'s has been widely recognized by the society. Hunan Modern Logistics College and Hunan Shunjie Logistics Co., Ltd. were awarded the modern apprenticeship training base by China Federation of Logistics and Purchasing and the National Logistics Vocational Education Teaching Steering Committee on January 13, 2018.

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