The Research and Practice of the Order-based Cultivating Mode of Metro

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Abstract. Following with the rapid development of domestic metro, the order-based cultivating mode of metro is a way that university and metro company make and finish training target, training program, training plan based on school-enterprise cooperation and market demand. First, confirming the positive function and finding some problems of the order-based cultivating mode by the acquaintance with the teaching situation of domestic universities. Then, analyzing the source of the issue and offering advice on it by experience on the order-orientated talents training of East China Jiaotong University.

Introduction

Urban rail transit is greatly expanded because of its characteristic with large capacity, high speed, less area, little pollution and noiseless. Additionally, educational resources and High-end technical talent can’t match with the swift development of rail transit because the cultivation of professional personnel in rail transit is mainly based on the universities affiliated to the former Ministry of Railways in China \cite{1}. At the same time, the majors related to urban rail transit, such as the major of metro vehicles and mass transit signal, can’t be replaced with the mechanical specialty and communication specialty because of its particularity. Accordingly, those factors result in retraining and more cost.

The Significance of the Order-based Cultivating Mode of Metro

Talents Cultivation Seamlessly Integrates into Talent Demand

In the training process, university and metro company make training program together in order to improve the students' practical ability to make sure that students can meet the employers’ requirements. Then, this will shorten training period and suiting period, and therefore it will also cut down metro company’s training cost. During the cultivation period, students can comprehend corporate culture and enhance the sense of identity and the existence feeling of it. This sense of belonging doesn’t only reduce graduates’ job-hopping effectively but also lessen the risk of employment.

Promoting the Construction of Teachers’ Team and Enlarge the Scale of Training Field

The key to the development of a mechanism for cooperation between production and education lies in the cooperative initiative and interdependence for both colleges and enterprises. This need close communication and contract-cooperation between colleges and enterprises. For one thing, teachers can enter the enterprise and understand the actual skill requirement deeply to Optimize teachers' teaching methods and improve teachers' teaching ability. For another, companies can acquire a greater depth of understanding of theoretical knowledge to improve innovation ability and working ability of corporate team. Additionally, the order-based cultivating mode request higher requirements for training base from universities and urge companies to share the advanced equipment with universities.
Problems in Practice of the Order-based Cultivating Mode

Strong-targeted Curriculum System May Led to Comprehensive Ability Weakly

Because of the pertinence of order-based cultivating mode, this cultivating mode pays more attention to whether courses meet the employment requirements of employing unit to enhance employment rate. As is known to all, the construction of knowledge system and curriculum system is the important part in the program of cultivating talents. Forasmuch, this mode may result in that students’ all-round quality, such as other discipline knowledge, humanities and moral quality, which is companies always ignore. Those may affect the sustainable development of training students.

Traditional Educational Idea and Weak Teacher Resources

Affected by traditional philosophy of education, old notion of curriculum as well as many other factors, a number of problems and difficulties are faced in the process of teaching. Firstly, the traditional teacher-centered knowledge-feeding pattern confines students in textbooks and makes the students passive in the whole teaching process, which suppresses students’ creative thoughts. Secondly, some teachers have high-level and comprehensive professional knowledge, but they lack sufficient practical teaching experience and skills. Lastly, the major of urban rail transit is transformed from mechanical specialty, communication specialty or other specialties in most colleges which are short of professional teachers and scientific teaching methods [2].

Universities Lack Attention and Investment

Seeing the superiority of the order-based cultivating mode, some universities disregard the fact of teachers’ team and teaching equipment to develop order-based cultivation and enlarge the enrollment scale in order to achieve the leapfrog development [3]. However, some universities don’t pay much attention to it, and this result in lack of Scientific management, enough finance and advanced equipment. Finally, the protocol of the order-based cultivating mode will become a mere scrap of paper.

Enterprises’ Low Enthusiasm in Taking Occupational Training

Cost savings and receiving high-level talent are enterprises’ motivation of participating in personnel training. In fact, some enterprises are anxious to achieve quick success and get instant benefits. They don’t take part in training and share educational resources with colleges energetically, let alone send professionals to colleges to give on-the-spot guidance [4]. Enterprises’ operation risk may directly affect the whole process of professional personnel training simultaneously.

Advice

Students: Bringing Subjective Initiative and Working Hard

Before order-based cultivation, students should consider own actual situation, Career planning and individual value to make choice of cooperative enterprise which include culture, salary, working environment, job requirements and so on. During the cultivating time, students must stimulate initiative and finish studying plan on time to meet the educational program requirements. At the same time, students also need the rich campus cultural life and social practices which can promote the students' health and growth to the fullest extent.

Universities: Heightening the Teaching Quality and Specifying the Teaching Feature

Carrying out the order-based cultivating mode depends on many factors, including social demand, local industrial structure, universities’ actual conditions such as faculty and teaching equipment, as well as cooperative company which has good enterprise culture, integrity, bright development prospect and relatively strong profitability. Universities need to guide teachers to update traditional educational idea and strengthen the construction and management of faculty, teaching quality, practical bases, teaching equipment and facilities, and so on.
Enterprises: Participating in Teaching and Sharing Resources with Universities

Enterprises need to communicate with universities for the training target and standards based on confirming job requirements in time. In the process of cultivation, it is significant to remember that the enterprises have more to do than just offer internships and then to share resources with universities. Additionally, enterprises must employ the graduates in accordance with the contract.

Government: Providing Policy Support and Legal Protection

The government, working as the manager of public affairs, plays an important role in promoting school-enterprise cooperation. The government should offer policy support and law to ensure the success of order-based cultivation, especially encourage universities to create new cooperation projects to realize win-win cooperation with enterprises, and make it serve for local economy based on the successful and prosperous industries.

Summary

Due to the severe employment situation, more and more universities have been crazy for the order-based cultivating mode which can raise employment rates and reduce enterprises’ hiring cost effectively regardless of its actual ability, so that a whole series of issues aroused by it. For this situation, universities and enterprises should suit the development and applications of the order-based cultivating mode to local conditions, unceasingly consummate and innovate on the basis of existing theories and practices. In this way, the order-based cultivating mode can maximize the superiority of it and achieve a win-win situation.

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References


