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The Optimization Countermeasure of Practical Teaching of Applied Logistics Engineering Specialty

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Abstract: On the basis of the exploration of practical teaching of logistics engineering in recent years, this paper analyzes the misunderstandings existing in practical teaching of logistics engineering. Combined with the exploration of practical teaching, this paper puts forward the optimization countermeasures of practical teaching of applied logistics engineering.

Keywords: Logistics engineering; School-enterprise cooperation; N1N teaching platform

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In 2022, Jilin University of Chemical Technology Higher Education Teaching Reform research general topic "Construction and Practice of practical teaching Mode for applied talents of Logistics Engineering Undergraduates based on N1N university-Enterprise Cooperation Platform"

1. Mistakes in practice teaching of logistics engineering

1.1 On-campus simulation practice logistics enterprise operation actual disconnect

Modern logistics has gone beyond the era when traditional logistics uses simple methods and means to simply shift goods. Modern logistics is the product of the integration of logistics with modern information technology and engineering technology. The logistics system which integrates modern information technology and engineering technology is a complex large-scale system. The complexity of logistics system requires that logistics engineering teaching practice must go deep into the operation of logistics system in order to master the essence and connotation of logistics engineering. However, in the teaching and practice of logistics engineering, due to the influence of teaching conditions and other factors, the practical teaching of logistics engineering in some universities is carried out in the way of simulating the operation of logistics system. Through the practical teaching completed by simulation practice, students have no contact with logistics enterprises and do not understand the operation status of logistics system, and the teaching effect is not satisfactory. After graduation, they are helpless in the face of the problems existing in the operation of logistics system of enterprises.

1.2 The basic role of practice teaching in professional teaching has not been fully utilized

Practice teaching plays an increasingly prominent role in the teaching of application-oriented colleges and universities. Because practical teaching can not only verify the authenticity of the principles learned, but also allow students to find problems in practice, solve problems, and inspire students' innovative thinking.

Logistics engineering majors in application-oriented colleges and universities should face the front line of logistics production and operation, cultivate applied talents of logistics engineering, and serve logistics enterprises, which requires students to firmly grasp the entry point of practical teaching. On the one hand, combining theory with practice can consolidate and improve the effect of theoretical teaching through practical teaching. On the other hand, in the practice of enterprises, the problems existing in the operation of logistics enterprises are found through course design and graduation design, so as to improve students' ability to find and solve problems.

In teaching practice, some application-oriented colleges and universities, due to their lack of understanding of themselves, have problems in the orientation of colleges and universities, do not attach importance to practical teaching, and do not rationalize the relationship between practical teaching and theoretical teaching. Practical teaching is basically completed in campus simulation, and

cultivating students' ability to find and solve problems can only be an empty talk.

1.3 The practical teaching is superficial

At present, most colleges and universities have established off-campus practice bases. In the process of internship, enterprises do not arrange students to go deep into the frontline of enterprise operations in order not to affect the normal operation of enterprises, and students often only visit after internship. Students can neither contact the actual operation and operation of logistics, nor get logistics operation data. Even less likely to find operational problems.

Some colleges and universities practice teaching is to arrange students to work as interns in enterprises. After a period of internship, students' job operation ability has been improved, but the job work limits their vision, and students lack the observation and thinking of the whole logistics system. This practice method is only suitable for the training of skilled talents, not for the training of applied talents.

Some of the above practical teaching errors seriously affect the training of applied talents of logistics engineering. In order to train applied talents of logistics engineering to meet the needs of society, we must innovate practical teaching methods.

2. Exploration of practical teaching of logistics engineering

According to the actual development of the university and society, Jilin University of Chemical Technology has positioned the university as an application-oriented university focusing on cultivating application-oriented undergraduate talents. Under the influence of specialty characteristics and school talent training objectives, logistics engineering majors take practice teaching as a breakthrough in the construction of professional characteristics, and carry out a bold exploration in the practice teaching of logistics engineering majors.

Since 2021, students majoring in logistics engineering have had professional internships in Shandong Jingbo Group. During the internship, the students were divided into several research groups with the help of the N1N learning training platform of Jingbo. Based on the problems existing in the operation of Jingbo logistics, a topic was determined for each group. The off-campus instructor and the internship leader jointly guided the topic research. In the subject research, the research group has conducted several in-depth investigations into Jingbo Logistics, obtained data, conducted modeling and deduction, and demonstrated countermeasures. After the research, each group put forward countermeasures to the problems existing in the operation of the enterprise, most of these countermeasures have been adopted by the enterprise and have created certain benefits.

The reason why N1N training is recognized by students mainly lies in: First, this internship method finds the common interests of universities and enterprises. In the past, in the school-enterprise cooperation of logistics major, students went to the enterprise for internship in the way of post, and in the process of post internship, students should create value for the enterprise. In this kind of school-enterprise cooperation, the goal of the school is how to enable students to improve their ability and increase their ability in the internship, while the goal of the enterprise is how to obtain greater benefits through students' work on the job. The difference in goals often makes such cooperation unstable and long-term, and it is easy to produce contradictions. In N1N school-enterprise cooperation, how to enable students to improve their ability and increase their ability in logistics operation has become the common goal of both schools and enterprises. Because enterprises need to find and recruit excellent students in the practice teaching, therefore, in the process of internship, whether the professional quality and ability of students can be improved is also related to the future development of enterprises. Therefore, N1N university-enterprise cooperation has a solid foundation and more lasting cooperation; Second, the internship is arranged in a problem-oriented way in the internship. Students find problems in the production and operation of enterprises during the internship - in-depth analysis of the causes of the problems - research countermeasures to solve the problems in the internship, students have been trained in the process of solving problems, and their abilities have been improved.

3. Optimization countermeasures for practical teaching of applied logistics engineering

3.1 School-enterprise cooperation to build a new type of practical teaching platform

From the exploration of practical teaching of logistics engineering majors in application-oriented undergraduate colleges, we realize that traditional simulation practice teaching only simulates the logistics operation process scenarios, and cannot simulate the actual situations such as the coordination and cooperation of various functional elements in the logistics system, and the need to connect the supply chain of upstream and downstream enterprises in the operation of the logistics system. Therefore, the role of simulation teaching in the cultivation of students' ability is limited. The practice teaching is not suitable for the training of applied logistics engineering talents. Therefore, the practice teaching of logistics engineering in applied undergraduate colleges should find a suitable practice teaching platform. The N1N school-enterprise cooperation platform of Shandong Jingbo Group is open to universities all over the country and accepts practical teaching from universities. In order to cooperate with the teaching practice of university

students, Jingbo Group specially selects staff with professional background from enterprises as off-campus instructors to provide guidance. Students' internship is a macroscopic research object on the whole logistics system. Find the technical problems existing in the operation of logistics system, and conduct research oriented to technical problems. This is different from the job-centered, in order to complete the production task for the purpose of on-the-job internship. This provides conditions for cultivating application-oriented talents' global vision and ability to discover and solve problems, and the internship effect is better than before.

3.2 Teaching reform leading the training of applied logistics engineering professionals with practical teaching reform

Through the reform of practical methods, students can obtain the basic data of logistics system operation management and learn how to solve the problems of logistics system operation. These laid the foundation for the reform of logistics engineering professional personnel training and teaching. In the past course design and graduation design of logistics engineering major, students all designed through data copied from the Internet or subjective data, and the design results were divorced from reality, and even made jokes, and the effect of course design and graduation design was not good. The course design of the students after their practice in the enterprise is based on the data obtained by the students' practice. Some students' graduation design scheme is adopted by Jingbo, and the students are hired by Jingbo as employees because of their excellent design performance.

3.3 Establish a new school-enterprise cooperation mechanism

In the N1N training, colleges and universities should establish a long-term and mutually beneficial cooperation mechanism with enterprises that accept internships. Enterprises should provide free practice platforms for students in colleges and universities, and the resources of colleges and universities should also be tilted toward enterprises. For example, while accepting students for internships, enterprises should also become research platforms for teachers in colleges and universities, so that experts and scholars in colleges and universities can feel the pulses of enterprises and make enterprises into experimental fields for innovation in colleges and universities. Allow enterprises to take the lead in using new technologies and new processes, so that enterprises can taste the dividends of scientific and technological innovation as soon as possible. Under the premise of two-way selection of college internship students, enterprises are allowed to prioritize the selection of outstanding students to work in enterprises. In this way, a mutually beneficial school-enterprise cooperation mechanism is established, which makes the school-enterprise cooperation more stable, and the teaching level of logistics engineering major is raised to a new height under the new practical teaching mode.

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