Application of Biometric Technology on the Practical Teaching of Logistics Major in Vocational Colleges

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Abstract: The practical teaching is an important means to highlight the characteristics of Logistics Major in vocational colleges, but there are many problems in the construction and use of logistics training room, which directly leads to the lack of effectiveness of logistics practice teaching. Therefore, this paper discusses and analyses the application of biometric technology in the practical teaching of Logistics Major in vocational colleges. Based on the characteristics of practical teaching of logistics, an improved method is proposed to improve the teaching effect of logistics training courses. Studies have shown that under the situation of the development of vocational education, it is an ineviTable choice for vocational colleges to deepen reform, improve practical teaching quality, improve school level and enhance competitiveness.

1. Introduction

From the experience of foreign logistics education and the practice of logistics education in domestic vocational colleges, the logistics education of vocational colleges in China must have characteristics, which is determined by the practical, marginal and interdisciplinary nature of logistics disciplines [1]. How to carry out good logistics training and meet the needs of local logistics talents is a problem worthy of local colleges and universities [2]. Despite this, compared with nearly 10 million logistics operators, the proportion of training talents is still small [3]. Therefore, to improve the practical teaching effect of logistics in vocational colleges and to adopt practical and feasible methods to cultivate practical high-skilled talents that meet the needs of enterprises are issues of great concern to both vocational colleges and logistics enterprises [4]. How to speed up the development of logistics industry under the new situation and build up a high-quality logistics skills professional team, which puts forward higher requirements for the development of Logistics Major in various schools [5]. The training room has built a biometric system of logistics practical teaching which is suiTable for the professional characteristics and subject development of our school. The biometric system of logistics practice teaching related courses has been set up, which pays attention to cultivating students' practical and innovative abilities.

At present, the rapid economic development puts forward higher requirements for the logistics industry, and further highlights the shortage of logistics professionals [6]. The biometric system of logistics practice teaching is a product of the deep integration of professional knowledge system and information technology, an extension and effective supplement of traditional experiment teaching, and an important content of higher education information construction [7]. It plays an increasingly prominent role in China's national economic development, which is more and more prominent in contradiction with the current situation of China's logistics industry lagging behind, lack of logistics professionals and so on. It has become an important and urgent matter to speed up the training of high-quality logistics professionals [8]. The shortage of logistics talents has become increasingly prominent, especially the gap in logistics skills talents has been increasing [9]. Let the students of logistics majors in the school, through repeated simulations in the simulation of the real environment, the various types of real enterprises, role-playing [10]. Students can gain valuable on-the-job experience with a complete on-campus biometric training system. After graduation, they will be able to quickly compete in various positions of real logistics companies. At present, many

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vocational colleges have set up an on-campus training platform and venue in order to better cultivate logistics professional skills, and further emphasize the important position of practical training, and hope to improve students' practical ability and Comprehensive quality and achieved certain results.

2. The Status Quo and Existing Problems of Practical Teaching of Logistics Management Major in vocational Colleges

2.1 The logistics training system lacks effectiveness

The main performance is the lack of argumentation, the professional calibre is too large, and the positioning is not allowed. On the one hand, the training equipment is relatively simple, and some large-scale logistics equipment cannot be truly present in the training room, such as port terminal equipment, and more are mainly simulation models, which makes the logistics practice teaching greatly reduced. On the other hand, due to various reasons, many devices are not maintained in time, resulting in only being unable to use. All schools that have established logistics management majors are almost all directed at the “logistics hot”, and have not been fully investigated and demonstrated. These two points have caused the logistics education of most colleges to lack their own characteristics, the combination of training content and curriculum is low, the software and hardware utilization of training is inefficient, and the logistics training system lacks effectiveness. At the same time, driven by skills competitions at all levels, the training rooms of colleges and universities are equipped with more professional equipment and systems. The biometrics of logistics-related operations is more realistic and has better training and learning value. To carry out characteristic logistics practice teaching, we must consider the practicality of logistics and the effectiveness of logistics education. Logistics practice teaching in vocational colleges has been carried out for nearly ten years. The biometrics of logistics practice teaching is constantly improving according to the demand of logistics market talents, but there are still some problems in the development and construction.

In recent years, the number of research on the application of biometrics in the practical teaching of Logistics Major is increasing, which shows that the majority of scholars pay attention to this kind of research. Figure 1 shows the increasing and decreasing trend of related research in recent years.

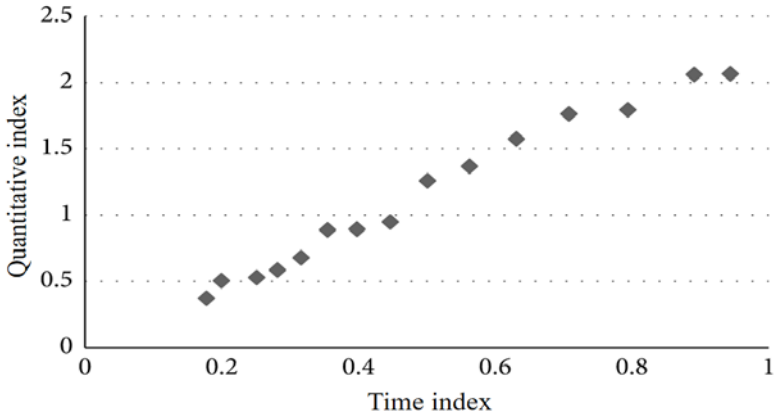

Fig.1. Studies quantitative trends

With the continuous development of market economy, some long-term entrepreneurs realize the importance of operational talents to enterprises. Let students register Taobao accounts on Alipay and improve Alipay related information. The assessment methods of each system fully draw lessons from the biometric management methods of real logistics enterprises, such as warehouse access method, inventory method, route arrangement, vehicle scheduling, vehicle stowage and so on. Students can find problems in competition, study and solve problems, and improve their learning initiative greatly. In the logistics practice teaching process, the training teachers often adjust the teaching content according to the training resources of each school, or compile the teaching process according to the training content, which lacks professional guidance and is arbitrary. In the

biometric operation mode, beginners can easily operate and control, in addition, use biometrics to better understand the various operations of the real enterprise. Therefore, the vocational colleges and enterprises in the principle of “equality and voluntariness”, “mutual benefit”, through the form of contract to establish long-term cooperative relations, the college's logistics personnel training tasks and the development and interests of the enterprise.

The members of the Training Design Evaluation Committee passed the evaluation of the indicators responsible for evaluation, using quantitative and qualitative value analysis, and finally obtained the scores of each evaluation index. Through weighted calculation, the quantitative judgment of the evaluated training teaching design was obtained (Table 1).

Table 1.Evaluation Committee corresponding evaluation information

Serial number	Evaluation index score	Training design total evaluation
1	70 points or less	Can not meet the needs of professional training, it is recommended to redesign
2	70 points - 80 points	Basically meet the needs of professional training, and suggest to improve the inadequacies
3	80 points - 90 points	Can meet the needs of professional training, and suggest to improve the inadequacies
4	90 points or more	Better meet the needs of professional training

2.2 Poor Conditions for Professional practice teaching of logistics

Lack of professional teachers with practical experience and professional training room. First, professional teachers are very scarce, logistics management professionals from high-end to low-end are in short supply. Logistics training room lacks overall planning in the demonstration stage, and has strong randomness. In the design of the composition of the logistics training room, it blindly pursues the advancement and comprehensiveness of software and hardware, pays attention to visual effects, and emphasizes hardware. Many Training rooms can only provide students with the opportunity to visit, but few can really enable students to learn on-site operation. Other vocational colleges are similar. The professional teachers of the existing Logistics Major are almost all changed by the relevant professional teachers after short-term study and training. Only a few colleges and universities have one or two teachers who are specialized in logistics management. For the learners, it is difficult to truly understand some highly specialized logistics equipment, facilities and understanding the more complicated logistics processes by adopting the traditional theoretical teaching mode. Professional teachers lack the background of logistics management professional practice, only book knowledge without practical experience and actual logistics management capabilities. Therefore, on the basis of increasing hardware investment in logistics training, we should also improve the level of information technology and strengthen the application of biotechnology.

3. Reforming Practice Teaching Method and Significance of Logistics Major in Vocational Colleges

3.1 Significance of Application of Biometrics in Logistics Practice Teaching

The biometrics training system is helpful to stimulate students'interest. The whole system provides a real operating environment, including almost all logistics enterprises in reality, covering most scenarios related to real logistics. In addition, the construction content of the practical training should be effectively combined with the training curriculum, and the theoretical teaching and practical teaching should be effectively linked up. However, whether developed or developing countries, economic development has put forward higher requirements for the diversification of talent demand. The emphasis of logistics education in vocational colleges is not only to cultivate students'self-study ability, team cooperation ability, social adaptability and psychological endurance ability, but also to cultivate students' ability to understand and use modern information technology. Vocational colleges need to improve the proportion of practical courses, combine practical teaching

platform with theoretical teaching, and improve the teaching effect and quality. At present, combined with the advanced teaching mode at home and abroad, the introduction of biometric technology into logistics practice teaching is a relatively advanced practice teaching method in China. The students'training process is assisted by biometrics to complete the corresponding practice teaching tasks. This requires teachers to have a strong comprehensive quality, so vocational colleges must allow teachers to participate in the corresponding on-the-job training, in order to improve the practical teaching ability.

As shown in Figure 2, the logistics training room carries out warehousing training, customs declaration and inspection process training and port terminal training respectively. For example, warehousing training can be divided into warehousing, shelf, shelf, sorting, circulation processing, packaging and stacking training projects. It is of great significance to introduce biometrics into practical teaching of logistics.

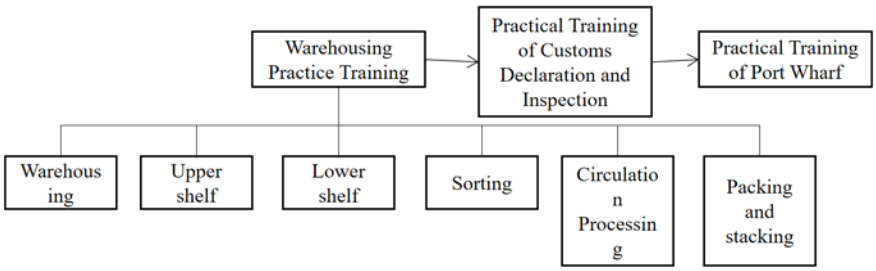

Fig.2.Logistics Training Process

3.2 The Method of Establishing Logistics Training room

In order to better introduce biometrics technology into the construction of logistics training room and improve the quality of students'practice teaching, vocational colleges should choose the suiTable construction scheme for their own training room according to the actual situation.All training scenarios require the management process of logistics enterprises as the core. The training process of each subsystem should be designed with reference to the business norms and business models of leading enterprises in many industries at home and abroad. In the process of students'study in out-of-school training room, they can be explained by front-line experts rather than by teachers, which is more professional and lively. On the other hand, practical experts can be invited, experts can be integrated into the classroom, students can accept practical training courses, teachers can receive training.

Logistics majors mostly belong to the Department of Economic Management in vocational colleges. Whether it is professional teachers, professional practical teaching facilities or professional teaching materials, all have certain links with other majors. Therefore, in order to distinguish the major and cultivate the professional students, logistics practice teaching needs its own independent training room. Introducing biometric technology to build logistics training room with its own characteristics. On the one hand, it enriches the content of practical teaching and enhances students'interest; on the other hand, it improves the efficiency of practical teaching and cultivates students' team cooperation ability. More importantly, the training system of biometrics can reasonably match students with different abilities, promote each other and make progress together, so as to achieve better learning results.

4. Conclusion

Enhance the effectiveness of practical teaching of logistics. With the rapid development of the logistics industry and the rapid demand for logistics professionals, this requires vocational colleges to pay attention to practical teaching of logistics. According to the actual needs of the society, the college should adjust the teaching contents in time, build a new training environment and introduce advanced technology, such as the application of biometric technology in logistics training, so as to promote the distance between graduates and work to be “0”.

In the process of logistics training teaching, teachers pay attention to the use of modern logistics teaching mode, with the help of advanced training teaching methods, so as to improve the teaching effect. Because of the characteristics of logistics Major, there are many kinds of facilities, equipment, training software and hardware involved, high requirements of operation technology, and difficult to fully equip. In practice, the practical teaching in many vocational colleges is mere formality. In order to promote the development of Logistics Major in vocational Colleges and cultivate high-quality skilled logistics talents, biometric technology is gradually applied in logistics practice teaching. Through the actual operation of logistics enterprises in the real environment, students can feel the specific positions of logistics enterprises, so that the logistics practice teaching can really achieve the actual effect. In order to enable students to accumulate real work experience before graduation,we should believe that with all efforts, vocational colleges will surely be able to construct logistics training room of biometrics and cultivate logistics skilled talents to meet the needs of society.

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