

Innovative Research on the Practical Teaching System of Logistics Management in the Background of Digital Economy

Chunlan Lv, Yanli Chen

School of Economics and Management, Yibin University; Yibin, Sichuan, 644007, China

Abstract

With the application of digital economy, artificial intelligence and other technologies in the logistics industry, which has driven the transformation and upgrading of the traditional logistics industry, logistics has become one of the industries with highly intensive talents and technology. Therefore, cultivating composite specialized talents that meet the needs of modern logistics development and helping the logistics industry to develop steadily in a scientific and innovative direction has become the key. The article explores talent cultivation models around teaching objectives, constructs corresponding practical teaching course systems and modular course content, and explores the practical teaching system for cultivating applied talents at the undergraduate level of logistics management in the context of digital economy.

Keywords

Logistics management; Undergraduate level; Digital economy; Practical teaching system.

1. Introduction

With the development of the digital economy, Big data, financial technology, blockchain, cloud computing and other technologies are more and more used in logistics activities. The characteristics of the logistics market, such as decentralization and fragmentation, are increasingly apparent, which makes the logistics industry achieve leapfrog development in terms of production and service methods, information transmission means and management methods.

The transformation and upgrading of the logistics industry will inevitably lead to new changes in the teaching system of logistics management majors. In the traditional teaching system of logistics management specialty, due to the lack of attention to the training of scientific and technological means, the focus on Technological literacy, and the cultivation of students' systematic thinking, the trained talents lack the awareness and ability to use modern scientific and technological means to deal with logistics activities, and the lack of innovative ability and critical thinking in practical activities, As a result, it is unable to adapt to the logistics environment of the technological era and handle the impact of digital economy technology on logistics activities[1]. Therefore, in order to cultivate professional talents who can adapt to the impact of digital technology on the traditional logistics industry and proficiently use digital technology to handle new phenomena in logistics activities, the practical teaching mode for cultivating applied talents in logistics needs to be reformed urgently.

2. Constructing A Guarantee and Evaluation System for Practical Teaching of Digital Logistics Management

The practical teaching system is an important carrier for improving students' abilities and literacy, and is an organic whole composed of the objectives, content, students, teachers, evaluation, and other elements of practical teaching. Therefore, the construction of the digital technology logistics management practical teaching system should be centered on the

cultivation of digital technology capabilities, guided by the goals of digital logistics practical teaching, focused on the optimization of digital logistics practical teaching content, and focused on the reform of digital logistics management practical teaching methods. Innovative practical teaching models should be established, the practical teaching management system should be streamlined, and a scientific digital logistics management practical teaching guarantee system and evaluation system should be established[2].

2.1. Establishing a target system for practical teaching of digital logistics management

The goal of practical teaching, which is to cultivate what kind of abilities, refers to the expected results to be achieved through practical teaching activities. Traditional logistics management needs to shorten the distance from social and economic development. It requires self adjustment, absorption of some courses in digital logistics, timely revision of talent training plans for various majors, and also ensures that the students trained can adapt to changes in social and economic development, and can establish a foothold in logistics activities in the digital economy era. Therefore, improving students' comprehensive quality, cultivating innovative spirit and digital technology practical ability to adapt to the logistics environment of the technological era is the main goal of digital logistics management practical teaching. The goal of digital technology-oriented logistics management practical teaching emphasizes the transformation of talents' single skills to composite skills, and the transformation of professional quality to cross disciplinary and comprehensive quality. This requires the cultivation of students' self-learning ability, allowing them to actively learn, self think, choose practical activities, unleash their potential, and improve their abilities.

Focusing on the training objectives of digital logistics professionals, it is necessary to conduct in-depth research on their knowledge structure, quality structure, especially their ability structure. The knowledge, qualities, and abilities of talents are an organic whole that cannot be separated from each other. The goal of cultivating abilities and qualities mainly relies on practical teaching to achieve. According to the structure of abilities and qualities, the specific goals of digital logistics management practical teaching in applied undergraduate universities include: professional cognitive goals, professional ability goals, digital technology application ability goals, entrepreneurial and innovative ability goals, and comprehensive quality goals. Therefore, the practical teaching objective system for applied digital logistics management talents is shown in Figure 1.

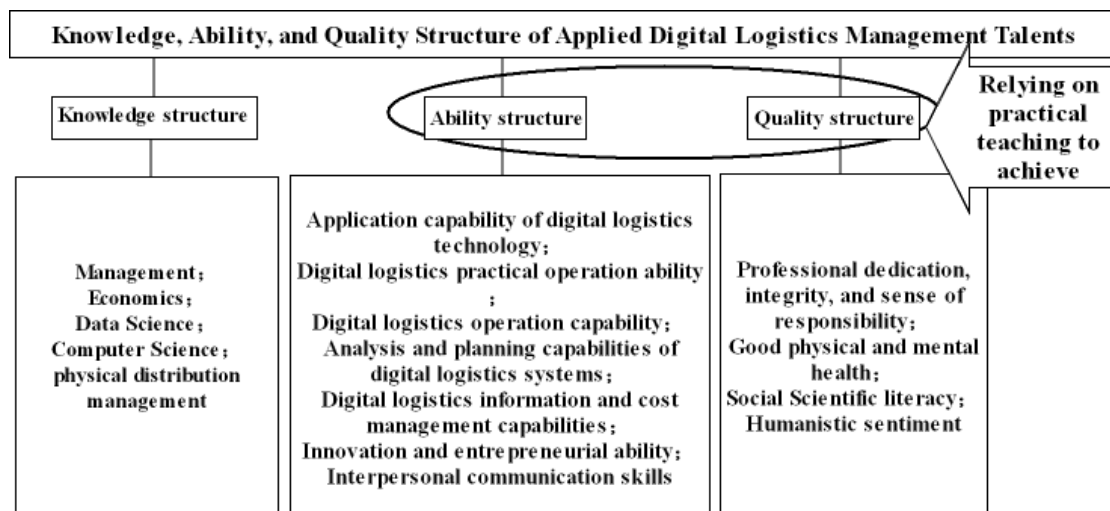


Figure 1. Practical Teaching Objective System for Applied Digital Logistics Management Talents

2.2. Design the content system of digital logistics management practical teaching

The content of practical teaching is the foundation for achieving practical teaching objectives and directly affects the quality of talent cultivation. It is particularly important to comprehensively and systematically design practical teaching links, optimize practical teaching content centered on ability cultivation, and build a "multi-level and integrated" practical teaching content system.

In terms of practical teaching content design, the main focus is on the integrated design of independent practice modules, course practice modules, and innovation and entrepreneurship second classroom modules. On each main line, follow the gradual law of knowledge and establish multi-level practical teaching links. At each level, there are several active ability modules that can be flexibly combined to achieve different ability development goals. The practical teaching content system of "multi-level and integrated" is shown in Figure 2.

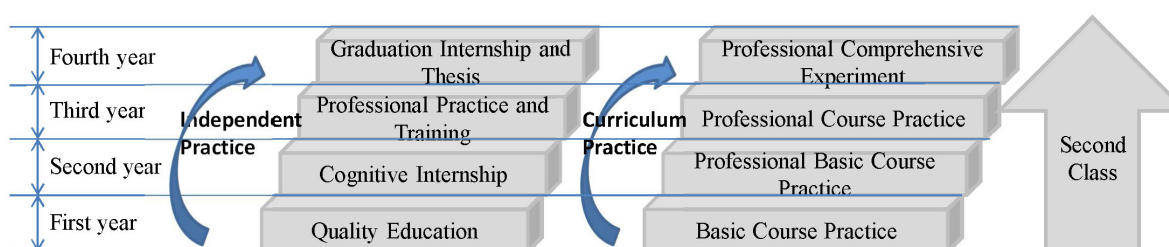


Figure 2. Multilevel and Integrated Practical Teaching Content System

The levels of independent practice modules from low to high are: quality education → cognitive internship → professional practice and training → graduation internship and thesis. This progressive hierarchical design can spiral up the cultivation of students' practical abilities. The course practice module refers to the experimental or (and) practical links designed in the professional foundation courses and professional courses. Designing these experiments or (and) practical links is not only beneficial for mastering theoretical knowledge, but also for improving professional practical application abilities. Curriculum practice has promoted the integration of practical teaching and theoretical teaching, with both being emphasized and developed in parallel. The second classroom module for innovation and entrepreneurship consists of comprehensive and innovative practice modules. This module is based on projects, competitions, and entrepreneurship, and students independently select practical projects. Various forms of activity content can be adopted, with a focus on cultivating students' innovation awareness and entrepreneurial spirit, and promoting personalized development.

2.3. Effective Extension of Digital Logistics Management Practice Teaching System

The logistics management major in the context of the digital economy emphasizes the practical abilities of the talents it cultivates, and emphasizes that students can enhance their practical abilities, innovation and entrepreneurship abilities through the theoretical knowledge learning process of the school, so as to better integrate theory with practice and adapt to the constantly changing logistics environment in the digital economy era. Therefore, the integration of production and teaching is an effective way to cultivate students' ability to combine theory with practice, and to test whether students can adapt to the new logistics environment. Through the integration of industry and education, universities need to determine their own talent cultivation positioning based on industry and professional standards, and the needs of enterprises for talent capabilities, in order to reconstruct the knowledge structure of the talents

to be cultivated. Through the organic integration of production and teaching, a redefinition of students' ability structure and quality structure is formed, in order to cultivate the necessary talents for enterprises[3].

3. Key Issues to Be Addressed in Constructing A Digital Logistics Practical Teaching System

3.1. The cultivation of digital technology talents closely integrated with practice

Firstly, many new courses in the field of digital logistics management often require knowledge in computer science, data science, and other fields. Therefore, in the process of introducing new teachers, it is important to focus on introducing new teachers with interdisciplinary backgrounds, such as those who study mathematics, computer science, data science, and other majors at the undergraduate or master's level, while those who study business majors at the master's or doctoral level have a good foundation. Thus, it can quickly integrate into the digital logistics profession. Secondly, the design and evaluation of the practical teaching system is an important part of practical teaching. Therefore, it is necessary to invite industry associations, experts from enterprises, and graduates from this major to participate in the design and evaluation of the practical teaching system in universities. This is extremely important for improving the quality of applied talent cultivation.

3.2. Laboratory Construction of Digital Technology Applied Undergraduate Universities

In order to efficiently use experimental funds and better serve local enterprises, the construction of laboratories in local and application-oriented undergraduate universities can consider collaborating with other local universities to build laboratories, school enterprise cooperation to build laboratories, or purchasing large-scale equipment. The enterprise's laboratory can also be relocated to universities, where multiple parties can jointly invest and share experimental resources. This not only helps to save laboratory construction funds, but also helps to save laboratory construction costs, And it is conducive to improving the utilization rate of the laboratory. In addition, before planning to build a laboratory in universities, it is recommended to comprehensively consider the teaching needs of the school and the actual needs of local relevant enterprises. In terms of equipment selection, some equipment can be selected at the enterprise level for the school and enterprises to use together. This can not only solve the difficulties of tight experimental funds, but also better serve local enterprises.

3.3. Encourage digital technology personnel from local enterprises to participate in practical teaching

The improvement of practical teaching quality cannot be separated from the participation and support of enterprise personnel. Drawing on the experience of the Fachhochschule in Germany and combining with the actual situation of China, The forms in which enterprise personnel participate in practical teaching in universities range from low to high: enterprise personnel go to schools to give special reports on enterprise practical operations to students and teachers; enterprise experts go to universities to work as part-time teachers; enterprises help schools provide opportunities and venues for students to conduct off campus inspections; enterprise personnel actively participate in guiding students to complete enterprise practical projects; schools and enterprises jointly carry out scientific research and practical projects; enterprise mentors participate in students' graduation internships and Guidance for graduation thesis → Establishing a network of enterprise relationships between schools, enterprises, and industry associations → Conducting collaborative projects outside of teaching between schools and

enterprises → Conducting high-level scientific research cooperation between schools and enterprises.

4. Conclusion

The era of digital economy has arrived, and informatization and digitization are the core of the current logistics industry. Logistics professional management talents must use modern information technology to propose accurate industrial layout based on Big data analysis, so as to achieve regional intensive development, reduce industrial logistics costs and improve management level. However, in the traditional teaching system of logistics management specialty, the training of scientific and technological means for students and the attention to Technological literacy have not been paid much attention, resulting in the lack of awareness and ability of trained talents to use modern scientific and technological means to deal with logistics activities, unable to adapt to the logistics environment in the scientific and technological era and deal with the impact of digital economic technology on logistics activities. Therefore, the research on the practical teaching system of logistics management in the context of the digital economy has certain novelty.

Acknowledgments

Foundation Project: Yibin University Education Reform Project“Innovative Research on the Practical Teaching System of Logistics Management under the Background of Digital Economy: Taking Yibin University as an Example”(NO.:159-JGY202214) phased results.

References

- [1] D.Y. Wang.Construction of Practical Teaching System for Applied Undergraduate Logistics Management Majors. Logistics Technology, 2023,46(13).
- [2] X.W. Li, Jin. Fan. Construction of Practical Teaching System for Logistics Management in Applied Undergraduate Colleges Based on OBE Concept. China Logistics and Procurement, 2023(07).
- [3] H.F. Dong.The Talent Cultivation Model and Practical Teaching System Construction of Logistics Management Major - Review of "Practice and Exploration of Logistics Management Major Construction". Research on Science and Technology Management, 2021,41(21).