Discussion on the Construction of Employment Oriented E-Commerce Curriculum System in Higher Vocational Education

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Abstract: E-commerce is a new business model that breaks the limitations of time and space, enabling the sharing of information, products, and services between enterprises and consumers. Therefore, studying the construction of e-commerce courses in vocational colleges under this new situation has certain practical significance. This article analyzed and investigated the current situation of cultivating students majoring in e-commerce in vocational colleges. The survey method and analytic hierarchy process were mainly used to describe the suggestions and attitudes towards the construction of the curriculum system. Survey data showed that 75% of people supported the construction of practical teaching courses. The findings indicate the need to develop students' competencies in terms of theory and practice.

1. Introduction

E-commerce is a new type of business model with great development prospects and can become a mainstream trend in the future. The construction of e-commerce course system is a complex system engineering that requires the joint participation of schools, enterprises, and students. At present, there are problems in the construction of the e-commerce curriculum system in vocational colleges, such as a lack of teaching staff and outdated teaching facilities and equipment. Therefore, this article proposes corresponding countermeasures and suggestions on the basis of the development direction of vocational education reform and social needs. Therefore, it is meaningful to construct an e-commerce course system that conforms to the characteristics of vocational colleges and adapts to social needs.

Due to factors such as the current market economy environment, talent cultivation system, and policies and regulations, some graduates have a blind understanding of e-commerce. In-depth analysis and discussion are needed on the construction of e-commerce curriculum system and teaching methods in higher education, so as to cultivate excellent professional competent people. There are many theories related to studying e-commerce courses and career guidance. For example, some scholars have proposed a dynamic cost sharing contract to address issues such as information

asymmetry, long-term integration, and cost inefficiency in the supply chain of electronic retailers [1-2]. Some scholars also indicate that although there are obstacles to developing countries adopting e-commerce, there are signs of an increase in acceptance of e-commerce recently [3-4]. In addition, some scholars believe that in the study of a single method of e-commerce, relevant shelf issues have been proposed, and it has been found that the growth mode of e-commerce is related to a large number of products, product display space, heterogeneity of online shoppers, and large returns from customers [5-6]. As a new business model, a new form of business operation and management method, vocational college students still need to strengthen their professionalism, and their employment situation still faces challenges.

This article first studied the basic concept of employment orientation and described the implementation methods of employment guidance. Secondly, the advantages and disadvantages of e-commerce were described, and the relevant content of e-commerce courses was discussed. Then, the characteristics of the construction of the e-commerce course system and the issues related to the e-commerce course system in vocational colleges were elaborated. Afterwards, suggestions were made to establish an e-commerce course system in higher vocational education. Finally, relevant discussions were conducted on course construction through investigation.

2. Employment Oriented Vocational E-Commerce Course System

2.1 Employment Orientation

Employment orientation is a targeted orientation towards education and training institutions, as well as educational and teaching activities, aimed at providing students with the knowledge, skills, and professional qualities required for employment. The purpose of employment education is to provide students with practical skills and knowledge required for employment, and to provide them with better employment opportunities. In the area of higher vocational education, employment orientation is very important, because the objective of higher vocational education is to train applied talents with specific practical skills and professional qualities to adapt to the market demand [7]. Therefore, higher vocational education should focus on developing practical education, integrating production and teaching, and focusing on improving students' competitiveness in the field of employment [8]. In educational and teaching activities, employment guidance can be achieved through the following methods:

By connecting with different industries, courses are determined. Higher vocational education should establish connections with different industries to understand the talent needs and requirements of the industry, and determine courses and plans that enable students to acquire knowledge and skills that meet market demands. Through practical courses, project internships, and other methods, students can gain a deep understanding of the actual operation of the industry, acquire and improve practical skills. Vocational schools should plan their careers to enable students to understand the development trends and employment prospects of different industries, improve their professional literacy and career planning skills, and provide better career development space for students [9]. Higher vocational education should strengthen the integration of production and education, establish close connections with different enterprises through cooperation and internships between schools and enterprises, and provide more employment and development opportunities for students [10]. Overall, employment orientation is one of the main goals of higher vocational education. Higher education should focus on practical teaching, combining production and teaching, career planning, and improving students' competitiveness [11].

2.2 E-Commerce Courses

E-commerce can conduct transactions 24/7, allowing customers to shop quickly anytime, anywhere. E-commerce orders are processed, shipped, and delivered very quickly, which can reduce customer waiting time and improve customer satisfaction [12]. There is no need for large logistics warehouses and physical stores, which saves on store rent and labor costs. Traditional physical enterprises are limited by geography and population, while e-commerce is unrestricted and can enter a wider market. Digital means help to better understand customer needs and develop more targeted marketing strategies. However, due to the inability of the product to be viewed directly online, transactions must be made based on the merchant's credit, and some unpopular merchants may take advantage of this opportunity to engage in fraudulent activities. The goods require logistics transportation, which may lead to logistics damage, delay, loss, and other issues. Some technical support is needed, and maintenance and management require a certain number of technical personnel, which may increase the difficulty for some small enterprises. It is necessary to ensure network security and prevent data loss and hacker attacks regarding user personal and transaction data. Some consumers may prefer to purchase goods in physical stores because the services provided by physical stores better meet their needs. In e-commerce, service experience affects user satisfaction [13].

E-commerce courses refer to some courses related to e-commerce offered by universities. The goal of the e-commerce course is to cultivate an understanding and mastery of the basic concepts, technologies, applications, and management of e-commerce, providing students with a solid foundation for future e-commerce related work [14]. The content of e-commerce courses usually includes the following aspects:

The basic knowledge of e-commerce includes the definition, characteristics, development history, e-commerce models, advantages and disadvantages of e-commerce, etc. E-commerce technology includes network technology, security technology, database technology, mobile technology, etc. E-commerce applications include e-commerce platforms, e-commerce marketing, e-commerce customer relationship management, e-commerce supply chain management, etc. [15]. E-commerce Law includes e-commerce laws and regulations, e-commerce contracts, e-commerce intellectual property rights, etc. Electronic payment covers the basic concepts, types, processes, and security of electronic payment transactions [16]. The innovation and development of e-commerce include the latest technologies, trends, and directions of e-commerce. In the teaching of e-commerce courses, practical teaching, Case method, project practice and other methods should be emphasized, so that students can deeply understand the actual functions of e-commerce, master practical skills and improve practical skills [17]. At the same time, students can also familiarize themselves with industry practices through extracurricular practical activities, company internships, and other opportunities. These activities can create better job opportunities and career development space for students. In short, the e-commerce course is an important course for developing e-commerce related talents, and should focus on practical teaching, case studies, project practice, and other methods to improve students' practical skills and employability [18].

The characteristics of the construction of the e-commerce course system mainly include the following aspects.

Optimizing course configuration: Establishing an e-commerce course system requires improving, dividing, and deepening courses based on students' needs and industry trends. Strengthening practical education: The establishment of an e-commerce curriculum system should focus on practical teaching, strengthen case study and project practice, and improve students' practical skills and application level [19]. Through practical teaching, students can better understand and master the basic concepts and application technologies of e-commerce, thereby improving their practical

and innovative abilities. Industry and education are closely related: Establishing an e-commerce curriculum system must establish close connections with the industry, understand industry trends and needs, incorporate industry applications and practical experience into the curriculum, and improve students' employability. Cooperation between schools and companies must be strengthened to provide more internship and employment opportunities for students. Optimizing teaching staff: Establishing an e-commerce course system requires the introduction of excellent teachers with extensive practical and industry experience to provide students with better teaching content and guidance. There is also a need to strengthen teacher training and communication to improve the educational and professional quality of teachers. Improving innovation ability: The growth of e-commerce courses should focus on the development of innovative skills. Innovative practice activities and scientific research projects stimulate students' innovation awareness and ability, and improve their overall quality and employment ability [20].

The structure of the e-commerce curriculum system should focus on improving the curriculum system, strengthening practical teaching, closely integrating production and teaching, optimizing teacher resources, and developing innovative abilities, in order to improve students' practical skills and employment abilities.

2.3 Construction of E-Commerce Course System in Higher Vocational Education

The problems of the e-commerce curriculum system in vocational colleges mainly include the following aspects.

The curriculum is not specific enough: Some vocational schools' e-commerce courses are relatively unique, lacking segmentation and depth, resulting in students lacking a comprehensive and in-depth understanding of the e-commerce field, which affects their competitiveness in the employment field. The curriculum is too theoretical: Some e-commerce degree courses in vocational schools are too theoretical, lack practicality and relevance, and cannot meet the actual needs of students. Lack of integration with the industry: Some vocational schools' e-commerce courses lack integration with the industry, leading to a lack of timely understanding of industry trends and needs, resulting in teaching content that is detached from practice. Teacher shortage: Some vocational schools do not have enough teachers to teach e-commerce courses. Teachers lack practical and industry experience, making it difficult to provide practical teaching content and guidance to students. In order to address the above issues, the e-commerce curriculum system of higher education institutions needs to be reformed and improved. The specific measures are shown in Figure 1.
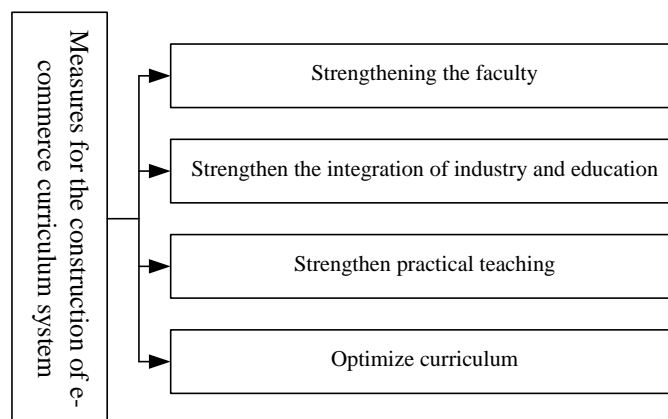

Figure 1: Measures for the Construction of E-Commerce Curriculum System

In response to curriculum issues, there is an urgent need to reform and enhance the e-commerce curriculum system of higher education institutions to enhance students' practical skills and competitiveness in the field of employment. The establishment of an e-commerce curriculum system in higher education institutions should be oriented towards employment, training high-quality and applied personnel with certain practical experience and e-commerce skills. Here are some suggestions for establishing an e-commerce course system in higher vocational education:

A curriculum system that adapts to market demand has been established. Based on the current market demand and the development trend of the e-commerce industry, a curriculum system that meets practical needs is established, including courses such as e-commerce introduction, e-commerce platform operation, e-commerce marketing, e-commerce law, electronic payment, logistics management, etc. Attention should be paid to cultivating students' practical skills and improving their practical and problem-solving skills.

Practical teaching courses have been strengthened. E-commerce is a very practical subject, so it is necessary to strengthen the connection between practical teaching. By organizing practical courses, internships, project practices, and other methods, students can gain a deeper understanding of the actual working methods of e-commerce.

Experts in the e-commerce industry are hired as teachers. The e-commerce industry is rapidly developing and must evolve over time. To ensure that the teaching content is practical and forward-looking, it is recommended to hire experts in the e-commerce industry as teachers to help students gain a deeper understanding of the development trends and latest technologies in the e-commerce industry, and improve their practical skills.

The internationalization of the curriculum is promoted. E-commerce is a global industry, therefore it is necessary to promote the internationalization of e-commerce. The content of international courses is increased to cultivate students' cross-cultural communication skills and international perspectives. By using the fuzzy evaluation method to grade the strategies for constructing the curriculum system, Analytic Hierarchy Process can be used to determine the product of each row element in the matrix, which is Q_i:

$$Q_i = \prod_{k=1}^{m} x_{ik} \tag{1}$$

The m-th root of Q_i is calculated:

$$Q_i = \prod_{k=1}^{m} x_{ik} \tag{2}$$

$\overline{v}_i$ is normalized:

$$v_i = \frac{\overline{v}_i}{\sum_{k=1}^{m} \overline{v}_i} \tag{3}$$

The relative weight values of each element are calculated.

To establish a high-level e-commerce curriculum system, it is necessary to focus on practical teaching, establish a curriculum system that meets market demand, hire e-commerce industry experts as teachers, promote the international construction of the curriculum, and enable students to have certain practical experience and skills to adapt to the growth needs of the e-commerce industry.

3. Survey on the Construction of E-Commerce Course System

3.1 Necessity of Course System Construction

The necessity of constructing an e-commerce course system:

Adapting to the trend of e-commerce: With the rapid development of internet technology, e-commerce has become an important force in stimulating the economy. Therefore, establishing a curriculum system that adapts to the development trend of e-commerce and cultivating talents with e-commerce skills is crucial for promoting economic development and enhancing national competitiveness.

Improving students' professional competitiveness: With the continuous growth and development of the e-commerce industry, the demand for e-commerce talents is also increasing, and the demand for e-government talents is also increasing. Therefore, establishing an e-commerce curriculum system that meets market demand and cultivating e-commerce talents with practical and innovative skills can effectively improve students' employability.

Promoting educational reform: Establishing an e-commerce course system is an important measure to promote educational reform, which can promote the transformation of educational methods, improve teaching quality, and provide better educational resources and services for students.

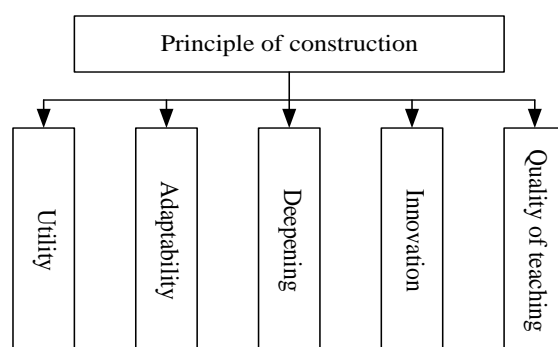The principles for constructing the e-commerce course system are shown in Figure 2.

Figure 2: The Principle of E-Commerce Curriculum System Construction

Utility principle: The establishment of an e-commerce course system should focus on practical aspects, closely integrate e-commerce application practices, and improve students' practical skills and application levels. Adaptability principle: The structure of the e-commerce course system should adapt to the development trend of the e-commerce industry, closely integrate with market demand, and cultivate e-commerce talents who meet market demand. Deepening principle: The structure of the e-commerce course system should focus on deepening and subdividing teaching content. Innovation principle: The establishment of an e-commerce curriculum system should be innovation oriented, enhance students' innovation awareness and ability, and improve their overall quality and employment ability through innovative practice activities and scientific research projects. Principle of teaching quality: Establishing an e-commerce course system should focus on teaching quality, strengthen teacher training and course management, and improve teaching quality and efficiency.

The necessity of establishing an e-commerce curriculum system lies in adapting to the trend of e-commerce, improving students' employability, and promoting educational reform. Its principles include practicality, adaptability, depth, innovation, and teaching quality.

3.2 Relevant Survey Questionnaires

This article conducted a data survey on vocational colleges and e-commerce, as shown in Table 1.

Table 1: Information Related to Vocational Colleges and E-Commerce

Item	Higher vocational school	commerce revenue (trillion)	E-commerce users (hundred million)	E-commerce market size (trillion)	Big data visualization coverage	Employment rate of e-commerce majors
Number	1438	31.6	6.3	10.63	83.5%	90%

The number of vocational colleges has exceeded 1438, and the e-commerce industry has achieved a revenue of 31.6 trillion yuan. The scale of e-commerce users has reached 630 million. The scale of the online retail market has reached 10.63 trillion yuan. The coverage of teaching big data visualization platform reached 83.5%. The employment rate of graduates majoring in e-commerce remained above 90%.

This article conducted a questionnaire survey on the construction of an employment oriented e-commerce curriculum system in vocational colleges. This activity was aimed at students majoring in e-commerce at a vocational high school in this city. The aspects covered in the questionnaire are consistent with the research direction of this article, including the principles of curriculum construction, necessity, problems with the curriculum system, advantages and disadvantages of the curriculum, and improvement strategies. In addition, some basic information of the students was also investigated. This questionnaire involves 136 respondents and adopts a combined online and offline survey method, with 120 valid questionnaires collected. The analysis is mainly based on the attitude of the respondents.

3.3 Attention Direction for System Construction

The construction of an employment oriented e-commerce curriculum system in vocational colleges should focus on the following aspects.

The curriculum must be closely aligned with market demand. Design a curriculum system that is suitable for market demand and provide practical applications for e-commerce talents based on the needs of the e-commerce industry. The course should cover the basic theoretical knowledge, application technology, and practical skills of e-commerce.

Practical education should be strengthened. The establishment of e-commerce course system should emphasize practical teaching, strengthen Case method and project practice, and improve students' practical skills and application level. Students need to enhance their practical and innovative abilities through practical and in-depth understanding of business models, marketing strategies, technology applications, and other aspects.

The teaching staff needs to be optimized. Establishing an e-commerce course system requires the introduction of excellent teachers with extensive practical and industry experience. There is also a need to strengthen teacher training and communication to improve the educational and professional quality of teachers.

It is necessary to strengthen the integration of education. Establishing an e-commerce curriculum system should strengthen cooperation between schools and enterprises. At the same time, it is necessary to incorporate industry applications and practical experience into the teaching content to enhance students' competitiveness in the field of employment.

The ability to innovate must be maintained. The development of e-commerce courses should focus on the development of innovative skills. Innovative practice activities and scientific research projects stimulate students' innovative awareness and ability, and improve their overall quality and employability.

4. Survey Results of Course Construction
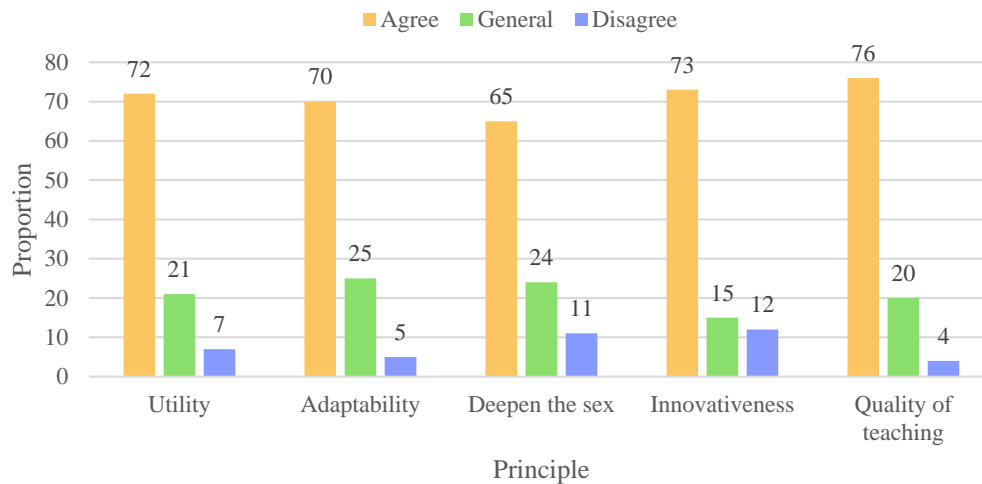
4.1 Principles of E-Commerce Course System

Figure 3: Principle Analysis of E-Commerce Curriculum System

As shown in Figure 3, when designing the e-commerce course system, attention should be paid to the innovation of the course and the quality of teaching. The improvement of the curriculum system is to provide better resources and cultivate more practical talents. Therefore, in the principle of utility, 72% of people supported it. In the principle of adaptability, 70% of people expressed support. 76% of people supported the principle of teaching quality.

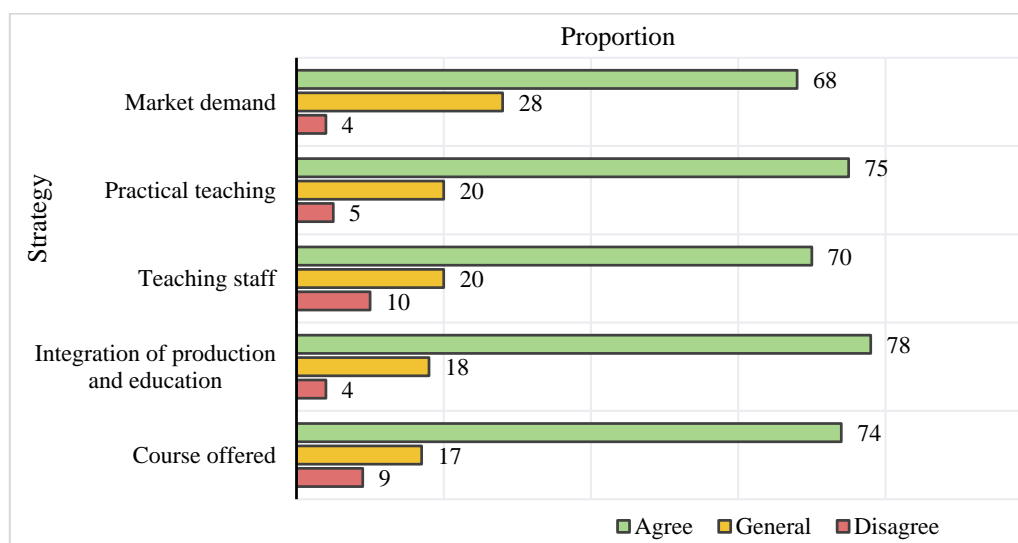### 4.2 Improvement Strategies for the E-Commerce Course System

Figure 4: Strategies for Improving the E-Commerce Curriculum System

As shown in Figure 4, when designing the e-commerce course system, attention should be paid to the practical teaching of the course and the integration of industry and education. In terms of market demand, 68% of people expressed support. In terms of practical teaching, 75% of people expressed support. In terms of the teaching staff, 70% of people expressed support. In terms of curriculum design, 74% of people expressed support.

5. Conclusions

The construction of the course system based on e-commerce has made certain breakthroughs in teaching content, teaching management, and practical operations, achieving the integration of traditional classroom learning and online teaching in vocational college students' professional ability cultivation and theoretical mastery. In short, the construction of an employment oriented e-commerce curriculum system in vocational colleges should focus on market demand, practical teaching, teaching staff, integration of industry and education, and innovation capabilities. Only by focusing on these aspects of construction can it provide students with better educational resources and services to enhance their employment competitiveness.

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