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Pathway for the Development of Digital Teaching Resources for the "Supply Chain Management" Course in Vocational Colleges

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Abstract:

This article focuses on the development of digital teaching resources for the "Supply Chain Management" course in vocational colleges. It deeply explores the opportunities brought by digitization to the teaching of this course. Through the construction of digital teaching resources, it not only helps to enrich teaching content but also facilitates the innovation of teaching models and enhances the personalization of student learning. However, there are also challenges in practical implementation. By strengthening the construction of digital teaching resources for the "Supply Chain Management" course through various effective pathways, this study aims to better motivate students' learning enthusiasm and practically improve their professional skills.

Keywords:

Vocational colleges
Supply Chain Management
Digital teaching resources

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1. Introduction

Digitization has demonstrated significant value in various fields. When conducting "Supply Chain Management" course activities, vocational colleges also need to keep pace with the times, strengthen the construction of digital teaching resources, and fully recognize the opportunities brought by digitization to the teaching of this course, as well as the difficulties faced in the practical construction of digital teaching resources. Continuously optimizing the construction of digital teaching resources can cultivate professionals who better meet the needs of the industry. This article explores the opportunities brought by digitization to the teaching of the "Supply Chain Management" course in vocational colleges, analyzes the difficulties faced in the construction of digital teaching resources, and proposes specific construction pathways.

2. Opportunities brought by digitization to the teaching of "Supply Chain Management" in vocational colleges

Digitization has ushered in new development

opportunities for the advancement of education. For the "Supply Chain Management" course in vocational colleges, the construction of digital teaching resources possesses significant value that cannot be ignored. It not only greatly promotes the reform of course teaching but also enhances teaching quality. Through the development of digital teaching resources, the educational content of "Supply Chain Management" can be enriched. Traditionally, when teaching "Supply Chain Management" in vocational colleges, teachers often mechanically explain the knowledge in textbooks, resulting in both the teaching content and methods being relatively dull. However, during the construction of digital teaching resources, a plethora of multimedia materials such as videos, audio, and animations are incorporated into the teaching, making the abstract concepts of supply chain management more vivid and intuitive. For instance, when explaining the operational flow of the supply chain, teachers can utilize animations to visually demonstrate the process of raw materials being transported from suppliers to manufacturers, processed by the manufacturers, and then sold to consumers by distributors. This allows students to effortlessly comprehend the entire operational process of the supply chain, thereby facilitating a deeper understanding and mastery of this knowledge.

Additionally, digitization technology provides convenient conditions for innovating the teaching mode of "Supply Chain Management". Teachers can explore intelligent and immersive new teaching modes through various functional modules on the teaching platform, such as voting, quick response, in-class exercises, themed discussions, and surveys. This enriches teaching activities and makes them more engaging, ultimately increasing students' interest in learning. Furthermore, the construction of digital teaching resources can enhance the personalized level of "Supply Chain Management" teaching, ensuring that the diverse learning needs of different students are well met. By analyzing students' learning situations through the learning platform, teachers can comprehensively understand all students' learning habits, progress, and areas of improvement. This enables them to tailor different teaching plans for different students, while the learning platform also provides personalized learning resources. For students with stronger learning abilities, the platform often offers expansive learning resources such as the latest industry research achievements, technologies, and development trends, aiming to further strengthen their professional capabilities. For students who struggle academically, the learning platform provides resources focused on basic knowledge explanation, helping them solidify their foundations, identify and address gaps, and keep up with the teacher's teaching progress. The implementation of personalized teaching can maximize the learning potential of every student, contributing to an overall improvement in student learning outcomes.

3. Difficulties faced in the construction of digital teaching resources for the "Supply Chain Management" course in vocational colleges

Although the construction of digital teaching resources has brought unprecedented opportunities to the teaching of "Supply Chain Management" in vocational colleges, it also faces many difficulties in specific implementations. On one hand, the quality of digital teaching resources needs to be improved [1]. Some digital teaching resources simply convert previous teaching content into digital form, which often lacks interest and interactivity, making it difficult to stimulate students' interest in learning. Additionally, some digital teaching resources have issues such as unclear video images and sound, and the presentation of content lacks focus, making it hard to attract students' attention. Furthermore, some digital teaching resources are divorced from actual supply chain management, and the presented content lacks practicality. On the other hand, the digital literacy of teachers for the "Supply Chain Management" course needs to be further improved. Some teachers find it difficult to flexibly use digital teaching tools and technologies in their teaching. When using learning platforms, they often only use some basic functions of the platform, which makes it difficult to fully utilize the application value of digital teaching tools. In addition, some teachers have relatively weak abilities to design digital teaching. When designing teaching activities for "Supply Chain Management," they often do not comprehensively analyze the characteristics and advantages of digital teaching resources, as well as the personalized learning needs of students, resulting in

unsatisfactory teaching effects.

4. Effective paths for the construction of digital teaching resources for the "Supply Chain Management" course in vocational colleges

4.1. Clarifying the goals of digital teaching resource construction

Based on the actual talent demands of enterprises and industry development trends, reasonable long-term, medium-term, and short-term construction goals should be set for the digital teaching resource construction of the "Supply Chain Management" course [2]. The short-term construction goal is the construction of basic digital teaching resources, such as converting knowledge content from textbooks into electronic teaching courseware and micro-courses on learning platforms. The medium-term construction goal is to complete the construction of virtual digital teaching resources based on industry characteristics, such as simulating various processes of the entire supply chain, including procurement, warehousing, and transportation. The long-term construction goal is to complete the construction of collaborative digital teaching resources for industry, education, and research. When planning the digital teaching resource construction for the "Supply Chain Management" course, vocational colleges should refer to professional talent training programs, refine the content, main responsible persons, and time nodes of digital teaching resource construction, ensure that the constructed digital teaching resources meet teaching needs, and prevent blind and random construction from causing resource waste.

4.2. Vigorously develop high-quality digital teaching resources

On one hand, it is necessary to strengthen the development of diverse digital teaching resources for the "Supply Chain Management" course. By introducing resource sharing through the learning platform, typical cases and situational game resources can be constructed. Additionally, by consulting reference textbooks, literature, watching excellent online courses, and national quality courses, we can draw lessons and absorb them. Keeping an eye on relevant news and information, and integrating them according to the needs of the course, the digital teaching of the service course can be completed in modules such as the theoretical foundation of supply chain management, supply chain system design, operation management of each link (purchasing, production, inventory, logistics) in the supply chain, and supply chain system evaluation [3].

On the other hand, resource optimization should be strengthened. A standardized digital teaching resource library should be established on the learning platform to classify and manage various resources. Teachers and students can quickly retrieve resources using keywords and other methods. Furthermore, higher vocational colleges need to regularly evaluate the digital teaching resource library for the "Supply Chain Management" course, update the resources in a timely manner, and eliminate outdated and poor-quality resources. When relevant laws, regulations, and policies are adjusted, it is necessary to promptly introduce them into the resource library and incorporate the latest industry cases to improve the practicality and timeliness of the content.

4.3. Strengthen the innovation of teaching models

Teachers of the "Supply Chain Management" course in higher vocational colleges need to focus on strengthening the innovation of teaching models while building digital teaching resources. Firstly, the application of hybrid teaching models should be enhanced. Hybrid teaching models combine online and offline teaching. Online teaching can use the learning platform to explain key and difficult knowledge of "Supply Chain Management" and conduct case analyses. It can also test students' learning situations online. In offline teaching, teachers can use project training, group discussions, and invite industry experts to conduct special lectures to convey course knowledge and skills [4]. For example, when teachers conduct teaching activities related to supply chain design, they can upload videos of industry experts analyzing supply chain strategies to the learning platform. Students can independently complete the basic knowledge learning of this lesson by watching the videos before class. In offline teaching, teachers can divide the entire class into different groups. Each group of students needs to design a supply chain strategic planning scheme based on the business operation data provided by the teacher and present the planning and design scheme in the classroom [5]. Secondly,

teachers can also innovate and apply project-based teaching, using actual supply chain projects to drive students' learning motivation. Teachers can subdivide the project content into multiple sub-tasks [6]. For example, when organizing students to participate in the "regional fresh agricultural product supply chain optimization" project, teachers can divide the overall project tasks into market research, supplier selection, logistics and distribution, etc., and use the learning platform to simulate and analyze project plans and data, thereby strengthening the cultivation of students' practical abilities and problem-solving abilities. Finally, the level of personalized teaching should be improved. With the help of the learning platform, comprehensive data collection can be conducted on the data generated during the students' learning process, such as online learning time, duration, test scores, and homework completion. Through data analysis, teachers can accurately grasp students' learning characteristics and deficiencies, and use this as a basis to provide personalized learning guidance for students, as well as targeted promotion of digital learning resources, achieving individualized teaching.

4.4. Improving teachers' digital literacy

Higher vocational colleges need to strengthen systematic training for teachers of the "Supply Chain Management" course, implementing layered and categorized training for teachers' digital teaching resource development abilities. Teachers can be divided into different levels based on their teaching experience and technical proficiency, with different training content designed for each level. For newly hired teachers of the "Supply Chain Management" course, training should focus on the proper use of digital teaching tools and basic information technology operational skills. For senior teachers, training should emphasize course design, innovative teaching modes, and the application of technologies such as virtual reality, big data analytics, and augmented reality in course instruction [7]. This practical approach effectively improves teachers' digital literacy, enabling them to better complete the construction of digital teaching resources. Additionally, higher vocational colleges need to establish incentive mechanisms for the development of digital teaching resources for the "Supply Chain Management" course, recognizing and rewarding teachers who excel in digital resource development and innovative teaching modes through special reward funds. The effectiveness of digital teaching resource construction should also be included in teacher performance evaluations to motivate teachers' autonomy and enthusiasm for building digital teaching resources [8]. Furthermore, colleges can improve teachers' digital literacy through collaboration with enterprises, organizing regular visits to relevant enterprises for teachers to learn and practice, keeping abreast of the latest industry developments, business processes, and technologies.

4.5. Strengthening the improvement of digital teaching resource construction guarantee mechanisms

Firstly, it is necessary to appropriately increase funding for the development of digital teaching resources for the "Supply Chain Management" course. Dedicated funds should be established for the development of digital teaching resources, the construction of learning platforms, and teacher training [9]. Additionally, colleges should actively raise funds through various channels, such as strengthening cooperation with relevant enterprises to obtain financial support, and providing adequate funding for the construction of digital teaching resources.

Secondly, colleges should obtain technical support through collaboration with professional educational technology companies, jointly building a stable digital teaching platform and providing technical support for subsequent upgrades and maintenance [10]. Regular invitations should be extended to company technicians to provide on-site technical guidance, timely assist teachers and students in solving technical problems encountered when using the platform, and maximize the application value of the learning platform.

Thirdly, a scientific evaluation system for digital teaching resources in "Supply Chain Management" should be established, including assessments of the application effectiveness of digital teaching resources, the level of digital teaching technology, and the quality of resource content. Feedback from teachers and students on the use of the learning platform should be regularly collected to improve and optimize the platform accordingly.

5. Conclusion

In conclusion, the construction of digital resources for the "Supply Chain Management" course in higher vocational

colleges plays a significant role in cultivating high-quality supply chain management talents. Therefore, colleges need to clarify the goals of digital teaching resource construction, vigorously develop high-quality digital teaching resources, strengthen the innovation of teaching modes, improve teachers' digital literacy, and enhance the improvement of digital teaching resource construction guarantee mechanisms. With the continuous development of various emerging technologies, the level of intelligence and personalization of digital teaching resource construction should be continuously improved.

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