

Thinking and Exploration on the Construction of New Form Teaching Materials in Vocational Education from the Digital Perspective

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Abstract: Under the background of digital era, the reform and development of vocational education have attracted more and more attention from all walks of life. Nowadays, with the rapid development of information technology, traditional vocational education materials have been difficult to meet the needs of diversified and personalized learning. Therefore, it is of great significance to explore the construction of teaching materials in the new form of vocational education. This paper will deeply explore the necessity and feasibility of constructing new form of vocational education textbooks in the digital vision, analyze the current challenges, and give relevant solutions.

Keywords: Digital vision; Vocational education; Use of teaching materials

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Introduction:

Nowadays, with the rapid development of digital technology, traditional paper textbooks can no longer meet the needs of modern vocational education, and new forms of textbooks such as digitalization and rich media have gradually become the mainstream textbooks. This new form of teaching materials make full use of digital technology, integrating text, images, audio and video, so that the transmission of knowledge becomes more intuitive, more vivid and more effective. Through digital teaching materials, students can learn anywhere, anytime, anywhere without time and space constraints, which greatly enhances the flexibility and autonomy of learning. The new form of teaching materials can also be intelligently adjusted and optimized according to students' learning progress and feedback to achieve the purpose of personalized teaching, so as to promote the improvement of teaching quality and effect. Therefore, the construction of new forms of vocational education textbooks from the digital perspective is an important orientation of China's vocational education reform and development, which is of great significance to train high-quality skilled personnel and promote the modernization of vocational education.

1. We should pay attention to the optimization and updating of teaching materials

With the rapid development of science and technology, industry technology continues to innovate, and people's requirements for professional fields continue to develop and change. In order to adapt to this change, the content of vocational education materials should also keep pace with The Times and pay close attention to the latest industry dynamics and technological trends. This determines that textbook editors need to maintain a keen sense of the market, grasp the pulse of industry development, and incorporate the latest knowledge, skills and industry standards into textbooks. The content update of teaching materials should not only stay at the level of newly added knowledge, but also pay attention to the optimization and refining of existing content ^[1]. When optimizing the content of the textbook, it is necessary to highlight the key points and difficulties, which is conducive to students' in-depth understanding and grasp of the knowledge. The explanation of key concepts and core skills can be deeply analyzed in the form of case

analysis and practical operation, so that students can have a deep understanding and skilled application. Teaching materials should pay attention to the combination of practical application, theoretical knowledge and vocational practice, so that students can experience the practicability and value of knowledge in the learning process. This can not only stimulate students' interest in learning, but also cultivate students' practical ability and problem solving ability, laying a solid foundation for entering the workplace in the future. Under the background of continuous progress of industry technology and changing occupational demands, it is of great significance to update and optimize the content of teaching materials in real time. This can not only ensure that the teaching materials are close to the needs of the industry, but also effectively promote the improvement of students' learning effect and professional quality, so as to lay a solid foundation for their future development.

2. Strengthen the application of multimedia in teaching materials

With the power of digital technology, teachers can skillfully integrate rich multimedia elements, such as text, images, audio and video, into vocational education textbooks, thus making the transfer of knowledge more intuitive and vivid. For example, when teaching automotive maintenance majors, traditional textbooks may only describe the structure and working principle of auto parts through text and simple illustrations, but the introduction of digital technology can greatly enrich the content of textbooks. For example, the textbook can implant three-dimensional images into it, allowing students to observe the detailed structure of auto parts in an all-round way in the process of rotation, enlargement and reduction, making simple text descriptions or static pictures more intuitive ^[2]. At the same time, animated videos can also be added to demonstrate the dynamic process of engine operation and transmission system coordination during the working process of auto parts, so that the complex working principle can become image and easy to understand. Audio explanation can also be integrated into the textbook, so that students can read the text or watch the video while listening to the expert detailed explanation, which can not only deepen their understanding, but also bring them more close to the real classroom learning experience. In order to further improve the interactivity, the textbook can also set up interactive tests, simulation practice links, etc., for students to simulate the actual operation in the virtual environment such as replacing auto parts, which can greatly improve students' interest in learning. Integrating multimedia elements into vocational education textbooks through digital technology can not only make the learning process more vivid and interesting, but also help students to deeply understand and master professional knowledge, so as to lay a solid foundation for their future career.

3. Interactive and intelligent teaching materials

Making teaching materials interactive and intelligent is an important direction of the development of contemporary educational technology. With the help of digital technology, teachers can build an interactive teaching material platform, which can support students' real-time interactive learning, so that they can ask questions at any time and get answers in time, significantly strengthening the learning effect. Taking e-commerce teaching materials as an example, teachers can build interactive teaching materials system on the Internet. In this system, students can interact with textbook content by clicking, dragging and inputting. For example, in the study of e-commerce process, students can complete a real e-commerce transaction through simulation - the actual operation process from selecting goods, placing orders, paying to receiving goods. If students have questions during operation, they can ask questions online, and the system will push the relevant answers in real time or import them to the expert question answering area. And the use of big data and artificial intelligence technology can enable teachers to deeply analyze students' learning. The system can record students' learning path, residence time and interaction times, and use intelligent algorithms to analyze students' learning preferences, difficulties and doubts. The system can push personalized learning suggestions and feedback to students based on the above analysis. For example, when the system detects that students repeat mistakes or stay too long on a certain knowledge point, it will automatically provide relevant tutoring materials, exercises or video explanations to help students overcome difficulties. Intelligent teaching materials can also dynamically adjust the learning content and difficulty according to students' learning progress and achievements. After students acquire basic knowledge, the system can automatically add more challenging learning tasks to stimulate their desire to explore and promote the development of their thinking ability ^[3]. With the help of digital technology, teaching materials are interactive and intelligent, which can bring more personalized and effective learning experience to students. This new teaching material model can not only answer the problems existing in students' learning in time, but also give accurate learning suggestions and feedback according to students' learning situation, which is conducive to students' mastering of knowledge and promoting the improvement of learning effect.

4. Strengthen the training of digital literacy for teachers and students

In order to make both students and teachers more proficient in using digital materials to carry out efficient learning and teaching, schools need to focus on strengthening digital literacy training. Digital literacy is not only to master basic information technology skills,

but also includes a series of complex skills such as information technology application ability, information retrieval and processing ability and network security awareness. It is important to enhance teachers' and students' ability to use information technology. Schools can organize regular IT skills training sessions to teach students and teachers how to use various digital textbooks and tools. From the curriculum, schools can demonstrate how to run digital textbook platforms, how to use online collaboration tools to work in teams, and how to adapt digital textbook Settings to individual learning requirements. Schools can also encourage teachers and students to actively explore advanced features in digital textbooks, such as creating interactive courseware and using big data to analyze learning outcomes. Enhance information retrieval and processing capabilities. Schools can also set up information retrieval and processing courses to help students and teachers more efficiently identify valuable information and evaluate its authenticity, reliability, and timeliness among large amounts of information. In these courses, schools can teach students how to use metadata, keywords, and search engine skills to quickly locate needed resources, while developing their ability to critically evaluate sources and content of information. Strengthening the awareness of network security is also a must in the digital age. Schools can communicate the importance of cybersecurity to teachers and students and teach them how to identify and protect against phishing, malware and other cybersecurity threats by holding cybersecurity lectures and simulation exercises. Schools can also provide practical guidance on how to create strong passwords, protect personal privacy, corporate data, and more. Through these specific training measures, the digital literacy of students and teachers can be comprehensively improved, so that students are more confident and more efficient in using digital teaching materials for learning and teaching^[4]. This is not only conducive to the improvement of education quality, but also provides a solid guarantee for the safety and growth of students and teachers in the digital era.

Peroration:

In the digital perspective, the construction of new vocational education materials is facing unprecedented opportunities and challenges. Through deep thinking and exploration, this paper puts forward many novel measures, so as to build a comprehensive, fresh and interactive digital teaching resource base to meet the diversified learning needs of students and promote their vocational skills. It is believed that with the continuous progress of science and technology and the continuous innovation of educational concepts, the construction of vocational education textbooks will continue to deepen under the new situation, so as to lay a more solid foundation for promoting the all-round development of students.

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