

Research on Curriculum Reform and Teaching Mode of Vocational Education Based on Learning Theory



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Abstracts: At present, China is in a critical stage of rapid economic and social transformation and upgrading, and global scientific and technological innovation and industrial change present an unprecedented profound impact. In this context, the importance of vocational education is further emphasized. The traditional model of vocational education is faced with the rapid evolution of technology, knowledge, and market, and new occupational positions and skill requirements have emerged in many fields, posing brand new challenges to the education system and teaching mode. Guided by the learning theory, it has become an important issue in the field of vocational education nowadays to cultivate vocational talents with more comprehensive quality and innovative ability through curriculum reform and teaching mode innovation. The article explores the curriculum reform and teaching mode innovation of vocational education based on learning theory, to provide a reference for relevant staff.

Keywords: learning theory; vocational education; curriculum reform; teaching mode.

Introduction

Vocational education is an important part of China's education system, which plays an irreplaceable role in cultivating high-quality applied talents and promoting economic development and social progress. With the rapid development of science and technology, economy and society, the needs and challenges of the vocational field are becoming more and more complicated and changeable, however, the traditional vocational education mode is often limited to the inculcation of knowledge and skill training, which is difficult to adapt to the requirements of modern workplace on the comprehensive quality and innovation ability, and the lagging behind of the education mode leads to the graduates appearing insufficiently adapted and flexible in the face of complex and diverse

vocational environments. Therefore, how to reform the vocational education curriculum and teaching mode innovation based on learning theory, so that education is more in line with the reality of the demand, in the current vocational education field of the urgent need to solve the problem.

1. The necessity of vocational education curriculum reform and teaching mode research based on learning theory

The necessity of vocational education curriculum reform and teaching mode research based on learning theory is becoming more and more prominent in the modern education environment. The traditional vocational education model tends to instill knowledge and skills training as the main goal, but with the rapid changes in society and technology, students need more adaptive and innovative capabilities. The knowledge and skill needs of current vocational

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fields are constantly changing, so vocational education must be more flexible in adapting to these changes. Curriculum reform based on learning theories can enable educators to better understand how students learn so that they can adjust their teaching strategies according to their learning styles and needs; Modern vocational environments require people to have the ability to learn continuously to adapt to new technologies and challenges, and a learning theory-based teaching model can develop students' independent learning ability and critical thinking so that they can continuously update and expand their knowledge and skills at work. Learning theories emphasize the integration of practical experience with theoretical knowledge for better understanding and application of what has been learned. By incorporating learning theories in vocational education, educators can better guide students to apply what they have learned to practical problem-solving. At the same time, different learning theories provide different ways of motivation and engagement, which can stimulate students' interest and increase their motivation and engagement, which helps to create a positive learning environment and enhance learning outcomes. Individual differences are emphasized in learning theories, and a teaching model based on learning theories can better meet the learning needs and styles of different students, thus providing a more personalized learning experience (Zhang, 2023).

2. Vocational education curriculum reform and teaching mode innovation based on learning theory

2.1 Introducing problem-driven student learning, stimulating students' subjective initiative to learn

In traditional vocational education, the teacher is the dominant player in education, and the students follow the teacher's thinking to carry out learning, and the students have few opportunities to think on their own, in the context

of the application of learning theory, the introduction of problem-driven student learning can be introduced into vocational education, which helps to stimulate the students' subjective initiative to learn. The core of problem-driven learning lies in taking real-life problems or challenges as the starting point for learning and placing students in a real and concrete situation, which can be a real case, a vocational scenario, or a social problem. By introducing problems into teaching, students no longer just passively accept knowledge, but actively seek solutions because of the existence of problems, which naturally stimulates their curiosity, desire for knowledge, and motivation to learn. Problem-driven learning not only enables students to gain a deeper understanding of knowledge but also allows them to apply what they have learned in the process of solving problems and develop practical application skills (Dong, 2022). In addition, problems are often interdisciplinary, which prompts students to use not only their professional knowledge but also knowledge from different fields when solving problems, which develops students' comprehensive analysis and problem-solving ability. Students' autonomy is also emphasized in problem-driven learning, where students need to collect information, analyze data, formulate solutions on their own, and discuss and present them in teamwork, this autonomy exercises students' self-management, organizational skills, and innovative thinking. At the same time, problem-driven learning also enables students to better understand the connection between knowledge and practical application and improves the depth and durability of learning. The introduction of problem-driven learning is one of the key strategies in the reform of vocational education curriculum and innovation of teaching mode based on learning theory, which not only cultivates students' self-learning ability and practical problem-solving ability, but also promotes students' interdisciplinary thinking and innovative thinking, and injects more vitality and

potential into the cultivation of vocational talents.

2.2 Integrate interdisciplinary learning content and promote students' comprehensive development

In the curriculum reform and teaching mode innovation of vocational education based on learning theory, the integration of interdisciplinary learning content is a crucial strategy aimed at promoting the overall development of students. Traditional vocational education often tends to teach specialized knowledge and skills, however, the modern vocational environment has put forward higher requirements for practitioners, requiring them to have comprehensive cross-disciplinary abilities and a broad vision of knowledge. Incorporating interdisciplinary learning content means integrating knowledge, concepts, and methods from different subject areas into vocational education programs. By combining elements from different disciplines, students can gain a more comprehensive understanding of what they have learned and become better equipped to deal with the challenges of increasingly complex and diverse careers (Yang, 2023). For example, when designing an innovative technological product, students need to understand not only engineering techniques but also consider interdisciplinary factors such as user experience, market demand, and sustainability. Interdisciplinary learning helps develop students' comprehensive analytical skills and systems thinking, and they can view problems from multiple perspectives, understand the interrelationships between different fields, and provide more innovative and integrated solutions to complex problems. In addition, interdisciplinary learning develops students' cross-cultural communication skills, enabling them to collaborate with professionals in different fields to solve challenges in multicultural contexts. By incorporating interdisciplinary learning content, vocational education can better meet the needs of modern professional environments and produce graduates with a wide range of knowledge and

diverse skills. This not only makes students more competitive but also makes them more able to adapt to the ever-changing work environment of the future and create greater value for society.

2.3 Promote cooperative learning and enhance students' sense of teamwork and collaborative ability

In traditional vocational education, each student is independent, constantly working for their learning and achievement, however, in the reality of the workplace, cooperation, and collaboration ability become a key factors for success. Therefore, it is crucial to develop students' ability to collaborate effectively in a team environment (Ke, 2015). Cooperative learning emphasizes students working together in teams to accomplish tasks or projects. By introducing group projects, discussions, or joint problem-solving activities into the curriculum, students can not only share each other's knowledge and experience but also learn to listen to and respect the opinions of others, which helps to cultivate students' sense of cooperation and teamwork skills, enabling them to work better with others later in their careers. Cooperative learning can also develop students' communication and communication skills. In teamwork, students need to express their ideas effectively, understand the views of others, and reach agreement on issues, and this practice of communication and communication helps to improve students' oral and written expression skills, enabling them to better communicate with colleagues, clients, and partners. In addition, cooperative learning can also develop students' problem-solving and decision-making skills. Teamwork often faces various challenges and problems, and students need to brainstorm and work together to develop solutions. Through continuous discussion, reflection, and practice, students can develop more mature problem-solving thinking and decision-making skills. It can be seen that promoting cooperative learning plays an important role in vocational education curriculum reform and teaching mode

innovation based on learning theory, and by cultivating students' sense of teamwork and collaborative ability, they can better adapt to the requirements of the modern vocational environment and lay a solid foundation for future career development (Wu et al, 2012).

2.4 Guiding students to carry out independent learning, so that students become the master of the classroom

With the deepening of curriculum reform, the subjective position of students in learning is emphasized in the modern classroom, and students need to become the center and master of the classroom, which helps to stimulate their motivation to learn, desire to explore, and creativity so that they can give full play to their subjective initiative in learning. Self-directed learning emphasizes students' self-regulation and self-management abilities in the learning process. By setting personal learning goals, formulating learning plans, selecting learning resources, and evaluating learning outcomes, students can take better control of their learning process, which fosters their self-motivation and learning ability and enables them to cope with future learning challenges more effectively. Guiding students to engage in self-directed learning also helps to develop students' exploratory and creative abilities. In the process of self-directed learning, students are often required to solve problems, explore new knowledge, and apply concepts, and this kind of self-directed exploration not only helps to cultivate students' critical and innovative thinking but also improves their problem-solving abilities. Teachers in vocational education teaching must give students more autonomy in learning, so that students can master their learning process, which can develop their learning ability, creativity, and problem-solving ability, and lay a solid foundation for their future career development and self-growth.

2.5 Combination of theory and practice, laying a solid foundation for students to enter society in the future

Vocational education is an important part of China's education system, providing a large number of application-oriented talents for China, Vocational education should emphasize the practical ability of students, work ability, etc., but traditional vocational education often emphasizes the teaching of knowledge and theoretical learning, and neglects the combination of theory and practice of the teaching mode, which is not conducive to the future development of the students as well as the development of their future careers (Li, 2020). Combining theory and practice helps students better understand knowledge and apply it to practical problem-solving. By introducing activities such as real cases, simulated situations, and field trips into vocational education courses, students can connect the theoretical knowledge they have learned with practical situations, to understand the connotation of knowledge and the way its practical application in a more in-depth way, which lays a solid foundation for entering the workplace later on and enables students to This will lay a solid foundation for entering the workplace in the future, and enable students to quickly apply what they have learned in practical work. At the same time, the combination of theory and practice can also cultivate students' problem-solving and innovation abilities. In the process of solving practical problems, students need to use the theoretical knowledge they have learned, combine it with the actual situation, and put forward innovative solutions, this kind of practical operation exercises students' analytical thinking, creativity, and practical application ability, which will accumulate valuable experience for them in their future careers. Allowing students to personally participate in practical problem-solving in the learning process can enable them to better master knowledge and skills and lay a solid foundation for future success in the professional field, and this practical experience not only enriches students' learning experience but also adds confidence and strength to their career development (Jin et al , 2022).

2.6 Introducing modern technology to promote the reform and innovation of teaching mode

With the rapid development of science and technology, modern technology has brought unprecedented opportunities to the field of education, which can greatly promote the reform and innovation of vocational education teaching mode. The introduction of modern technology can not only enrich the teaching content, but also enhance the teaching effect, through the use of multimedia, virtual laboratory, online teaching platforms, and other technological tools in teaching, teachers can make abstract concepts more vivid images so that students are more easy to understand and assimilate, which helps to stimulate the students' interest in learning and improve their motivation to learn. At the same time, modern technology can also promote personalized learning and independent learning. Through online learning platforms and personalized learning systems, students can independently choose their own learning content and learning paths according to their learning rhythms and interests, which can help to meet the learning needs of different students and cultivate their independent learning ability. In addition to this, the introduction of modern technology can also promote interaction and cooperation between teachers and students. Technical means such as virtual classrooms, online discussions, and collaboration tools enable teachers and students to communicate and cooperate anytime and anywhere, expanding the boundaries of learning. This interaction can make teaching more flexible and adaptable to the learning styles and needs of different students. The introduction of modern technology is an indispensable part of the reform of vocational education curriculum based on learning theory and the innovation of teaching mode, with the help of technology, teachers can better meet the learning needs of students, improve the teaching effect, cultivate the comprehensive quality and skills of students, and fully prepare them for future professional success (Hou et al ,

2020).

Summarization

To summarize, by introducing problem-driven learning in vocational education, integrating interdisciplinary content, promoting cooperative learning, guiding independent learning, combining practice and theory, and innovating teaching materials and technology applications, students can be enabled to learn and apply their knowledge to practical problems and cultivate interdisciplinary thinking, innovative thinking, and practical problem-solving skills. At the same time, continuous innovation and improvement play a key role in the whole educational process, ensuring that the teaching model is always up-to-date. Through these efforts, we can provide a more adaptable and comprehensive education system for the cultivation of vocational talents and lay a solid foundation for their future professional success.

Conflict of Interest

The authors declare that they have no conflicts of interest to this work.

Acknowledgement

This research was funded by:

1. Research and Practice of Higher Vocational Education Teaching Reform Research Project of Shaanxi Provincial Education Department Based on the "Three-dimensional Linkage" Teaching Mode of "People, Things and Fruits" (21GY012)
2. Research Project of Education and Teaching Reform of Shaanxi Railway Engineering Vocational and Technical College An Exploration on the Construction of New Form Teaching Material "Measurement and Valuation of Underground Engineering" under the Three Education Reform (2020JG-30)

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How to Cite: Wang, X., & Jia, L. (2023). Research on Curriculum Reform and Teaching Mode of Vocational Education Based on Learning Theory. *Contemporary Education and Teaching Research*, 04(09), 477-482.
<https://doi.org/10.61360/BoniCETR232014920912>.