

# Research on effective teaching in vocational education from the perspective of school-enterprise cooperation

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**Abstract:** This article explores the importance and development trends of vocational education, as well as vocational education models from the perspective of school-enterprise cooperation. Vocational education plays a crucial role in meeting market demands and enhancing the quality of the workforce, with future trends including technological integration and personalized learning. School-enterprise cooperation models encompass internships, dual-system education, and project-driven education, which help students gain practical work experience and problem-solving abilities. The article also discusses effective teaching methods applied in school-enterprise cooperation to improve the quality and practicality of vocational education. In summary, vocational education and school-enterprise cooperation provide essential avenues for nurturing professionals with practical skills and competencies, and they will continue to play a key role in the future.

**Key words:** school-enterprise cooperation; vocational education; teaching research

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## 1 Introduction

Vocational education can cultivate a group of highly skilled professional and technical talents. As China enters a new development stage, industrial upgrading and economic restructuring are accelerating, leading to an increasing demand for technical and skilled talents across various industries. The importance and role of vocational education are becoming more prominent. The newly revised Vocational Education Law has begun to be implemented, explicitly stating in legal form that "vocational education is an education type of equal importance to general education." In recent years, a series of vocational education reform policy documents have been introduced to vigorously promote vocational education development. The integration of industry and education, as well as school-enterprise cooperation, is an important path for the development of vocational education. This article will explore vocational education model from the perspective of school-enterprise cooperation and the impact of school-enterprise cooperation on effective teaching in vocational education. Through this comprehensive analysis, we aim to better understand how to explore models of vocational education systems based on local economic and social development needs, promoting innovation and progress in the vocational education system.

## 2 The importance and trends of vocational education

### 2.1 Meeting market demands and enhancing workforce quality

The importance of vocational education is evident, as it not only helps meet the growing market demands but also enhances the quality of the workforce. In today's job market, businesses require employees with specific skills and

knowledge to adapt to rapidly changing industry trends. Vocational education provides practical vocational training and skill development, enabling students to enter the workforce immediately after graduation, thus supplying businesses with the specialized talent they need. The philosophy of vocational education encompasses both knowledge and skills, as well as essential elements like teamwork and professional ethics, making students more competitive and adaptable. Therefore, vocational education plays an indispensable role in building a more competitive workforce and driving economic growth [1].

## 2.2 Technological integration and personalized learning

Technological integration and personalized learning are two significant trends in the field of vocational education. With the rapid development of technology, the education sector is actively integrating digital tools and online resources to offer students a more diverse and engaging learning experience. This integration not only provides more appealing educational content but also caters to the varied learning needs of students, making education more personalized. Through intelligent learning management systems and customized teaching plans, students can tailor their learning paths based on their interests, learning pace, and skill levels, thus enhancing their learning efficiency and satisfaction [2]. Technological integration and personalized learning not only improve the quality of education but also make it more attractive and accessible, contributing to better cultivate professionals who can adapt to the constantly changing professional needs.

# **3 Vocational education models from the perspective of school-enterprise cooperation**

## 3.1 Internship and practical education model

The internship and practical education model is a vital component of vocational education from the perspective of school-enterprise cooperation. This model emphasizes the integration of learning with real work experience, providing students with valuable opportunities to apply the knowledge and skills acquired in the classroom in actual work environments. Through internships and practical projects, students can gain firsthand experience of the challenges and opportunities in their chosen field, accumulate valuable work experience, and establish good connections with enterprises. This educational model helps students better understand the actual operations within their vocational field, improving their professional competence and competitiveness. Simultaneously, enterprises benefit from this model by absorbing students with practical work experience, reducing training costs, and creating a potential pool of future employees. Therefore, the internship and practical education model plays a crucial role in vocational education, fostering mutually beneficial relationships between students and enterprises [3].

## 3.2 Dual-system education model

The dual-system education model is an innovative educational approach from the perspective of school-enterprise cooperation. It emphasizes close collaboration and integration between educational institutions and enterprises, combining theoretical knowledge with practical work experience. In this model, schools and enterprises jointly develop talent cultivation plans, curriculum standards, and teaching materials to ensure that educational content closely aligns with actual vocational demands. Students not only receive education in schools but also gain practical experience in real work environments within enterprises. This dual-system education model helps students acquire practical vocational skills, enhancing their vocational competitiveness. Simultaneously, enterprises can participate in the educational process to ensure that graduates possess the required professional qualities [4]. Therefore, the dual-system education model provides students with a more practical and comprehensive educational experience, aiding their better adaptation to the demands of the job market.

## 3.3 Project-driven education model

The project-driven education model is an educational approach within the realm of school-enterprise cooperation that

emphasizes students learning and applying knowledge through participation in real projects. This model goes beyond theoretical education in the classroom and requires students to work together to solve problems and challenges. Students need to collaborate in planning and executing projects, gaining real work experience and skills in the process. The project-driven education model helps cultivate students' creative thinking, problem-solving abilities, and teamwork skills. Furthermore, this practice-oriented educational approach enables students to better understand the practical applications of course content and equips them to handle complex vocational challenges more effectively. Consequently, the project-driven education model plays a significant role in school-enterprise cooperation, providing students with a more meaningful learning experience and contributing to their success in the vocational field [5].

#### **4 The impact of school-enterprise cooperation on effective teaching in vocational education**

##### 4.1 Real-world work experience

Real-world work experience holds critical significance in vocational education from the perspective of school-enterprise cooperation. By providing students with opportunities in authentic work environments, this experience not only helps them integrate classroom learning with practical work but also equips them with valuable vocational skills. Through real work, students can apply the knowledge and skills they've acquired in school, gain insights into industry trends, and face real-world challenges. This experience cultivates students' problem-solving abilities, decision-making skills, and communication capabilities, enabling them to better adapt to the demands of the job market. Additionally, real-world work experience enhances students' competitiveness in the job search. Employers often prefer candidates who have practical experience in the relevant field, as they are more likely to make an immediate contribution to the company. Therefore, real-world work experience enriches students' resumes and broadens their career opportunities. In summary, real-world work experience is an integral part of school-enterprise cooperation, providing students with deeper learning experiences and laying a solid foundation for their career development.

##### 4.2 Addressing real-world problems

Addressing real-world problems is an educational approach within the context of school-enterprise cooperation, emphasizing that students learn and apply knowledge by solving real-world problems. This approach not only focuses on theoretical classroom education but also integrates academic knowledge with practical challenges, fostering students' critical thinking and problem-solving abilities. In the problem-solving education model, students are typically confronted with real problems from businesses or society [6]. They need to analyze issues, gather data, propose solutions, and implement these solutions collaboratively in teams. This process not only requires students to apply theoretical knowledge to real-life situations but also nurtures their innovative thinking and collaboration skills. Students, while addressing problems, not only acquire knowledge from the classroom but also develop their leadership and communication skills. Addressing real-world problems not only contributes to students' academic development but also provides crucial support for their career development. By solving real-world problems, students establish connections with businesses and industries, and accumulate valuable professional experience, making them more competitive and better prepared for the challenges of the job market. Furthermore, addressing real-world problems also fosters collaboration between schools and enterprises, with businesses presenting challenges and schools providing training and guidance, collectively driving innovation and development in education.

##### 4.3 Sharing educational resources

Sharing educational resources in school-enterprise cooperation emphasizes the mutual sharing of educational resources between educational institutions and enterprises to enhance the quality and practicality of education. This sharing encompasses various aspects, including knowledge, facilities, technology, and professional talent. Firstly, schools and

enterprises can share knowledge resources. Schools offer rich educational knowledge and academic expertise, while enterprises possess practical industry knowledge and experience. Through collaboration, schools can gain access to the latest industry trends and requirements from enterprises, ensuring that their curriculum content aligns closely with the market. Conversely, enterprises can benefit from the research and academic knowledge of schools, aiding them in solving complex problems and innovating. Secondly, sharing educational resources also involves facilities and technology resources. Schools typically have modern laboratories, libraries, and teaching facilities, which can support enterprises. Enterprises may provide advanced technological equipment and real workspaces for student practice and internship. Through resource sharing, schools and enterprises can mutually benefit, enhancing the effectiveness of education and training. Additionally, educational resource sharing includes collaboration with professional talent. Enterprises can invite teachers or experts from schools to provide training and guidance to employees, ensuring that they possess the necessary skills. Schools can also invite professionals from enterprises to lecture or participate in research projects, enriching the diversity and practicality of education. Most importantly, sharing educational resources helps enhance the practicality of education. Students gain a better understanding of the real-world applications of course content by being exposed to actual industries and enterprises.

## **5 Application of effective teaching methods in school-enterprise cooperation**

### **5.1 Project-based education**

Project-based education is an educational model centered around students' participation in real projects, emphasizing the close integration of learning with practical application and providing students with rich and in-depth learning experiences. This educational approach focuses on developing students' practical problem-solving abilities, teamwork skills, and innovation capabilities, enabling them to better adapt to complex and ever-changing professional environments. In project-based education, students typically face challenges and projects from real professional fields. They need to analyze problems, formulate solutions, and collaborate to execute projects. This process not only reinforces students' theoretical knowledge but also hones their practical skills. Through real-world projects, students gain insights into the realities of their professional field, better understanding how concepts and principles from the classroom apply to real work. One of the significant advantages of the project-based education model is its ability to spark students' intrinsic interest in learning. By participating in attractive and challenging projects, students are more likely to maintain learning motivation as they see the practical value and application of their efforts. Additionally, project-based education helps students develop problem-solving abilities and innovative thinking. Students need to contemplate various solutions and select the most suitable approach to address problems, fostering their judgment and decision-making skills. Teamwork is also a core element of project-based education, where students collaborate within teams to accomplish tasks, enhancing their collaboration skills and communication abilities. In the real professional world, teamwork is crucial, making project-based education a valuable source of teamwork experience for students. In summary, this educational approach not only elevates students' academic proficiency but also provides them with enhanced opportunities for career development.

### **5.2 Practical education**

Practical education plays a vital role in school-enterprise cooperation, facilitating the integration of students into the actual professional field and aiding them in better meeting professional challenges. This educational method emphasizes the cultivation of students' practical skills, problem-solving abilities, and professional ethics, providing them with a solid foundation for their career development. In practical education, students are typically involved in real work projects, gaining hands-on experience and applying the knowledge and skills they have acquired in school. This practical work experience not only helps students better understand theoretical concepts taught in the classroom but also provides them

with an opportunity to align with the realities of the professional field. Students can develop essential skills like communication, leadership, and teamwork through practical work experience, which are vital for their careers. Another advantage of practical education is that it assists students in adapting to the demands of the job market. By participating in actual projects and gaining work experience, students can accumulate valuable professional experience, enhancing their competitiveness in job applications. Employers are often more willing to hire candidates with practical work experience, as they are more likely to adapt quickly and contribute effectively to the job. Practical education also contributes to students' self-development and career planning. Through practical work experience, students gain a clearer understanding of their interests and career goals, helping them make wiser career decisions. Furthermore, practical education helps students build professional networks, connect with industry professionals, and provides support for their future career development. Through hands-on practical experience, students not only learn knowledge and skills but also cultivate problem-solving abilities and professional ethics.

### 5.3 Simulation exercises

Simulation exercises are an effective educational method that helps students learn and improve skills by simulating real-life situations and tasks. This educational model emphasizes practical exercises conducted in safe and controlled environments to prepare students better for real-world challenges. Simulation exercises can be applied in various fields, including medicine, aviation, military, business, and education, providing students with valuable practical experience. In simulation exercises, students are typically presented with specific scenarios or tasks, which can be either replicated from real-world situations or created in virtual environments. Students need to apply the knowledge and skills they've learned in the classroom to simulate the problem-solving process. For example, in the field of medicine, medical students can practice diagnostic and treatment techniques by simulating medical cases. In the business field, students can simulate managing a company or dealing with market challenges. This type of practice enables students to accumulate experience in a risk-free environment, enhancing their confidence and ability to deal with challenges. Simulation exercises also emphasize the importance of feedback and assessment. Students typically receive feedback after each exercise, understanding their performance and areas for improvement. This timely feedback helps students better grasp their weaknesses and provides direction for further learning. Assessment is also a part of simulation exercises and can be used to evaluate students' skill levels and accuracy. One notable advantage of simulation exercises is that they allow students to try new methods and strategies without real-world risks. They can test different decisions, observe outcomes, and learn from mistakes, fostering their innovation and problem-solving abilities. Moreover, simulation exercises help students adapt to pressure and emergency situations, enhancing their ability to handle complex scenarios.

### 5.4 Team projects

Team projects are a highly valuable educational method that fosters students' teamwork, leadership skills, and problem-solving abilities. This educational model emphasizes students working together in groups or teams to complete tasks and projects, simulating real professional environments. Team projects can be applied in various fields, including education, business, engineering, and science, providing students with valuable collaborative experience and practical work exposure. In team projects, students are typically assigned to a small group or team and collaborate to complete a common task or project. This project may cover a wide range of areas, from research and reports to product design and market promotion. Students need to cooperate to plan the project, assign tasks, create plans, and work closely within the team to ensure successful project completion. This collaborative process not only helps students develop their teamwork and communication skills but also hones their leadership and teamwork spirit. An essential aspect of team projects is that students need to collectively solve problems within the project. They may face various challenges and difficulties,

requiring them to collaborate to find solutions. This process cultivates students' problem-solving abilities and innovative thinking, enabling them to better adapt to real-world challenges in their professional fields. Another advantage is that team projects help students better understand and apply the knowledge taught in the classroom. By combining theoretical knowledge with real projects, students can see the practical application of concepts and principles, enhancing their understanding of how these concepts apply to real work. This practical learning approach helps students remain motivated to learn by participating in engaging and challenging projects that demonstrate the real value and application of their efforts. Additionally, team projects help students develop problem-solving abilities and innovative thinking. They must contemplate various solutions and select the most suitable approach to address problems, fostering their judgment and decision-making skills. Teamwork is also a core element of team projects, where students collaborate within teams to accomplish tasks, enhancing their collaboration skills and communication abilities. In the real professional world, teamwork is crucial, making team projects a valuable source of teamwork experience for students. In summary, this educational approach not only elevates students' academic proficiency but also provides them with enhanced opportunities for career development.

### 5.5 Feedback and assessment

Feedback and assessment also contribute to educators' understanding of students' needs and the quality of education, ultimately improving education's quality. Feedback refers to providing information about students' performance, while assessment involves quantitatively or qualitatively measuring and judging students' learning outcomes. The following discusses the importance of feedback and assessment and their applications in the field of education. Firstly, timely feedback is crucial for students' learning and growth. Providing timely feedback helps students understand their weaknesses and the direction for improvement, allowing them to adjust their learning strategies and improve their academic proficiency. Feedback also boosts students' confidence, encouraging them to actively engage in learning because they know their efforts will be recognized, and they will have opportunities for improvement. Secondly, assessment is one of the key indicators of education quality. Through regular assessments, educational institutions can understand students' academic progress and the effectiveness of education. This helps educators better comprehend which teaching methods and strategies are effective and which need improvement. Assessment can also be used to compare the academic performance of different students, classes, or schools, promoting ongoing improvements in education. Feedback and assessment also promote students' self-directed learning. By receiving feedback, students can self-evaluate their academic performance, set learning goals, and take necessary actions to achieve these goals. This helps cultivate students' learning motivation and self-management skills, enabling them to better cope with academic challenges.

## 6 Conclusion

In this discussion, we have explored the importance of vocational education, its developmental trends, and vocational education models from the perspective of school-enterprise cooperation. We have also analyzed the impact of school-enterprise cooperation on effective teaching in vocational education and the application of effective teaching methods within this context. Vocational education, as a critical area for nurturing individuals to meet the demands of the job market, plays a crucial role in the sustainable development of society and the economy. In the future, it is essential to continue monitoring the trends in vocational education and effective teaching methods, striving to enhance the quality of education, meet societal needs, and pave the way for students' career success.

### Conflicts of interest

The author declares no conflicts of interest regarding the publication of this paper.

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