

Strategies for Improving the Educational Capacity of Professional Skills Teachers in Vocational Education

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Abstract: The educational capacity of vocational education teachers is a key factor in enhancing teaching quality and students' professional competence. Existing research and policy documents indicate that the training of dual-skilled teachers, the optimization of school-enterprise cooperation models, and the establishment of lifelong learning mechanisms are the main pathways for enhancing teachers' educational capacity. However, there is still controversy regarding the definition of capability components, the depth of school-enterprise cooperation, and the effectiveness of training models. To address these issues, this study primarily employs literature research and case analysis to systematically review recent theoretical and practical achievements in improving vocational education teachers' educational capacity. Through analysis of typical school-enterprise cooperation cases, it explores effective strategies for improving teachers' educational capacity.

The study finds that the cultivation of dual-skilled teachers is a core approach to improving teachers' educational capacity. The key to success lies in deep school-enterprise cooperation and the integration of practical skills with teaching abilities. The lifelong learning mechanism needs to rely on information platforms and diversified training formats to enhance the flexibility and efficiency of teachers' continuous learning. Additionally, the enthusiasm of enterprises to participate and unified cooperation standards are key factors influencing the success of cooperation. This study further proposes strategies to establish a long-term mechanism for cultivating dual-skilled teachers, improve the teacher educational capacity evaluation system, and innovate training and lifelong learning support systems, providing theoretical support and practical references for the enhancement of vocational education teachers' capabilities. Future research is recommended to focus on the

priority order of capability components, regional differences, and the application of digital technologies.

Keywords: Vocational Education Teachers' Capabilities, Dual-Skilled Teacher Cultivation, Lifelong Learning Mechanism, School-Enterprise Cooperation Models

Introduction

In the context of global economic integration and technological transformation, vocational education has become a significant driving force for socio-economic development. Especially in the process of industrial transformation and upgrading that focuses on skills, the professional competence of vocational education teachers directly influences the quality of talent development. However, with rapid technological iteration and changes in industrial demands, vocational education teachers face significant challenges in teaching methods, technology application, and professional capabilities. In particular, the improvement of the educational capacity of professional skills teachers has become a key issue in the development of vocational education.

Existing research indicates that the cultivation of dual-skilled teachers, the innovation of school-enterprise cooperation models, and the establishment of lifelong learning mechanisms are the main pathways for enhancing the educational capacity of vocational education teachers. Some studies focus on practical methods for cultivating dual-skilled teachers, emphasizing the balanced development of teaching and practical skills. Other studies highlight optimizing teacher training formats through information technology. However, there are also shortcomings in the literature: the components of educational capacity have not been clearly defined, the school-enterprise cooperation models lack unified standards, and the uneven distribution of educational resources across regions remains prominent. These issues hinder the practical application and promotion of strategies for improving vocational education teachers' educational capacity.

This study focuses on the teachers of professional skills courses in vocational education and aims to explore effective strategies for enhancing their educational capacity. First, it aims to clarify the components of educational capacity and their priority order. Secondly, it designs school-enterprise cooperation optimization plans based on regional and industrial demands, and proposes a lifelong learning model combined with digital technologies. The study adopts a combination of literature review and empirical analysis to systematically sort out theoretical and practical achievements in improving vocational education teachers' educational capacity, providing references for policy formulation and practical implementation.

1. Literature Review

The improvement of the educational capacity of professional skills course teachers in vocational education is a key issue in the current reform and development of vocational education. Against the backdrop of global industrial upgrading and rapid technological changes, the professional quality and comprehensive abilities of vocational education teachers directly affect teaching quality and students' career development. However, there remain many challenges in the pathways, standards, and mechanisms for enhancing teachers' capabilities in both theoretical and practical aspects. To address this, the academic community has extensively discussed various aspects, such as the construction of dual-skilled teacher teams, vocational ability standards, school-enterprise cooperation mechanisms, lifelong learning, and teacher professional development, achieving many results.

Vocational ability standards are a crucial foundation for evaluating and enhancing vocational education teachers' abilities and are central to building a teacher educational capacity system. Yi Yaqin (2022) pointed out that vocational ability standards should cover areas such as teaching research, teaching implementation, professional development, and educational management, offering a tiered and categorized ability standard system based on teachers' different development stages

(such as probationary, mature, and exemplary periods). By constructing a scientific and reasonable standard system, it not only provides a basis for teacher recruitment and training but also creates conditions for teachers' career planning and capacity improvement. However, the existing standard system still faces issues such as significant regional differences and lack of uniform implementation in practice, affecting the overall development of the vocational education teaching workforce. Zhang Xiaoling (2019) further proposed from a teacher professional development perspective that the scientific nature of dual-skilled teacher certification standards is key to promoting teachers' professional development. She emphasized that certification standards should fully consider the industry attributes of vocational education, coordinate the stability and flexibility of standards, and establish a multi-level certification system to meet the differences in personal development and regional vocational education needs.

As a core element of improving vocational education teachers' capabilities, the construction of dual-skilled teacher teams has received widespread attention. Li Li (2022) outlined the evolution of dual-skilled teacher policies, noting that policies have gradually shifted from a focus on quantity to an emphasis on quality improvement, requiring teachers to possess both industry practice and teaching innovation abilities. However, the current development of dual-skilled teacher teams still faces practical problems, such as weak teachers' practical abilities and insufficient depth of school-enterprise cooperation. Li Shufeng (2014) also emphasized the positioning of vocational education teacher professional development, suggesting that the connotation of dual-skilled teachers needs to evolve from simple skill-based teachers to composite teachers with a broad range of qualities, and pointing out that teachers need systematic practical training to achieve high-quality vocational education development.

In the pathway for building dual-skilled teacher teams, school-enterprise cooperation is regarded as an important means of improving teachers' practical abilities and

teaching quality. Xu Danyang (2021) pointed out that school-enterprise cooperation not only provides teachers with frontline industry practice opportunities but also promotes the precise alignment of teaching content with enterprise needs. However, he also mentioned that the current school-enterprise cooperation models are relatively simple, with limited enthusiasm for enterprise participation, leading to a lack of sufficient opportunities for teachers' practical training and failing to meet the actual demand for dual-skilled teachers in vocational education. Liang Ningsen (2022) further explored the internal logic between school-enterprise cooperation and the "Three Teachings Reform" (teaching staff, textbooks, and teaching methods), proposing the establishment of a school-enterprise cooperation community to promote the development of integrated theory and practice materials and the creation of joint practice teaching platforms to comprehensively improve teachers' capabilities, fostering deeper integration between vocational education and industrial demands.

Lifelong learning and professional development for teachers are also important ways to enhance their educational capacity. Li Guangxian (2021) emphasized that the lifelong learning mechanism is a critical support for vocational education teachers to adapt to technological and industrial changes, especially in the context of the information age and globalization, where teachers must continuously update their knowledge and skills through ongoing learning. He suggested that lifelong learning mechanisms should not only involve the construction of societal lifelong education systems but also improve individual self-learning awareness and abilities. Meanwhile, Xu Yurong (2022) proposed that building a credit accumulation and conversion mechanism for vocational education could help teachers achieve certification for learning outcomes and enhance their cross-disciplinary skills, thus providing teachers with more flexible learning paths and development opportunities.

However, despite the widespread recognition of the lifelong learning concept in theory, many challenges remain in practice. For example, some teachers lack the motivation and time for self-directed learning due to heavy teaching workloads, and

there are imbalances in the construction of lifelong learning resources and platforms. Additionally, Ye Xiaoming (2022) pointed out through research on the development of teachers in higher vocational colleges that teachers' professional development requires both internal motivation and external support. Schools need to create learning organizations, provide training resources and policy support, while teachers themselves should actively update their knowledge and skills to meet the development needs of vocational education.

In conclusion, existing research has deeply explored the enhancement of vocational education teachers' capabilities from multiple perspectives, including the construction of vocational ability standards, dual-skilled teacher team development, school-enterprise cooperation pathways, lifelong learning mechanisms, and teacher professional development. These studies provide essential theoretical foundations and practical references for this study. However, there are still some gaps in current research: First, there is a lack of systematic research on the components of vocational education professional skills teachers' educational capacity; second, the long-term pathways of school-enterprise cooperation mechanisms and teachers' practical ability improvement have not been clarified; third, the effects of lifelong learning mechanisms and the promotion of digital training resources require further verification. Therefore, this paper aims to address these gaps, focusing on strategies for enhancing the educational capacity of vocational education professional skills course teachers, proposing specific and feasible optimization paths to promote the high-quality development of the vocational education teaching workforce.

2. Research Design and Methodology

This study aims to explore effective strategies for enhancing the educational abilities of vocational education teachers in professional skills courses, focusing on the mechanisms for cultivating "dual-qualified" teachers and the practical pathways to improving teachers' educational competence within the context of school-enterprise collaboration. To achieve this, a combination of literature research and case analysis

methods will be used. By systematically reviewing theoretical studies and practical experiences from typical cases, the study will explore how school-enterprise cooperation can support the improvement of teachers' educational capabilities.

(1) Research Methods

Literature Research Method: This study first utilizes literature research to examine recent theoretical and practical studies on vocational education teachers' educational abilities, school-enterprise cooperation models, "dual-qualified" teacher cultivation, and lifelong learning mechanisms. Through the literature review, the study will identify the components of teacher educational competence, the supporting pathways of school-enterprise cooperation, and the core mechanisms of cultivating "dual-qualified" teachers, providing a theoretical foundation and analytical framework for the case analysis.

Case Analysis Method: As the main method of this study, case analysis will be employed to deeply explore the role of school-enterprise cooperation in enhancing the educational abilities of teachers in professional skills courses. The case analysis will focus on two dimensions: the first is the school-enterprise cooperation mechanism, including teacher enterprise practice, curriculum co-construction, and skill certification pathways. The second dimension is the effectiveness of the ability enhancement, analyzing the comprehensive impact of school-enterprise cooperation on teachers' practical and teaching abilities.

(2) Case Selection Criteria

To ensure the typicality and relevance of the case analysis, the study will follow these selection criteria:

Typicality: Cases selected will involve mature school-enterprise cooperation mechanisms and significant practical outcomes, with demonstrative significance.

Relevance: Cases will closely revolve around the themes of cultivating "dual-qualified" teachers and enhancing educational abilities, highlighting the role of school-enterprise cooperation in supporting teachers' competence.

Data Accessibility: Cases will be selected based on available public data, detailed case materials, and ease of analysis.

Based on these criteria, the following cases were selected:

- The teacher practice training in aviation manufacturing between Tianjin Vocational University and AVIC (Aviation Industry Corporation of China).
- Information technology teacher training between Shenzhen Polytechnic and Huawei Technologies Co., Ltd.

3. Research Framework

(1) Theoretical Aspect

The theoretical foundation of this study is established through the literature research method, which will identify the components and enhancement pathways of vocational education teachers' educational abilities. The study will be based on the following theories:

Teacher Professional Development Theory: This theory emphasizes continuous growth throughout a teacher's career, encompassing the comprehensive development of teaching abilities, practical skills, and professional qualities. It provides the theoretical basis for defining the concept of teacher educational competence.

Lifelong Learning Theory: This theory focuses on teachers maintaining updated professional knowledge and skills through continuous learning in the context of rapid technological changes. It provides guidance on how school-enterprise cooperation can support teachers' lifelong learning.

Practice-Oriented Teaching Theory: This theory stresses the close integration of educational practice and vocational needs, supporting the role of school-enterprise cooperation in enhancing teachers' practical abilities and teaching innovations.

Through literature analysis, the study will identify the key issues in cultivating "dual-qualified" teachers and enhancing teachers' educational abilities, thus laying the theoretical foundation for case analysis.

(2) Practical Aspect

This study will use case analysis to examine two representative school-enterprise cooperation cases and analyze their mechanisms and effectiveness in improving the educational abilities of teachers in professional skills courses. The framework will focus on the following two directions:

Mechanisms for Cultivating "Dual-Qualified" Teachers: The analysis will explore how teachers' industry adaptability and professional qualities are enhanced through enterprise practice, curriculum co-construction, and skill certification within school-enterprise cooperation.

Enhancement of Teacher Educational Competence: The study will analyze the role of school-enterprise cooperation in improving teaching abilities, practical skills, and professional qualities, focusing on the following aspects:

Teaching Ability: Teachers' course design and implementation skills are enhanced through school-enterprise co-constructed courses and project-based teaching.

Practical Skills: Teachers' ability to teach practical skills is improved through enterprise workstations and production training, allowing them to master industry-leading technologies.

Professional Qualities: Teachers' professional awareness and comprehensive qualities are cultivated through involvement in corporate culture and career guidance.

(3) Analytical and Strategy Layer

Based on the theoretical and case analysis, this study will identify the key pathways for school-enterprise cooperation to support the enhancement of teachers' educational abilities and propose the following strategies:

First, attention should be focused on constructing a long-term mechanism for cultivating "dual-qualified" teachers, encouraging teachers to regularly participate in enterprise practice, skill updates, and industry certifications.

Second, efforts should be made to optimize the teacher educational competence standards and evaluation system, establishing multidimensional indicators for teaching ability, practical skills, and professional qualities.

Finally, the study will advocate for innovative school-enterprise cooperation models, promoting the construction of school-enterprise communities to improve the resource allocation and operational mechanisms for enhancing teacher educational abilities.

Layers	Content	Objectives
Theoretical Support	Teacher Professional Development Theory, Lifelong Learning Theory, Practice-Oriented Teaching Theory	Provide theoretical basis for the composition and enhancement pathways of teacher educational abilities.
Case Analysis	Select typical school-enterprise cooperation cases and analyze the mechanisms for improving teachers' practical abilities, teaching abilities, and professional qualities.	Reveal the practical pathways and successful experiences of school-enterprise cooperation in enhancing teachers' abilities.
Strategy	Construct a long-term	Provide specific and

Extraction and Summarization	mechanism for cultivating "dual-qualified" teachers, optimize the teacher evaluation system, and innovate school-enterprise cooperation models.	feasible practical strategies for improving vocational education teachers' educational abilities.
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3. Analysis of the Current Situation and Case Studies of School-Enterprise Cooperation

The educational abilities of vocational education teachers are key factors influencing students' professional qualities and employability. With industrial upgrades and technological changes, vocational education teachers in professional skills courses face various challenges in terms of teaching ability, practical skills, and professional qualities. At the same time, school-enterprise cooperation, as an important means of enhancing teachers' educational abilities, provides practical support for vocational colleges and enterprises to jointly cultivate high-quality teachers. This chapter explores effective mechanisms for enhancing teachers' educational abilities through a current situation analysis and case studies.

(1)Current Situation and Problems of Vocational Education Teachers' Educational Abilities

Vocational education teachers' educational abilities typically include three main components: teaching ability, practical skills, and professional qualities. However, existing research and practice show that these three aspects of ability exhibit significant deficiencies, which restrict the improvement of teacher training and educational quality.

A.Current Status of Teaching Ability

The teaching ability of vocational education teachers mainly manifests in curriculum design, teaching implementation, and student guidance. In recent years, with the deep integration of information technology and education, vocational colleges have made progress in teaching content and methods. However, the following problems remain:

<1> Teaching methods are relatively single: Some teachers still rely mainly on traditional lecture methods, lacking the application of new teaching methods such as project-based teaching and integrated theory-practice teaching.

<2> Curriculum design is disconnected from industry demand: Course content is outdated and cannot match the rapidly changing industry technology demands.

<3> Insufficient student guidance: Teachers' abilities in career planning and skills guidance have not been fully realized, especially in terms of the lack of a systematic approach to individualized student development.

(2) Current Status of Practical Skills

Practical skills, as an important competency for "dual-qualified" teachers, represent the teacher's performance in practical operations and industry technology applications. At present, vocational education teachers' practical skills face the following deficiencies:

<1> Lack of industry practice experience: Some teachers have been disconnected from the front lines of the industry for a long time, lacking exposure to enterprise production technologies and processes, resulting in insufficient practical teaching ability.

<2> Limited training resources: Vocational colleges lack sufficient investment in practical teaching facilities and training bases, making it difficult to provide teachers with adequate practical training conditions.

<3> Technology updates are lagging: Teachers' skills are often outdated compared to cutting-edge industry technologies, which affects the relevance and practicality of the teaching content.

(3) Current Status of Professional Qualities

Professional qualities include teachers' professional responsibility, communication and collaboration abilities, and lifelong learning awareness. Although some teachers possess strong professional qualities, the overall situation still presents the following problems:

<1>Differences in professional responsibility: Teachers' work enthusiasm and sense of responsibility are greatly influenced by the school environment and policy incentives, lacking universal guarantees.

<2>Lack of lifelong learning awareness: Teachers' enthusiasm for participating in vocational skill training and knowledge updating is low, particularly under the heavy teaching workload.

<3>Insufficient enterprise collaboration ability: Some teachers lack the ability to communicate and collaborate with enterprises, which affects the depth and effectiveness of school-enterprise cooperation.

(4) Key Problems

Currently, there is significant room for improvement in vocational education teachers' educational abilities in terms of teaching ability, practical skills, and professional qualities, with particularly notable issues in weak practical skills, the disconnect between courses and industry demands, and insufficient enterprise involvement. In the "dual-qualified" teacher training process, limited practical opportunities for teachers and insufficient depth of school-enterprise cooperation are key constraints.

5. Typical Case Studies of School-Enterprise Cooperation Supporting the Enhancement of Teachers' Educational Abilities

School-enterprise cooperation is an important path for improving vocational education teachers' educational abilities. By introducing enterprise resources and deepening cooperation mechanisms, effective support is provided for the enhancement of teachers' teaching abilities, practical skills, and professional qualities.

This section analyzes two typical school-enterprise cooperation cases to explore their cooperation mechanisms and actual outcomes.

Case 1: Tianjin Vocational University and AVIC (Aviation Industry Corporation of China)

1. Background Introduction

Tianjin Vocational University cooperates with AVIC to meet the needs of the aviation manufacturing industry for highly skilled talent, while addressing the deficiencies of professional skills teachers in practical skills and teaching abilities. The aviation industry is technically complex and rapidly evolving, placing high demands on teachers' professional skills.

2. Cooperation Mechanism

(1) Teacher enterprise practice: The vocational university regularly sends professional skills teachers to AVIC for actual production and technical R&D. Teachers gain hands-on experience in aviation manufacturing processes and automation control technologies.

(2) Joint course development: Both parties jointly develop aviation manufacturing professional courses, incorporating enterprise technical standards and production processes into the teaching content to create an integrated theory-practice curriculum system.

(3) Skills certification: The enterprise provides teachers with skills training and professional qualification certification, enhancing the alignment of teachers' teaching content with industry demands.

3. Main Outcomes

- Teachers' practical skills significantly improved, with 80% of professional teachers obtaining "dual-qualified" status.

- Course content accurately aligned with the needs of the aviation industry, leading to a significant increase in student employment rates.

Case 2: Shenzhen Polytechnic and Huawei Technologies Co., Ltd.

1. Background Introduction

Shenzhen Polytechnic cooperates with Huawei to focus on the ICT industry's needs, aiming to cultivate "dual-qualified" teachers in the field of information technology. This collaboration addresses the rapid updates and high skill demands of information technology, providing strong support for teachers' ability enhancement.

2. Cooperation Mechanism

Joint construction of training bases: Huawei and the vocational college jointly build an ICT industry training center, providing a real enterprise project environment.

Teacher training: Huawei provides systematic ICT technology training courses for teachers, covering cloud computing, big data, and other areas, helping teachers master cutting-edge technologies.

Enterprise certification: Teachers participate in Huawei certification programs (e.g., HCIA/HCIP/HCIE), aligning teaching content with enterprise technical standards.

3. Main Outcomes

Over 65% of information technology teachers obtained Huawei certification, significantly improving their practical abilities and teaching levels. Teaching content became more aligned with industry needs, with notable results from curriculum reform.

(3) Case Summary and Analysis

Through the analysis of the cooperation practices between Tianjin Vocational University and AVIC, and Shenzhen Polytechnic and Huawei Technologies, the

following common pathways and experiences of school-enterprise cooperation in enhancing teachers' educational abilities can be summarized:

Co-constructing practical platforms: Providing teachers with enterprise practice opportunities, enhancing practical skills and industry adaptability through real work environments.

Joint curriculum development: Enterprises participate in curriculum design, integrating industry standards and enterprise demands into teaching content, improving the practicality and adaptability of courses.

Promoting "dual-qualified" teacher training through certification systems: School-enterprise cooperation promotes vocational qualification certification and skills training, facilitating comprehensive enhancement of teachers' "dual-qualified" quality.

The above experiences show that school-enterprise cooperation is an effective path for improving vocational education teachers' educational abilities, but its effectiveness still depends on the depth and sustainability of the cooperation mechanisms.

4.Strategies for Enhancing Teachers' Educational Abilities under School-Enterprise Cooperation

Through the analysis of the current situation of vocational education teachers' educational abilities and the study of typical school-enterprise cooperation cases, it is evident that school-enterprise cooperation has shown significant effectiveness in enhancing teachers' practical skills, teaching abilities, and professional qualities. However, to achieve comprehensive improvements in teachers' abilities, it is necessary to propose specific strategies and implementation pathways in response to the existing issues and shortcomings in current cooperation. This chapter proposes countermeasures from four aspects: building a long-term mechanism for cultivating "dual-qualified" teachers, improving the standards and evaluation system for teachers'

educational abilities, innovating teacher training and lifelong learning support systems, and optimizing school-enterprise cooperation policies and 保障 mechanisms.

(1)Building a Long-term Mechanism for Cultivating "Dual-Qualified" Teachers

The mechanism for cultivating "dual-qualified" teachers is the core of enhancing vocational education teachers' educational abilities. To achieve the sustainable improvement of teachers' abilities, the following two aspects should be addressed:

Encourage Teachers to Participate Regularly in Enterprise Practice to Master Cutting-Edge Technologies and Industry Standards

Enterprise practice is an important means for teachers to acquire industry technology and update their knowledge structure. Vocational colleges should establish long-term cooperation agreements with enterprises and regularly send professional skills teachers to participate in production and R&D projects, ensuring teachers familiarize themselves with the latest technical processes and industry standards.

In the practice process, methods such as "job rotation" or "project-based participation" can be adopted to integrate teachers deeply into the enterprise production chain, thereby effectively improving their practical teaching abilities. The collaboration between Tianjin Vocational University and AVIC is a typical example of this mechanism, where 80% of the teachers obtained "dual-qualified" status through enterprise practice.

Strengthen the Joint Development of Courses and Training Platforms with Enterprises to Improve the Adaptability of Teaching Content

Jointly developed, integrated theory-practice courses should be created by schools and enterprises, incorporating real work scenarios and tasks from enterprises into the curriculum to ensure that the course content keeps up with industry demands. For example, Shenzhen Polytechnic and Huawei jointly developed an ICT training base, and through collaborative course development, the teaching content was highly aligned with enterprise technical standards.

The construction of training platforms not only provides teachers with a place to

practice their technical skills but also serves students' training needs, helping to establish a virtuous cycle between enhancing teachers' educational abilities and students' skills development.

(2) Improving the Standards and Evaluation System for Teachers' Educational Abilities

Clarifying the components of teachers' educational abilities and establishing a multi-dimensional evaluation system are essential foundations for promoting ability enhancement.

Clarify the Components of Teachers' Educational Abilities and Establish a Multi-Dimensional Evaluation System

The educational abilities of vocational education teachers should include three core dimensions: teaching ability, practical skills, and professional qualities. Educational ability standards need to develop layered and categorized evaluation indicators based on the professional needs of teachers at different stages. For example, entry-level teachers should focus on basic teaching abilities, while senior teachers should emphasize practical skills and curriculum development abilities.

The evaluation mechanism should combine process-oriented and outcome-oriented assessments, using diverse evaluation methods (such as classroom observation, practical assessments, and student feedback) to comprehensively assess teachers' ability levels.

Introduce Industry Standards and Promote Teacher Skill Certification and Professional Qualification Acquisition

Vocational colleges should collaborate with enterprises and industry associations to jointly establish teacher skill certification standards, promoting teachers to obtain "dual-qualified" status through vocational qualification exams.

For example, Shenzhen Polytechnic utilizes Huawei certification programs (HCIA/HCIP) to help over 65% of its information technology teachers achieve

industry-recognized qualifications, ensuring seamless alignment between teaching content and industry needs.

(3) Innovating Teacher Training and Lifelong Learning Support Systems

The continuous development of vocational education teachers relies on a scientific training system and a comprehensive lifelong learning support mechanism.

Build a Multi-Dimensional Training Platform Combining Online and Offline Learning to Meet Teachers' Continuous Development Needs

By utilizing information technology, an online platform for teacher training can be established to provide teachers with access to learning resources at any time and place, such as micro-courses and case teaching videos. Additionally, combining offline workshops and enterprise training bases allows for the integration of online learning with practical application.

Training content should be designed based on teachers' actual needs, covering areas like professional technology, innovative teaching methods, and curriculum design, offering a diverse range of choices for teachers' ongoing learning.

Improve the Incentive Mechanism to Enhance Teachers' Motivation for Training and Practice

Schools and enterprises should develop effective incentive mechanisms to encourage teachers to actively participate in training and enterprise practice through methods such as title evaluations, performance rewards, and recognition awards.

For example, Tianjin Vocational University provides class-hour subsidies and preferential treatment for title promotions to teachers who participate in enterprise practice and achieve excellent results, which has motivated teachers to engage more actively.

(4) Optimizing School-Enterprise Cooperation Policies and Guarantee Mechanisms

Policy support is an important guarantee for the smooth implementation of

school-enterprise cooperation. To fully leverage the role of school-enterprise cooperation in enhancing teachers' abilities, efforts should be made in the following two areas:

Government Introduces Incentive Policies to Encourage Enterprises to Actively Participate in Teacher Training

The government should introduce tax incentives, special subsidies, and other incentive measures to motivate enterprises to participate in vocational education teacher training. For example, enterprises that provide training resources or participate in course development should receive financial support.

Moreover, industry association coordination mechanisms should be promoted so that enterprises, schools, and industry associations can jointly participate in the formulation and implementation of policies aimed at improving teachers' abilities.

Strengthen Resource Integration between Schools and Enterprises to Jointly Invest in Teacher Ability Enhancement Projects

Schools and enterprises should integrate resources through cooperative construction, jointly establishing training bases, teacher workstations, and other platforms to form a stable cooperation model.

In terms of resource allocation, schools should be responsible for curriculum development and training design, while enterprises provide facilities, equipment, and practical opportunities, ensuring the efficient use of cooperative resources.

Through building a long-term mechanism for cultivating "dual-qualified" teachers, improving teacher education ability standards and evaluation systems, innovating teacher training and lifelong learning support systems, and optimizing school-enterprise cooperation policies and guarantee mechanisms, vocational education teachers' educational abilities can be comprehensively improved. These strategies not only provide effective support for teachers' professional growth but also lay a solid foundation for the high-quality development of vocational education. In the future, efforts should be made to further optimize cooperation models in line with

regional differences and industry characteristics, ensuring the practicality and scalability of these strategies.

5. Research Conclusions and Outlook

This article focuses on enhancing vocational education teachers' educational abilities in professional skills courses, proposing a series of optimization strategies based on the analysis of teachers' abilities and typical school-enterprise cooperation case studies. The study found that school-enterprise cooperation is an effective path for cultivating "dual-qualified" teachers and enhancing educational abilities, especially in improving teachers' practical skills, teaching abilities, and professional qualities.

Through analyzing the collaboration between Tianjin Vocational University and AVIC, and Shenzhen Polytechnic and Huawei Technologies, the article summarizes the following core strategies: building long-term mechanisms to promote teachers' regular participation in enterprise practice; improving teaching content adaptability through school-enterprise joint development of courses and training platforms; improving teacher education ability standards and multi-dimensional evaluation systems, introducing industry standards, and promoting professional qualification certification; innovating teacher training and lifelong learning support systems with a combination of online and offline learning platforms. These strategies emphasize the deepening of school-enterprise cooperation mechanisms and the diversification of teacher ability evaluation systems, providing practical references for the construction of vocational education teaching teams.

Although this article attempts to explore the path of enhancing teachers' educational abilities from both theoretical and practical perspectives, certain limitations remain. On one hand, case analysis mainly focuses on a few typical institutions and industries, which may not fully reflect the characteristics of school-enterprise cooperation in different regional and industrial contexts. On the other hand, the data sources primarily rely on publicly available materials, limiting the depth of the research.

Future research should further expand the coverage of case studies, particularly examining the impact of regional economic differences on school-enterprise

cooperation models. Furthermore, with the development of educational digitalization, the application of digital training platforms and intelligent teaching tools in teacher ability enhancement is also worth further exploration. Research into teacher ability improvement strategies under the regional, industrial, and digitalization contexts will help promote the high-quality development of vocational education teaching teams.

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