

Research on the Construction of Pathways to Enhance the Accumulation Ability of Technical Skills in Vocational Colleges

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Abstract: School enterprise cooperation is a basic talent cultivation model in vocational education. The quality of cooperation directly affects the quality of talent cultivation in vocational schools. To effectively solve the prominent problems in the cooperation between vocational colleges and enterprises, it is necessary to address the problem of insufficient depth of school enterprise cooperation. This article combines the construction of the current cooperative operation mechanism between schools and enterprises, explores the construction of practical training venues, practical combat platforms, and teacher technical skill accumulation platforms in vocational colleges, and proposes a performance evaluation mechanism for talent cultivation quality, for reference and reference by other vocational colleges.

Keywords: Vocational Education; Government School Enterprise Collaboration Mode; Technical Skill Accumulation

1. Introduction

The main task of vocational education is to cultivate high-quality skilled professionals who are oriented towards the front lines of production, construction, management, and service. Vocational education cultivates students' ability to solve practical problems through reasonable selection of teaching content, reform of teaching methods, and implementation, achieving seamless integration between technical and skilled talents cultivated by vocational colleges and social needs, and alleviating labor shortages and employment difficulties. However, the current employment quality of vocational college

students is difficult to meet the expected requirements, and vocational education is detached from the needs of enterprises, which is far from the expectations of society. At present, students in schools are often in a passive learning mode, and the formation of engineering literacy and internship platforms are insufficient. The cultivation and training of students' engineering concepts are insufficient, resulting in a serious disconnect between the comprehensive abilities of vocational college students and the job requirements of enterprises.

Upon investigation, there are still urgent problems to be solved in the construction of practical training venues and engineering training platforms in vocational colleges. The equipment usage rate in vocational colleges is generally low, and some equipment is purchased without planning or donated by enterprises of poor quality. Some commonly used equipment is severely damaged, and the efficiency of comprehensive laboratory use is particularly low. Overall, there is a lack of top-level design and weak effectiveness in the technical skill accumulation platform. Conduct research on the existing problems.

2. Research on Platform Construction Model

2.1 Mechanism and Policy Design for the Construction of Government Led Technology Skill Accumulation Platforms

The government should carry out top-level design in accordance with relevant laws and regulations, and play a leading role in the construction of school enterprise cooperation, engineering training platforms, and skill accumulation platforms. To formulate a set of policy measures suitable for regional economic

development, improve the existing guarantee system, guide enterprises and industries to deeply integrate and deepen cooperation, and cultivate technical talents urgently needed by regional industries.

2.2 Collaborative Construction of deep Cooperation Models Between Schools and Enterprises

Explore school enterprise cooperation models such as "school factory factory school" to promote comprehensive and deep integration between schools and enterprises. The learning content of students during the learning process is basically consistent with the job requirements they will engage in in the future. Enterprises do not need to provide secondary long-term training for talents, improving the practicality of vocational education talents.

3. Specific Implementation Form

3.1 Based on the Original Accumulation of Technical Skills, Build a Technical Service Platform for Regional Enterprises

University teachers should strengthen the accumulation of skills, fully recognize the importance of transforming scientific research achievements, use the effective application and promotion of scientific research achievements as a measure of technological level, strengthen the scientific and technological service capabilities of regional enterprises, carry out substantive and grounded practical technology research and industrialization promotion for enterprises, and achieve industrial transformation and upgrading of regional enterprises.

By leveraging the technological public relations and social service capabilities of vocational college teachers, it is necessary to strengthen close cooperation with regional leading enterprises, and select enterprises that have made significant contributions to regional industrial transformation and upgrading and match their own professional construction for in-depth cooperation. Both parties of the cooperation will focus on the technical service capabilities of teachers and students, as well as the equipment and facilities of both parties, to jointly build a service platform and create a community of industry education integration.

Through the cooperation model between government, schools, and enterprises, actively build technology skill accumulation platforms

and technology regional incubators that can serve small and medium-sized enterprises or provide technical services to them. On the basis of accumulating existing skills, promote the transformation and upgrading of regional small and medium-sized enterprises, technological innovation, and product value-added enhancement.

In response to the development of high-tech industries and the shortage of high skilled talents, vocational colleges actively utilize market operation mechanisms through government departments or industry associations, accelerate the construction of industry university research cooperation platforms based on technical skills, and actively become service providers for regional small and medium-sized enterprises. By relying on the construction of the technical skills platform, undertaking business, and providing technical services to enterprises, this model effectively enhances the technical research and development capabilities, as well as the accumulation and innovation capabilities of the school's professional teaching staff and enterprise technical backbone. It enhances their role in the quality of technical skills talent training, technical skills inheritance, and applied technology development and promotion, making vocational colleges an important carrier of skill accumulation and innovation for small and medium-sized enterprise technology research and development, technical public relations, and technology promotion.

3.2 A Platform for Accumulating Innovative Abilities of Vocational College Teachers

According to the actual situation of their own profession, teachers choose regional benchmark enterprises that are closely related to their profession, have strong school enterprise capabilities, and have long-term cooperation as carriers of skill accumulation and social service capabilities. Based on this carrier, vocational college teachers should actively enter enterprises, learn key skills in their positions, and fully apply this key skill to teaching. They should actively identify technical problems in their positions, analyze existing problems, think about them, and then propose solutions, even implement them. Through firsthand experience, teachers should learn how to discover, solve problems, refine the process of solving practical problems, form research and development processes and solutions, organize cases, design and decompose

them into teaching resources, integrate them into professional courses, accumulate skills, and improve the practical content of skill accumulation. Teachers can only cultivate knowledge-based and skilled talents that meet the needs of enterprises by using frontline positions in enterprises as a platform for skill accumulation, and by accumulating skills and innovative abilities in enterprises, thereby promoting the deepening of skill accumulation models.

3.3 Build a Skills Learning and Practical Platform for Vocational College Students

In the process of establishing a skills learning platform, enterprises hire workers who are "skilled craftsmen" to timely impart skills, play an important role in the accumulation and inheritance of skills, hire high-level technical personnel and the high-level industry influence of "skilled craftsmen" as enterprise mentors, and provide guidance to students. Excellent school and enterprise teachers will impart both explicit and implicit knowledge to enhance students' employment competitiveness and social acceptance.

4. The Operation Mechanism, Implementation Plan, and Monitoring Design of the Technical Skill Accumulation Platform

4.1 The Operational Mechanism of "Industry Academia Research"

Actively exploring the operational mechanism of the integration of industry, academia, and research, and exploring the construction system of industry, academia, and research bases in vocational colleges. In the process of building a school enterprise community, both parties actively negotiate, including relevant resources, benefit sharing, institutional linkage, implementation of cooperation models, and division of responsibilities, in order to achieve sustained and stable cooperation. Special emphasis should be placed on the importance of "higher education, vocational education, and local areas" to ensure that students have a dominant position in the cooperation process, participate in the entire production process and work process, achieve zero distance between the classroom and the job, and greatly improve their abilities.

The construction of a school enterprise community needs to take into account its own

interests, especially the enthusiasm of enterprises in the construction process. We need to explore diversified paths for investment entities and operational mechanisms for sustainable development. This mechanism enables graduates to quickly grow into production lines, identify and solve problems, gain recognition from employers, and facilitate the verification of skill accumulation. Schools and enterprises, or three parties, should explore mixed ownership, strengthen the combination of vocational education and economic and social development, mix property rights, and cooperate with schools and enterprises to jointly establish in accordance with the principles of teacher mutual employment, resource sharing, and clear property rights.

The above operating mechanism will promote cooperation between schools and enterprises, promote the integration of industry and education, promote the development of applied technology and the accumulation of skills, achieve the coordination of skills accumulation between schools and enterprises under the balance of their respective interests, and effectively promote enterprise production, talent cultivation between schools and enterprises, technological progress of enterprises, accumulation of teacher student skills, and improvement of scientific research level.

4.2 Implement a Technical Skills Elite Training Program

Stimulate students' awareness and ability to learn independently, and be more willing to lead or participate in the development or innovation of new products or technologies. Students are required to have a fearless and tenacious personality, actively participate in scientific research projects of school teachers and production tasks of enterprise mentors in daily learning, be willing to express opinions, and be able to propose problem-solving ideas and put them into practice. Fully recognize the role of skill accumulation in higher vocational education, support majors and schools, truly prioritize skill accumulation in professional brand building, and carry out practical teaching and skill accumulation. These students are able to take on tasks immediately after graduation, and even independently assume key technical roles such as new product development, process improvement, technology projects, patent applications, etc., reducing talent training costs, improving talent

practicality, promoting seamless connection between school talent training and enterprises, achieving quality improvement, skill accumulation, and playing a role.

4.3 A Feedback Mechanism with Three Stakeholders

The performance evaluation of skill accumulation in school enterprise cooperation plays an important role in ensuring deep integration between schools and enterprises and improving the quality of cooperation. The level of cooperation plays a crucial role in the evaluation process, and it is necessary to establish an effective evaluation system. [9] In the process of skill accumulation, both schools and enterprises engage in a game of seeking a "win-win" situation. According to the quality standards of cooperation, the society supervises the accumulation, process, and effectiveness of school enterprise cooperation skills in the educational and teaching activities of vocational colleges. Based on evaluation, universities take corrective measures to achieve expected goals and improve teaching quality. The evaluation index system for the mechanism of skill accumulation in school enterprise cooperation mainly considers the construction of a community of interests between schools and enterprises, the importance of enterprises and universities, the accumulation of skills between teachers and students, the quality of talent cultivation, social satisfaction, employment rate, etc. Under the promotion of various parties, the key assessment is to match the training objectives with the requirements of professional positions or categories, the requirements of professional positions, and the ability level of students, jointly build facilities and facilities, strengthen school enterprise cooperation in skill accumulation, share and interact with teachers, promote the connection between profession and industry, and connect technical talents with local economy and enterprises.

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