



Research on The Impact of Modern Industrial Colleges on The Transformation and Development of Higher Vocational Colleges.

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Abstract. This article aims to study the impact of modern industrial colleges on the transformation and development of higher vocational colleges. Through the comprehensive analysis of relevant literature and the research of actual cases, it explores the positive role of modern industrial colleges in promoting the deep integration of higher vocational colleges and industries, promoting the reform of professional setting and curriculum system, and enhancing students' practical ability and employment competitiveness. At the same time, it also analyzes the challenges faced by higher vocational colleges in the process of transformation and development, and puts forward corresponding suggestions.

Keywords: Modern Industrial College; Higher Vocational Colleges; Industry-Education Integration; Practical Ability.

1 Introduction

As an important base for cultivating high-quality technical and skilled talents, higher vocational colleges are facing the urgent need for transformation and development. The rise of modern industrial colleges has provided new development opportunities for higher vocational colleges. This article analyzes the characteristics and functions of modern industrial colleges and explores their impact on the transformation and development of higher vocational colleges.

2 Characteristics and Advantages of Modern Industrial Colleges

Industry-education integration: Modern industrial colleges closely combine industry demands with education and teaching to achieve industry-education integration. The college collaborates with enterprises to jointly develop training plans, design courses, and provide practical opportunities, enabling students to learn and practice in a real industrial environment and better adapt to market demands.

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Practice-oriented: Modern industrial colleges focus on cultivating students' practical ability and practical operating experience. Through cooperation with enterprises, students can participate in actual projects, internships, and practical courses to obtain practical experience and skills related to the industry and increase their employability.

Industry connection: Modern industrial colleges connect with specific industries or industrial fields, and carry out professional setup and course design according to the needs and development trends of the industry. Students can gain a deep understanding of the latest technologies, trends, and norms in the industry to prepare for future career development.^[1]

Diverse faculty: Modern industrial colleges have a diverse faculty consisting of on-campus teachers and industry experts from enterprises. This faculty structure helps combine theoretical knowledge with practical experience to provide students with more comprehensive and practical education.

Innovation and entrepreneurship support: Modern industrial colleges encourage students' innovation and entrepreneurship spirit and provide relevant support and resources. The college may establish innovation laboratories, entrepreneurship accelerators, etc., to provide students with entrepreneurship guidance, financial support, and resource connection, and cultivate their innovation and entrepreneurship ability.

Employment advantage: The close cooperation with enterprises allows students of modern industrial colleges to have an advantage in employment. Students have more opportunities to contact enterprises, understand corporate culture and needs, and may obtain employment opportunities through internships or cooperative projects.

Continuous development: Modern industrial colleges maintain close contact with the industry, being able to keep abreast of the changes and needs of the industry, continuously update teaching content and methods, so that education keeps pace with the development of the industry.

3 The Impact of Modern Industrial Colleges on the Transformation and Development of Higher Vocational Colleges

Promote the integration of industry and education: Modern industrial colleges emphasize the deep integration of industry and education, and promotes the cooperation between higher vocational colleges and enterprises. Through cooperation with enterprises, higher vocational colleges can better understand the industry demand, adjust the professional setting and curriculum system, and cultivate practical talents that meet the requirements of the industry.

Improve the quality of practical teaching: Modern industrial colleges focus on practical teaching, and provide students with more practical opportunities and actual project experience. This helps to improve students' practical operation ability and problem-solving ability, so that they can better adapt to the requirements of the job position.^[2]

Promote the reform of professional setting and curriculum: The development of modern industrial colleges has promoted the reform of the professional setting and

curriculum system of higher vocational colleges. The college can flexibly adjust the professional setting and course content according to the industry demand and market changes, making teaching more close to practical application.

Strengthen the construction of the teaching staff: Modern industrial colleges require teachers to have an industry background and practical experience, thus promoting the strengthening of the construction of the teaching staff in higher vocational colleges. The college can introduce teachers with industry experience, or encourage teachers to participate in enterprise practice to enhance their practical teaching ability.

Improve students' employment competitiveness: The close cooperation with enterprises and the strengthening of practical teaching enable students to better understand the corporate culture and job requirements, and increase their employment competitiveness. Modern industrial colleges can also provide more internships and employment opportunities for students.

Promote innovation and entrepreneurship education: Modern industrial colleges encourage the cultivation of the spirit of innovation and entrepreneurship, and provide support and resources for students' innovation and entrepreneurship. This helps to cultivate students' innovation awareness and entrepreneurship ability, and promotes the transformation of higher vocational colleges to innovative colleges.^[3]

4 The Challenges Faced in the Transformation and Development of Higher Vocational Colleges

Change of concepts and culture: Transformation requires changing traditional educational concepts and college culture, and advocating the educational model of the integration of industry and education and practice-oriented. This requires the leadership of the college, teachers, and students to consciously change their way of thinking to adapt to new educational concepts and teaching methods.

Constraints of funds and resources: Transformation requires a large investment of funds and resources, including the construction of practical teaching facilities, the introduction of industry experts, and the development of enterprise cooperation. However, higher vocational colleges may face constraints on funds and resources, and it is difficult to meet the needs of the transformation.^[4]

Improvement of teacher ability and professional quality: Modern industrial colleges require teachers to have practical experience and industry background, which puts higher requirements on the ability and professional quality of teachers. The college needs to provide training and development opportunities to help teachers improve their practical teaching ability and industry insight.

Challenges of industry cooperation and enterprise participation: Establishing close industry cooperation relationships and attracting the participation of enterprises is the core of modern industrial colleges. However, higher vocational colleges may face difficulties in cooperating with enterprises, such as insufficient willingness of enterprises to cooperate, and unmatched cooperation models.

Challenges of curriculum and teaching reform: Transformation requires reform of the curriculum system and teaching methods to meet the requirements of industrial

needs and practical teaching. This involves challenges in curriculum design, adjustment of teaching outlines, and innovation of teaching methods.

Difficulties in evaluation and certification: Traditional evaluation and certification systems may not fully adapt to the characteristics and requirements of modern industrial colleges. Establishing an evaluation and certification mechanism suitable for the integration of industry and education is a challenge.

Adjustment of management and organizational structure: Transformation requires the corresponding adjustment of the management and organizational structure of the college to better support the integration of industry and education and practical teaching. This may involve challenges in department adjustment and redefinition of responsibilities.^[5]

5 The Promoting Role of Modern Industrial Colleges in the Development of Higher Vocational Colleges

Modern industrial colleges have brought innovation and optimization to the talent cultivation model of higher vocational colleges. The establishment of industrial colleges enables schools to jointly formulate talent cultivation plans with enterprises. Enterprises are deeply involved in aspects such as curriculum setting, teaching content selection, and practical link design, ensuring that the knowledge and skills students acquire are closely connected to the forefront of the industry. This customized cultivation model based on industrial demands can greatly enhance the targeting and practicality of talent cultivation, enabling graduates to adapt to job positions more quickly and reducing the re-training costs of enterprises.

In terms of educational and teaching reforms, modern industrial colleges also play a positive promoting role. It prompts higher vocational colleges to update teaching concepts and introduce more advanced teaching methods and means. Meanwhile, industrial colleges can also promote the integration and optimization of teaching resources. Enterprises provide schools with the latest equipment, technology and practical platforms, while schools share their own educational resources with enterprises. The two sides complement each other's advantages and jointly build a rich and high-quality teaching resource database.

The industrial college builds a long-term and stable cooperation platform for schools and enterprises, enabling both sides to carry out in-depth cooperation in multiple fields such as talent cultivation, technology research and development, and staff training. The scientific research achievements of the school can be transformed into actual productive forces more quickly, creating economic benefits for the enterprise; the production practice of the enterprise also provides rich topics and data support for the school's scientific research, promoting the improvement of the school's scientific research level. This two-way interactive, mutually beneficial and win-win cooperation model not only helps to enhance the social service ability of higher vocational colleges, but also can enhance the enthusiasm and initiative of enterprises to participate in vocational education.

Integration of industry and education is the key to the development of modern vocational education, and modern industrial colleges are important carriers for deepening the integration of industry and education. Industrial colleges build a long-term and stable cooperation platform for schools and enterprises, enabling both sides to carry out in-depth cooperation in multiple fields such as talent cultivation, technology research and development, and employee training. The scientific research achievements of schools can be transformed into actual productive forces more quickly, creating economic benefits for enterprises; the production practice of enterprises also provides rich topics and data support for the scientific research of schools, promoting the improvement of the scientific research level of schools. This two-way interaction and mutually beneficial and win-win cooperation model not only helps to enhance the social service ability of higher vocational colleges, but also can enhance the enthusiasm and initiative of enterprises to participate in vocational education.

Modern industrial colleges have an undeniable promoting effect on the development of higher vocational colleges. It provides strong support and impetus for higher vocational colleges in aspects such as talent cultivation, educational and teaching reform, integration of industry and education, construction of teaching staff, and student employment, promoting higher vocational colleges to continuously improve their school-running level and quality, and better serve regional economic development and industrial transformation and upgrading.

6 Conclusions

Clarify the transformation goals and strategies: Higher vocational colleges should clarify the goals and strategies of transformation and formulate specific implementation plans. This includes determining the professional settings, curriculum system, and teaching mode that match the industry needs, as well as establishing the mechanism and platform for cooperation with enterprises.

In conclusion, the strategies and suggestions for modern industrial colleges to deal with the transformation of higher vocational colleges include clarifying transformation goals and strategies, strengthening the integration of industry and education, improving teachers' practical ability, optimizing the curriculum system and teaching methods, establishing an innovation and entrepreneurship education system, strengthening the practical link of students, establishing evaluation and feedback mechanisms, and striving for policy support and resource input. The implementation of these strategies and suggestions will help higher vocational colleges better adapt to the needs of economic and social development and cultivate high-quality technical and skilled talents that meet industry needs.

In summary, the modern industrial college has an important driving role in the transformation and development of higher vocational colleges. Higher vocational colleges should fully recognize this trend, actively respond to challenges, strengthen cooperation with the industry, and improve the quality of talent training to provide strong talent support for economic and social development.

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