

Practice and Exploration of the Reform of the International Talent Cultivation Model in Higher Vocational Colleges from the Perspective of New Quality Productivity

Chen Yin & Ding Wen, Zhejiang Business Vocational and Technical College

Abstract: In the context of globalization and rapid development of the knowledge economy, vocational colleges urgently need to establish a talent training model which is both in line with international standards and has local characteristics. Faced with the strategic demand for internationalization and the requirement for new quality productivity of innovative talents, this article starts from the perspective of new quality productivity and adopts qualitative research methods to explore the practical ways of reforming the international talent training mode in vocational colleges. Through literature review and case analysis, this article identifies the key elements of the international talent cultivation model, namely the construction of an international curriculum system, the internationalization of the teaching staff, the cultivation of cross-cultural competence, and international exchange and cooperation. Based on this, detailed reform strategies are formulated. On this basis, this article proposes a series of innovative measures, including establishing a curriculum system centered on ability output, implementing international teacher training programs, strengthening exchanges and cooperation with international universities, and promoting student exchange programs. These measures provide novel ideas and feasible operational plans for the international talent cultivation of vocational colleges, which have significant theoretical contributions and practical guidance significance, and help improve the quality and international competitiveness of vocational education.

Keywords: Vocational colleges, International talent cultivation, New Quality Productivity, Curriculum system reform

1. Introduction

Since the implementation of the Belt and Road Initiative, the internationalization of vocational colleges has entered a new stage. The task of cultivating highly skilled technical talents with international perspectives, proficiency in international rules, and the ability to engage in international affairs and competition has become more urgent. However, the current international talent cultivation model in vocational colleges still faces several issues, such as weak international awareness, insufficient depth in educational cooperation, a lack of qualified faculty, a narrow scope of talent development, and low training levels. These challenges hinder the ability of vocational colleges to contribute to the Belt and Road construction and cultivate

high-quality international talents. In order to proactively adapt to the new trends of economic globalization, deepen educational openness, and enhance the internationalization of talent cultivation, vocational colleges should fully recognize the importance of training international talents, abandon traditional thinking models, embrace internationalization with an open mindset, and engage in deeper international educational cooperation [4].

The essence of vocational college internationalization is China's active adaptation to international development and exchange, and a dynamic process of continuous reform and innovation in higher vocational education [2]. Guided by the theory of New Quality Productivity, vocational colleges need to actively integrate with high-quality international vocational education resources, promote the simultaneous development of industry-education integration and internationalization, and cultivate technically skilled talents with global competitiveness. Specifically, vocational colleges should focus on developing internationally competent talents who possess not only solid professional knowledge, outstanding innovation capabilities, and excellent practical skills, but also a deep understanding of Chinese traditional culture, a strong sense of patriotism, an international outlook, and cross-cultural communication abilities. To achieve this goal, vocational colleges must deepen the reform of talent cultivation models, promote the internationalization of curriculum systems, teaching content, and training methods, and strengthen practical teaching to enhance students' international competencies.

2. The Current Situation of International Talent Cultivation

2.1 Global Trends in Higher Education Internationalization

With the rapid expansion of the scale of international talent cultivation in higher education, the internationalization of higher education has become a global trend. According to statistics by Guruz (2011), the total number of international students worldwide increased from 1.35 million in 1995 to 2.75 million in 2010. In less than a decade, the scale of international student mobility further increased to 5.3 million by 2017 [1]. De Wit & Altbach (2021) noted that large-scale international student mobility is accompanied by the rise of the knowledge economy and changes in the governance structure of higher education [2]. Marginson (2006) argued that modern universities operate in a complex, multi-layered environment, where inter-institutional transactions, influenced by global mobility and international networks, are combined with national systems shaped by legal, historical, resource, and local conditions. Within the "global-national-local" framework of higher education development, there exists a strong interaction between higher education institutions, local governments, political systems, economic institutions, and markets [3]. Therefore, to understand the process of higher education internationalization, more specific investigation and analysis are needed. However, most current research focuses on community colleges, commercial universities, and the leading countries in traditional international

education systems. Wende (2007) explored the challenges and opportunities of higher education internationalization in OECD countries. The article analyzed the driving forces influencing the internationalization process, such as globalization, changes in the role of the nation-state, and multilateral frameworks and agreements [4]. Ma Wanhua (2011) examined the international educational needs and opportunities proposed by the Belt and Road Initiative (BRI), and how these needs are reshaping the internationalization strategies and practices of China and surrounding regions. This study revealed the process of internationalization in Chinese higher education and proposed a Chinese education and research model that is being exported to other parts of the world.

2.2 Analysis of the Current Situation of Internationalization in Domestic Vocational Colleges

The talent cultivation programs in vocational colleges have faced numerous issues over long-term development. The proportion of theoretical courses is too high [5], which results in students possessing a narrow range of knowledge and skills, making it difficult for them to adapt to production practices and industrial demands. There are also deviations in teaching philosophy, as some colleges lack understanding of production and practice and fail to construct talent cultivation programs in a reasonable and systematic manner. The development of practical teaching resources has been slow [6], necessitating the introduction of advanced, world-class practical teaching equipment to improve the quality of educational resources. In addition, the development of Sino-foreign cooperative education in vocational colleges is unbalanced, with vocational colleges in coastal and border regions far outpacing those in inland provinces and central-western regions in terms of internationalization [7]. The international talent cultivation in vocational colleges also faces several challenges. On one hand, vocational colleges lag behind in the construction of internationally accredited curriculum standards and vocational qualification standards, leading to insufficient "vocational education outcomes" with national identifiers [9]. On the other hand, domestic vocational colleges also have shortcomings in attracting international students, most of whom prefer to engage in language and cultural studies, and the number of international students seeking Chinese vocational college graduation certificates is limited. Meanwhile, the further reform and opening-up of higher vocational education provide favorable conditions for vocational colleges to introduce high-quality international resources and engage in international cooperation [11]. Vocational colleges should seize this opportunity and actively explore new models for international talent cultivation.

Domestic vocational colleges face both opportunities and challenges in talent cultivation models, teaching resource development, and internationalization. Vocational colleges should thoroughly analyze their development status, grasp the trends in vocational education reform and development, and continue to focus on updating concepts, integrating resources, and innovating models. They should actively explore new paths for talent cultivation that meet the requirements of New Quality

Productivity, promote the alignment of talent cultivation systems with international standards, and cultivate highly skilled technical talents with international perspectives and competitiveness, thus providing strong support for regional economic and social development and industrial transformation and upgrading.

3. The Demand for Reform in Talent Cultivation Models in Vocational Colleges

3.1 The Theoretical Foundation of New Quality Productivity

The theory of New Quality Productivity provides an important theoretical foundation and practical guidance for the reform of international talent cultivation models in vocational colleges. In the context of the current internationalization of education, the cultivation of high-quality technical and skilled professionals in vocational colleges faces new challenges and opportunities [3]. The theory of New Quality Productivity emphasizes the decisive role of new production factors such as knowledge, technology, and information in economic and social development. This raises higher requirements for vocational colleges in cultivating high-skilled talents with international perspectives and competitiveness. Vocational colleges need to base their approach on the theory of New Quality Productivity, thoroughly analyze the inherent laws and development trends of international talent cultivation, continuously innovate talent cultivation models, and improve the quality of talent development.

Specifically, vocational colleges should highlight their professional characteristics, optimize the curriculum system, strengthen practical teaching, promote school-enterprise cooperation, enhance international exchanges, and comprehensively improve students' core vocational qualities and international competitiveness [10]. In terms of professional development, vocational colleges should dynamically adjust their program offerings in response to changes in the labor market, avoiding rigid and fixed models [13]. Additionally, internationalization should drive the standardization of program development, while information technology should be utilized to modernize program construction, and hierarchical approaches should be used to promote market differentiation in talent cultivation [2]. In terms of reforming the talent cultivation model, vocational colleges need to adopt effective training models and differentiated teaching methods based on the actual situation of student groups, promote innovations in teaching methods, and improve the quality of talent cultivation [6]. In aligning with international vocational education standards, vocational colleges should learn from advanced international experiences, strengthen cooperation with foreign universities and enterprises, and establish diversified channels for talent development. Moreover, they should fully leverage information technology to build internationalized teaching resource libraries and practical training platforms, providing students with more diverse learning opportunities. A robust quality assurance mechanism for international talent cultivation should be established,

including a scientific evaluation system to continuously improve the quality of talent development.

3.2 Motivations for Innovation in Talent Cultivation Models

The reform of talent cultivation models in vocational colleges from the perspective of New Quality Productivity presents diverse and multi-modal motivations for innovation. In the face of the challenges of economic globalization and technological iteration, higher vocational education is actively exploring pathways to cultivate internationally competitive, high-quality technical and skilled talents that meet the demands of the times. Among the many driving forces for reform, the close integration of industry, academia, and research has become a core driver. This requires updates to the content, models, and methods of education to align with market demand. Additionally, employers' perspectives on the required capabilities of vocational talents have introduced new expectations for educational models. To ensure that the direction of talent cultivation aligns with enterprise needs, school-enterprise cooperation has deepened, typically manifested in the establishment of "order classes" in collaboration with enterprises, where teaching content is provided based on real work scenarios to meet the precise talent needs of businesses.

The learning models in vocational colleges, both domestic and international, exhibit distinct characteristics in terms of model features, motivations for innovation, and challenges in model reform. For example, South China International Business College and Australia's TAFE Colleges have demonstrated the importance of international exchange and cooperation. The former uses foreign affairs department cooperation projects, while the latter relies on international cooperative programs to enhance educational competitiveness in an international context and provide students with broader perspectives and challenges through the introduction of high-quality educational resources. However, issues such as uneven resource allocation in international cooperation and difficulty in managing cooperation quality still exist, with successful cases often relying on the introduction of quality international resources and the implementation of international accreditation standards.

Furthermore, the construction of educational informatization is a key aspect for vocational colleges in the new era to address the challenges posed by New Quality Productivity. Qingyuan Information Engineering College has actively adapted to the trends of new information technology, making full use of digital teaching resources to promote innovations in teaching methods. Singapore Polytechnic, through its intelligent teaching platform, has achieved the digitization and interactivity of educational content, enhancing learning efficiency and the learning experience. These reforms indicate that informatization can effectively support the reform of talent cultivation models, but it also brings challenges such as high infrastructure investment and complex updates and maintenance.

In conclusion, the demand for reform in international talent cultivation models in vocational colleges continues to expand. Reform integrating school-enterprise cooperation, international exchange, and practical teaching is imperative. Through comparative analysis and in-depth research from multiple factors, new perspectives and reform ideas for the international development of vocational education in China are provided, nurturing technical and skilled talents better suited to the demands of international markets and economic development.

Model Features	Domestic Vocational College Example	International Vocational College Example	Analysis of Motivating Factors for Innovation	Challenges in Model Reform	Key Success Factors of Successful Cases
Depth of School-Enterprise Cooperation	Jinhua Vocational and Technical College (Enterprise Order Classes)	German Vocational Colleges (Dual Education System)	Economic globalization requires innovative talent models	Cultural differences between schools and enterprises, asymmetric demand	Clear enterprise demand, strong willingness for cooperation, well-developed supporting policies
Integration of Teaching Content and Practice	Zhongbei Vocational and Technical College (Work-Study Alternating Internship)	U.S. Community Colleges (Internships Embedded in Course Design)	Industry demand is ever-changing, education must keep up with the market	Disconnect between theory and practice, high update costs	Introduction of cutting-edge industry technology, analysis of real-world enterprise cases
Talent Cultivation Standards and Certification System	Guangdong Eastern Technical College (Industry Certification Education)	BCIT in Canada (Professionally Accredited Courses)	Mutual recognition of domestic and international certifications enhances students' job competitiveness	Diversified certification standards, difficult implementation	Internationalized certification system, universally recognized certification results
Teaching	Li Jiang	Finnish	Demand for	Aging	Strong

Model Features	Domestic Vocational College Example	International Vocational College Example	Analysis of Motivating Factors for Innovation	Challenges in Model Reform	Key Success Factors of Successful Cases
Staff and Teaching Methods	Vocational University (Dual-Qualification Teachers)	Vocational Education College (Teachers in Corporate Secondments)	integration of classroom teaching and practical experience	faculty structure, traditional teaching methods	integration of industry and education, strong awareness of educational innovation
Educational Informatization Construction	Qingyuan Information Engineering College (Digital Teaching Resources)	Singapore Polytechnic (Smart Teaching Platform)	The wave of informatization is sweeping through the education sector	Weak educational information infrastructure, high update and maintenance costs	Advanced IT support systems, rich digital teaching content
Continuous Education and Lifelong Learning System	Dongguan Modern Vocational Technical College (Remote Education Platform)	German Vocational Colleges (Adult Education Courses)	Addressing the rapidly changing social and economic environment	Low participation in evening school/online courses	Flexible learning methods, personalized learning plans

Table 1: Analysis of Motivating Factors for Vocational Education Models Domestically and Internationally

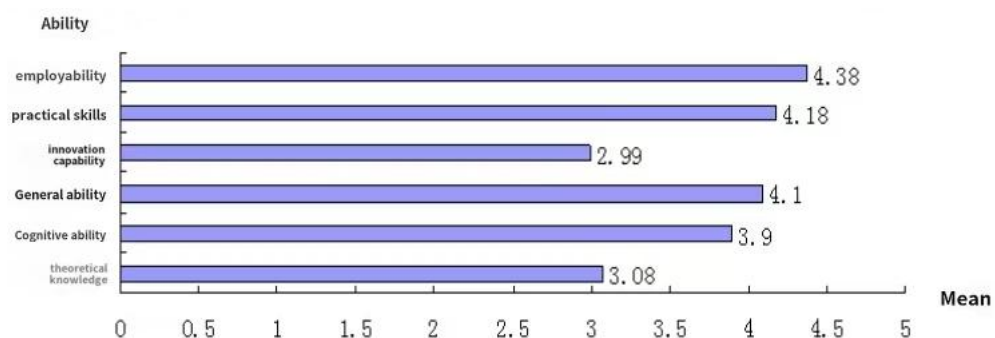


Figure 1: Competency Requirements for Vocational Talent from an Employer's Perspective

4. Reform Practices and Case Analysis

4.1 Reform Strategies for Higher Vocational Institutions

In exploring the reform of internationalized talent cultivation models in higher vocational institutions, a systematic practice model was adopted to achieve the established educational objectives. First, specific talent cultivation goals were clearly defined, closely aligned with internationalization demands. A comprehensive analysis of domestic and international education models was conducted to extract essential elements applicable to China's higher vocational education. Second, a four-pillar strategic implementation framework was established, encompassing curriculum reform strategies, the design of practical teaching activities, the optimization of faculty development, and the strengthening of international cooperation.

The curriculum reform strategy was constructed based on an engineering mindset and market orientation, establishing a multidimensional curriculum structure that integrates interdisciplinary approaches, school-enterprise collaboration, project-based teaching, and modular assessment to ensure alignment with international standards. In practice, the educational team followed the reform implementation process diagram of high-level vocational schools, integrating theory with practice and centering on students' vocational competency development to ensure that curriculum content evolves in sync with global industry advancements.

The design of practical teaching activities aimed to enhance students' applied skills and innovative thinking. Through case analysis, simulation training, and corporate internships, students were provided with real-world case studies to bridge the gap between theoretical knowledge and practical applications. The practical teaching components were structured to help students progressively develop problem-solving abilities in real or simulated work environments.

The optimization of faculty development focused on cultivating dual-qualified teachers. This was achieved by conducting regular domestic training programs and introducing overseas faculty development initiatives. These efforts enhanced educators' cross-cultural communication skills and internationalized teaching concepts. Moreover, faculty development programs systematically incorporated advanced educational theories and teaching methodologies by integrating real teaching cases.

Strengthening international cooperation was regarded as a crucial means of expanding educational influence and improving quality. By collaborating with prestigious international vocational institutions, efforts were made to secure educational resources,

share curricula, and facilitate faculty and student exchanges. Through rigorous implementation and feedback mechanisms, reform effectiveness was continuously evaluated, and strategies were iteratively adjusted to ensure the realization of educational reform objectives.

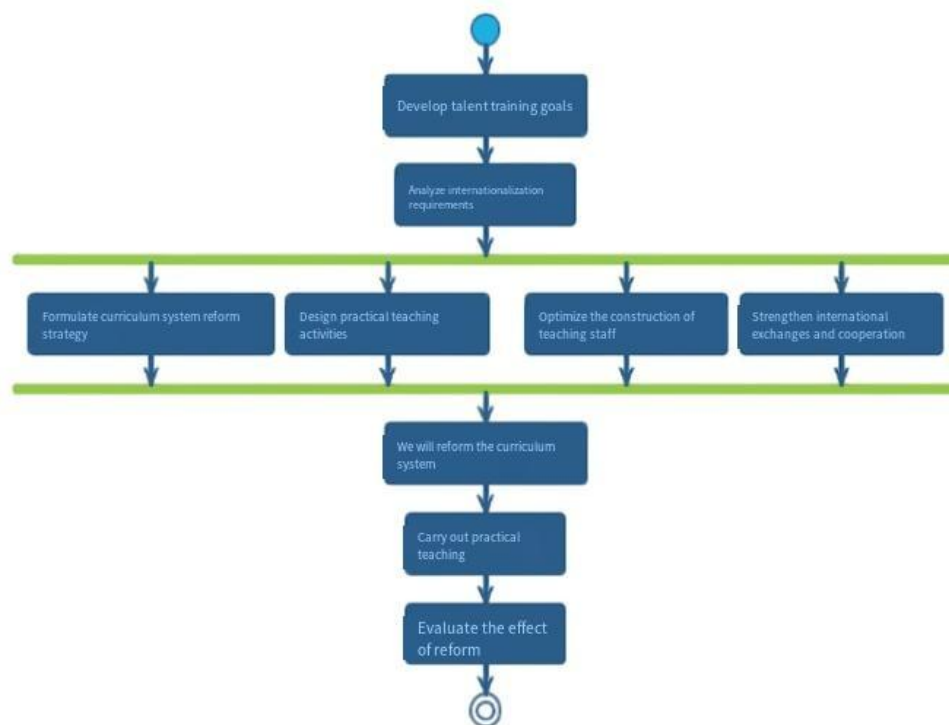


Figure 2: High-Level Vocational Colleges Talent Training Model Reform Practice Flowchart

4.2 Case Study

In the practice of reforming the international talent cultivation model in vocational colleges, Nvivo 12 was used for content analysis to identify existing issues and future trends. In terms of theoretical construction, the research team drew on multiple intelligence theory and international education concepts to develop a comprehensive vocational college talent cultivation framework. This study adopted a mixed research method to conduct an in-depth comparative analysis of domestic and international cases.

Regarding sample selection, the research team carefully chose five vocational colleges with representative international cooperation and analyzed their international talent cultivation reform practices. A structured interview guide and standardized questionnaire were used in the survey, covering multiple dimensions such as educational philosophy, curriculum design, faculty strength, teaching methods, and cooperative exchanges to ensure data consistency and comparability. The

questionnaire was designed based on a 5-point Likert scale¹. A total of 200 valid questionnaires were collected, with a recovery rate of 90%.

The research results indicate that the cultivation of international talent should integrate a global perspective with local practice, ensuring the development of compound talents capable of adapting to the international job market. According to the quantitative model results, intercultural communication skills, innovative thinking, and teamwork ability were identified as key competencies in international talent cultivation. The research findings suggest that vocational colleges should meet the needs for cultivating key competencies by innovating the industry-education integration and school-enterprise collaborative education mechanisms. This includes promoting international exchange practices through in-class and extracurricular activities as well as overseas internship platforms to enhance students' international employability. Furthermore, the research reveals the success factors for international talent cultivation, providing reference paths and future implementation strategies for the talent cultivation model reform in vocational colleges with a "industry-education-research integration" approach.

5. Conclusion

Empirical analysis and multiple research findings indicate that the reform of the international talent cultivation model in vocational colleges can follow various approaches, such as setting up multilingual teaching classrooms, establishing international cooperation and exchange programs, introducing high-quality foreign curriculum resources, and reforming specialized talent cultivation systems [7][8]. These measures effectively enhance students' intercultural communication skills, expand international perspectives and exchange platforms, and ultimately cultivate high-quality technical and skilled personnel with international competitiveness. However, challenges remain in the international talent cultivation of vocational colleges, such as insufficient local faculty strength, incomplete introduction of curriculum systems, and insufficient depth of international cooperation [8].

Therefore, vocational colleges should align with the development needs of New Quality Productivity, deepen industry-education integration and school-enterprise cooperation, and establish a talent cultivation system that aligns with international standards. Further efforts are required to intensify reforms, optimize talent cultivation

¹ :5-point Likert scale is a commonly used rating system in survey questionnaires to measure respondents' agreement with a statement. It includes five levels, usually ranging from "strongly agree" to "strongly disagree," sometimes with a "neutral" option in between. Respondents select the option that best represents their view, allowing researchers to quantitatively analyze attitudes or opinions.

programs, innovate teaching models, broaden international cooperation channels, and improve talent cultivation quality. The goal is to cultivate highly skilled professionals with both solid technical expertise and strong international perspectives and intercultural communication skills [8].

References

- [1] Tiryaki, A., Gürüz, G., & Orbey, H. (1994). Liquid-liquid equilibria of ternary systems of water + acetone and C5 and C8 alcohols at 298, 303 and 308 K. *Fluid Phase Equilibria*, 1(1), 458-
- [2] De Wit, H. (2020). Internationalization of higher education. *Journal of International Students*.
- [3] Marginson, S. (2010). Higher education in the global knowledge economy. *Procedia - Social and Behavioral Sciences*.
- [4] Van der Wende, M. (2007). Internationalization of higher education in the OECD countries: Challenges and opportunities for the coming decade. *Journal of Studies in International Education*.
- [5] Wang, Y., & Yuan, Y. (2019). [From the top 50 in international influence to discuss the practice and research of international talent cultivation in higher vocational colleges]. *Journal of Xidian University (Social Sciences Edition)*, 108-113.
- [6] Ma, W. (2021). ["The Belt and Road" initiative and the internationalization transformation of China's higher education]. *Journal of Beijing University of Aeronautics and Astronautics (Social Sciences Edition)*, 34(1), 134-142.
- [7] Hu, L. (2020). [Research on the construction path of international talent cultivation mode in high-quality higher vocational colleges]. *Youth Years*, 224.
- [8] Zheng, Y., Wei, J., Zhang, H., & Li, Z. (2021). [Issues and paths of cultivating compound international talents in higher vocational colleges]. *China Higher Education Research*, 5.
- [9] Bian, J., & Jiang, L. (2019). [Construction of an evaluation index system for the internationalization of talent cultivation in higher vocational colleges]. *Vocational Education Communication*, 23-27.
- [10] Tian, Z. (2020). [Exploring the modernization path of talent cultivation in high-level higher vocational colleges]. *Educational Development Research*, 1.
- [11] Liang, L. (2020). [Preliminary exploration of the talent cultivation mode construction in high-level higher vocational colleges: Based on the supply side and the million enrollment plan]. *Knowledge Economy*, 99-100.