

REVIEW ARTICLE

The internationalization of China's vocational education: Value implications, practices and planning

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ABSTRACT

The internationalization of vocational education is essential for cultivating high-quality talents that meet international standards, enhance the national educational level, and increase international competitiveness, all contributing to the goal of transforming a country into an educational powerhouse. To establish itself as a leader in education, a country has to fully comprehend the implications of internationalizing vocational education, taking into account the global labor market, diplomatic relations, and the evolution of vocational education. These goals can be achieved by analyzing collaborative educational programs, the status of its vocational education in the international context, and the methods employed internationally to develop vocational education. Strategies should include integrating national interests, fostering collaborative initiatives, and utilizing digital technology. In the case of China, such an approach will enhance China's global competitiveness, facilitate the spread of Chinese culture, strengthen the country's international partnerships, and increase its global influence and standing.

Key words: internationalization of vocational education, leading country in education, Chinese path to modernization

INTRODUCTION

Open cooperation between countries is essential, both now and in the future, for driving innovation and transformation in education and developing a high-quality educational system in China. The internationalization of China's vocational education enhances the development of high-quality talents that can meet international demands by fostering open cooperation, mutual learning, and resource sharing. Moreover, it facilitates the profound integration of industry, academia, and research, advancing technological innovation and industrial progress. This improvement in the quality of China's education and international competitiveness serves as a critical avenue towards the

objective of establishing a robust educational powerhouse.^[1] Therefore, China's vocational schools must understand the importance and value of internationalizing vocational education to meet developmental needs. They should identify practical implementation strategies from existing models and plan strategically for future growth through objective reflection.

INTERNATIONALIZING VOCATIONAL EDUCATION TO FORTIFY A NATION VIA EDUCATIONAL ADVANCEMENT

The exchange of vocational education is crucial to China's commitment to openness and collaboration in education. It is an essential component of the country's

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strategic diplomatic agenda and provides significant support for the creation of a world-class technical and skills training system, uniquely marked by Chinese characteristics.^[2]

Objective demand for labor in the context of globalization

As the process of globalization continues, economic interactions and collaborations between different countries and regions are growing stronger and more interconnected. There is a steadily increasing demand for professionals who exhibit exceptional professional qualities, have international experience, and are skilled in cross-cultural communication across different countries and regions. This trend is motivating nations to adapt their vocational education systems to meet international standards and nurture the development of individuals who possess a global outlook and competitiveness, preparing them to meet the requirements of the global labor market.

First, satisfying the requirements of the global market. As economic globalization intensifies, enterprises are increasingly driven to enter international markets in search of expanded business opportunities and development potential. Understanding and adapting to local laws, culture, customs, and other essential factors is crucial when entering a new market. Internationalized vocational education can provide businesses with the essential training and knowledge to comprehend and adapt to their target markets more effectively.^[3]

Second, fulfilling the requirements of multinational corporations. Enterprises need teams of skilled individuals with international backgrounds and capabilities during the process of internationalization. Consequently, multinational corporations have a growing demand for highly skilled professionals who can meet the challenges of global markets. For example, Chinese corporations currently manage 46,000 establishments in 190 countries and regions worldwide.^[1] These companies have accumulated a total outward foreign direct investment of 2.8 trillion US dollars and have created over four million jobs globally.^[4] Employees in these roles are required to have proficiency in foreign languages, cross-cultural communication skills, and extensive knowledge and experience in international business, along with other necessary qualifications. Vocational education is deeply intertwined with economic and social advancement. As businesses globalize, it is essential that vocational education adopts an international perspective.

Third, the development of technological innovations should be closely monitored. As technology progresses and global competition intensifies, enterprises must

consistently keep pace with and implement the latest technological advancements and innovative ideas. Vocational education going international provides advanced technical training and promotes innovative thinking, enabling businesses to maintain a competitive edge in international markets.

The internationalization of vocational education meets the globalization needs of enterprises, equipping them to satisfy worldwide market demands. It provides professionals with the global outlook necessary to meet the demands of multinational corporations, keep pace with international technological progress, and strengthen the competitive position of businesses on the global stage.

Realistic needs of China's external exchanges

Vocational education is vital for international relations, enabling China's educational system to maintain an open, confident, and proactive presence on the global stage.^[5] Vocational education significantly enhances international cooperation and economic growth by facilitating talent exchange and training, promoting cultural understanding, and directly and effectively boosting international competitiveness.

First, the exchange and training of talents should be improved. Vocational education is essential for cultivating a variety of professional skills, including those required by technicians, engineers, medical personnel, and management experts. International collaboration and exchange help develop talent and improve mutual understanding among nations. Globally, developed nations such as Germany are prioritizing technology and education as essential components of their diplomatic strategies. Likewise, Japan values vocational education as a key diplomatic tool and has purposefully crafted a roadmap for educational diplomacy.^[6] China utilizes technological advancements and expert knowledge to strengthen collaboration and reciprocal assistance through initiatives in vocational education and the promotion of the Chinese language.

Second, cultural exchange and understanding should be promoted. The internationalization of vocational education fosters communication and understanding among various countries and cultures. In vocational education, students are presented with the opportunity to interact with their peers from a variety of nations, allowing them to gain a deeper understanding of different cultural traditions, customs, and values. This interaction enriches their knowledge of diverse cultures, promoting cross-cultural communication and collaboration.^[7]

Third, international competitiveness should be

enhanced. Vocational education that involves international collaboration and exchange exposes students to cutting-edge technology, innovative concepts, and advanced management practices, thereby enhancing their professional skills and competitive edge in the job market. Such exposure fosters the development of individuals who are equipped with international competencies, crucial for improving a country's diplomatic ties and economic expansion in the globalized world.

Practical needs for advancing vocational education

Vocational education in China is actively engaging in international collaboration and exchange, driven by the country's Strategy of "Bringing In" and "Going Global". By adopting advanced international management systems, cutting-edge teaching methodologies, and innovative curriculum designs, the quality and standards of China's domestic vocational education are significantly enhanced, promoting its further reform and development.

The primary objective is to address the students' needs. As society and the economy experience swift changes, students' need for vocational education is continually evolving. Many students aspire to acquire an international education to boost their global competitiveness and adapt to the international job market.^[8] To cater to students' needs for internationalized education, vocational education must incorporate international elements into educational and teaching practices.

Second, the quality of education should be improved. International cooperation and exchange allow vocational schools to incorporate advanced global pedagogical techniques, curricula, and resources, thereby improving the quality of education. Collaborative interactions with international schools or educational institutions enable reciprocal learning from diverse resources and experiences, thereby increasing the quality and reputation of vocational education. Such partnerships also enhance social adaptiveness and augment competitiveness on both the domestic and global stages.

Third, international collaboration should be enhanced. Vocational education systems, experiences, and resources differ significantly among countries and regions. By fostering international collaboration and exchange, countries can engage in mutual learning and comparison, which together enhance the quality and standards of vocational education.^[9] The idea of mutual learning and comparison is founded on interaction and dialogue among varied cultures and educational systems, which can promote the rejuvenation of educational philosophies and innovation in teaching methodologies.

THE PRACTICE AND TRENDS OF INTERNATIONALIZING VOCATIONAL EDUCATION TO BUILD A STRONG EDUCATIONAL SUPERPOWER

The globalization of vocational education plays a crucial role in supporting our nation's diplomatic strategies and is a key aspect of our educational outreach efforts in this new era. After years of consistent dedication, China has successfully launched and hosted the first World Conference on Vocational Education Development, establishing a productive platform to foster global exchanges and cooperation in vocational education.^[10] Nationwide, all regions are adopting the new development framework, continuously improving mechanisms for international exchange and cooperation, and moving from a vocational education model of "One-way Introduction and Reference" to one of "Mutual Collaboration and Sharing". Vocational schools are expanding their global reach by developing educational brands internationally, enhancing Sino-foreign joint educational programs, adapting teacher training to local needs, assisting domestic firms in international production partnerships, and maintaining the quality of Chinese vocational education standards. These efforts have greatly increased the global impact of vocational education, enabled its high-quality advancement and bolstering the establishment of an educational superpower.

Establishment of Sino-foreign cooperative educational project and institutions

The first step is to employ diverse strategies to expand China's educational outreach globally. Chinese vocational institutions enhance the advantages of their specialized programs by navigating constraints and strengthening partnerships with global corporations, foreign universities, and educational organizations. They achieve this through online dialogues, cloud-based collaborations, and conventional inauguration events, thereby enabling the establishment of multiple branches of international campuses, educational facilities, training centers, and technical colleges.^[11] Efforts will be intensified to fortify internal development in overseas educational institutions, improve management processes, and enhance quality assurance mechanisms, all while consistently raising the standard of education abroad.

In 2023, China's higher vocational institutions operated 543 schools abroad, with 795 majors and 33,663 students. The China-Association of Southeast Asian Nations (ASEAN) Vocational Education Research Center, established in Guangxi Zhuang Autonomous Region, consists of 10 affiliated research institutions. Its primary mission is to provide decision-making consultation, promotional efforts, and publicity services

aimed at boosting vocational education collaboration and exchange between China and ASEAN nations.

Vocational institutions in Hainan province are spearheading an innovative method for overseas education, aligning with the advancements of the Hainan Free Trade Port and the concept of the International Education Innovation Island. The process of issuing contracts for overseas educational projects is being streamlined *via* online platforms. Hunan province's higher vocational schools engage in collaboration with international companies and cooperate with local foreign governments, industries, educational institutions, and businesses in various forms, including "School-Enterprise-School", "School-Enterprise-Industry", and "School-Enterprise-Government".

The second step is the continuous advancement of Sino-foreign cooperative educational programs. Chinese vocational schools are committed to integrating premier educational resources from abroad, improving partnerships with esteemed international vocational education institutions and universities, continuously advancing Sino-foreign cooperative education, promoting internationalization of vocational programs, and raising the standard of international talent development. In 2023, national higher vocational schools organized 1009 Sino-foreign cooperative programs, enrolling a total of 117,080 students. The Ministry of Education has designated 289 vocational schools to be the initial group of pilot institutions under the Sino-German Advanced Vocational Education Project (SGAVE), covering 310 pilot programs. Vocational colleges in Hubei Province have formed collaborations with institutions in the United States, Russia, Germany, Canada, Australia, the Netherlands, South Korea, Japan, and various other nations. These partnerships are facilitating specialized programs that adhere to international benchmarks in teaching practices, course content, and educational resources. Higher vocational schools in Shandong Province have partnered with international institutions to create joint specialized programs. The mode of cooperative school running has changed from introducing individual professional programs to cooperating with non-independent legal entities of Chinese and foreign cooperative school running institutions. This change has facilitated the introduction of specialized clusters of foreign advantages in bulk, thereby greatly improving the quality of Sino-foreign educational partnerships.

The third step is supporting enterprises to "Going Global" and engage in international capacity cooperation. Vocational schools in China rely on international branch campuses to fortify partnerships with corporations adopting "Going Global" strategies.

These institutions design bespoke training programs aligned with the distinct needs of these corporations, develop targeted skills training modules, and deploy experienced instructors equipped with strong practical skills to educate the workforce. This effort is promoting the development of a multitude of local management and technical experts for the Belt and Road Initiative and has received considerable praise from enterprises expanding globally scale. In 2023, full-time faculty members from national higher vocational colleges devoted a total of 449,976 person days to managing and conducting training abroad. In various provinces, including Guangdong, Henan, Jiangsu, Jiangxi, Shandong, Shaanxi, Zhejiang, and Chongqing, the training provided by these full-time instructors have exceeded 10,000 person days.

Vocational schools in Anhui Province are actively supporting the national Belt and Road Initiative by providing training, technology assistance, translation services, and extra resources to local businesses, enhancing the capabilities of businesses in Anhui Province for better global development. Higher vocational institutions in Jiangsu Province are collaborating with international training centers to develop professionals who are highly skilled and technically advanced for global enterprises. These professionals are proficient in Chinese, possess strong technical skills, and have a thorough understanding of China's corporate culture. Vocational institutions in Hubei Province are partnering with enterprises such as China Metallurgical Group Corporation (MCC) Southern Engineering Technology Co., Ltd. and Qianlima Machinery Supply Chain Co., Ltd. to create training hubs for countries and regions involved in the Belt and Road Initiative. The objective of this collaboration is to cultivate proficient experts for the initiative through alignment with local businesses seeking international growth.

China's international brand impact showcased by vocational education

The first goal is to establish an internationalized education brand. Institutions such as the Luban Workshop, the Silk Road Institute, the Zheng He Institute, the Bi Sheng Workshop, the Chinese Workshop, the Dayu Institute, the Furong Workshop, and the Guigang Center, among others, have made significant strides in the field of international vocational education. These unique establishments have supported their growth by advancing local research and making substantial contributions to developing talent, enhancing faculty, training skills, facilitating cultural exchanges, and fostering international cooperation. They have been instrumental in showcasing the international reach of Chinese vocational education and extending their educational brands *via* global platforms.

The initial distribution of licenses for the Lu Ban Workshop Operation Project has greatly increased both the domestic and international influence and appeal of the Lu Ban Workshop brand. Tianjin Vocational Institute has established 21 Lu Ban Workshops in 20 different countries, with the first international workshop located in Thailand. This initiative represents a groundbreaking effort to promote Chinese standards of vocational education, as well as Chinese equipment and programs all over the world. This project has received high praise from both the Chinese and Thailand governments and has gained significant influence in Southeast Asia and beyond.

Jiangsu Province is consolidating premier vocational education resources and steadily introducing the Zheng He Plan in vocational education. This endeavor is positioning vocational institutions to partner with businesses to foster global expansion and assist in training proficient individuals in countries involved in the Belt and Road Initiative.

Vocational schools in Shanghai are using its status as an international metropolis to leverage its geographic and platform advantages. Concentrating on their core competencies, they are complying with international standards and engaging in the Ministry of Education's Sino-foreign Humanities Exchange Center's Humanities Exchange Practical Project. Furthermore, they are committing to establishing prestigious institutions such as the Luban Academy and the Bi Sheng Workshop to elevate the status of Chinese vocational education.

The second goal is to build the brand of "Study in China". In response to the complex global environment and the challenges brought about by the coronavirus disease 2019 (COVID-19) pandemic, vocational schools across China have actively adopted strategies to boost the enrollment of international students. These initiatives involve enhancing their websites for international candidates, broadening promotional channels, and improving recruitment procedures to achieve greater focus and effectiveness. These efforts have played a crucial role in reinforcing and advancing the "Study in China" initiative.^[12]

In 2023, higher vocational colleges nationwide offered 1274 professional programs specifically for international students, attracting a total enrollment of 17,019 students. Ten provinces—Jiangsu, Chongqing, Shandong, Sichuan, Guangxi, Henan, Hebei, Zhejiang, Guangdong, and Beijing—have had the distinction of hosting over 500 international students each at their vocational education institutions. "Double High Plan" institutions in China offer 684 programs tailored for international students, representing 53.69% of these programs across the country. Annually, these schools enroll, on average,

9072 international students, constituting 53.31% of the total national enrollment. They are prominent leaders, both in providing specialized programs and admitting international students annually. Vocational institutions across the nation welcome international students, particularly in areas such as Chongqing, Shandong, Zhejiang, Hebei, and Beijing, where there is a notable presence.

Jiangsu Province has introduced Guidelines for the Construction of Websites for the Enrollment of Foreign Students in Jiangsu Universities, aiming to strengthen targeted recruitment efforts by universities, enhance the diversity of international students, increase the proportion of academically proficient students, and reinforce the "Study in Jiangsu" brand.

The third objective is to enhance the influence of Chinese standards. Chinese vocational institutions are actively embracing advanced international industry standards and high-quality educational resources for talent development. Utilizing their distinct educational characteristics and professional capabilities, they are cooperating with universities and enterprises, both domestically and internationally, establishing professional, curriculum, and technical standards in vocational education that are recognized both nationally and globally. These continuous collaboration and innovation are strengthening the worldwide influence of Chinese standards and Chinese solutions.^[13]

In 2023, overseas institutions adopted a total of 5986 course standards developed by Chinese vocational colleges. Of these, 3326 course standards were from schools involved in the Double High Plan, representing 55.56% of the total. The first phase of the Tanzania National Occupational Standards Development Project, initiated and implemented by the Sino-African Vocational Education Alliance, has been launched. The second phase of the project aims to develop 93 occupational standards in sectors such as construction, manufacturing, aquaculture, energy, mining, tourism, and the chemical industry. Nationally, 129 higher vocational schools have been selected to participate in this endeavor. The goal of the project is to assimilate high-quality Chinese occupational standards into vital Tanzanian industries, tailor them to local requirements, and subsequently ensure their official registration and certification in accordance with Tanzanian laws. These standards are intended to be integrated into the Tanzanian national vocational education system, along with appropriate professional teaching standards to guide the talent development initiatives of Tanzanian vocational institutions.

The vocational schools in the Guangxi Zhuang Autonomous Region have developed and implemented 182 course standards, both domestically and interna-

tionally, with 85% of those standards being adopted by ASEAN countries. These advances have leveraged the unique educational characteristics and strengths of the institution.

International development strategies for vocational education

Initially, the training model of "Chinese Language + Vocational Skills" should be improved and expanded. Chinese vocational schools have meticulously developed a training program for international students that integrates vocational skills with Chinese language learning, thereby promoting the simultaneous advancement of both professional and linguistic education. By employing highly regarded faculty members, refining training programs, and augmenting course content, China has effectively improved the vocational competencies and overall literacy of its international students.^[14] Beijing's advanced vocational institutions meticulously adhere to the national directive by vigorously promoting the "Chinese Language + Vocational Education" initiative. They have achieved this by augmenting teaching resources, expanding infrastructure, offering Chinese language training, and enhancing vocational skills.

Shanghai is establishing a platform to enhance "Chinese Language + Vocational Skills" talent development hub and an industrial service foundation to advance the integrated "Language + Culture + Profession" initiatives under the "Tourism Chinese" series.

Fujian Province is advancing a talent cultivation model for foreign students, integrating Chinese language education with vocational training. This method follows the "Chinese Language + Professional Skills + Culture" model, focusing on the complete integration of professional and cultural education. The objective is to nurture technically proficient overseas professionals who are well-versed in the Chinese language and to promote cultural exchange. Initiatives include training for Chinese language teachers, "Root-Seeking Trips To China", and initiatives that invite outstanding overseas talents to visit China.

Guangdong Province has improved educational standards for international students through the implementation of a "Chinese Language + Vocational Skills" curriculum, the development of bilingual educational resources, and the introduction of innovative teaching methods, aimed at cultivating localized technical and skilled professionals.

The second strategy is to continue to explore regional alliances for the internationalization of vocational education. Chinese vocational schools are harnessing the power of alliance effects by amalgamating premier

vocational education resources from both domestic and international sources. They are engaging in international collaborations and exchanges through multifaceted channels and sectors, forming international alliances, conducting international forums, and participating in diverse partnerships to enhance the global standing and competencies of vocational education.^[15]

The World Association of Technical and Vocational Education, in collaboration with various other global partnerships such as the Sino-African Vocational Education Cooperation Alliance, the Asia-Europe Vocational Education Alliance, and the Belt and Road Vocational Education Alliance, has been successfully established, and it is operational now. These alliances, which also incorporate the China-Central and Eastern European Countries Vocational School Industry-Education Alliance and the China-ASEAN Transportation Vocational Education Alliance, provide a broad and growing platform for exchanges and cooperation between vocational schools in China and those in other countries.^[16] This network is promoting the improvement of vocational education through collaborative learning and joint initiatives. The World Alliance for Vocational Education and Training is assembling representatives from universities, enterprises, and industry organizations worldwide. The preliminary selection of members includes 93 universities from 32 countries, including China, Egypt, Ireland, Australia, Germany, and France, as well as 28 global enterprises and 12 industry organizations.

Jiangsu Province has established numerous partnerships with Sino-foreign educational organizations from several countries such as the United Kingdom, Canada, the United States, and Germany. The objective of these alliances is to improve integration mechanisms, create specialized academic platforms, and launch branded project activities. Guangdong Province has utilized initiatives such as the South China Belt and Road Rail Transit Integrated Industry-Education Model Alliance and the South China Belt and Road Vocational Education Water Conservancy and Electric Power Alliance to facilitate events. These events have included the China-ASEAN Education Exchange Week Water Conservancy and Electric Power Skills International Competition and the Guangzhou-Uzbekistan Vocational Education International Innovation Cooperation Exchange Meeting. The objective of these initiatives is to strengthen international partnerships and exchanges in vocational education.

Heilongjiang Province is strengthening bilateral interactions and collaborative exchanges between vocational education in Northeast Asia and the China-Mongolia-Russia Economic Corridor. Supported by the Belt and Road Vocational Education Alliance, which

covers three provinces and one area in Northeast China, ten leading vocational institutions are implementing international education programs at a high level across multiple sectors, including digital economy, bioeconomy, ice and snow economy, and creative design.

The third strategy is to promote innovative global vocational education exchanges and cooperation. Topics that are currently of global significance and concern are "Empowerment Through Digitization and Transformation Upgrading", "Green Skills for Sustainable Development", "Shared Destiny with Cooperative and Mutually Beneficial Outcome", "Harmonizing General and Vocational Education for Lifelong Learning", "Reducing Poverty Through Skills-Based Interventions and Promoting Equity", "Integrating Industry with Education for Innovative Development", and "Advancements in Scientific and Engineering Education".^[17]

In light of the significant global changes over the past century and the challenges brought about by the COVID-19 pandemic, China has successfully inaugurated and hosted the first-ever World Conference on Vocational Education. At the same time, it facilitated the first World Industrial-Educational Integration Online Expo and the World Skills Competition for Vocational Colleges. Through these events, China promoted the establishment of the World Vocational Education Development Alliance and launched the International Vocational Education Award. These initiatives, which include conferences, alliances, competitions, and exhibitions, have established a new paradigm for international vocational education exchange and collaboration. By spearheading these initiatives, China is addressing international concerns and promoting mutual advancement and learning in vocational education, both within the country and globally.^[18]

The *White Paper on the Development of Vocational Education in China* presents China's advancements in vocational education and offers a Chinese approach to enhancing the quality of international vocational education. It aims to foster worldwide mutual development and contribute Chinese insights.

The First World Skills Competition for Vocational Colleges was presented on an unparalleled scale, attracting 988 contenders from 293 institutions across 107 nations, from continents including Asia, Africa, Europe, South America, and North America. It featured both local and international teams participating in a hybrid format of online and offline events. A total of 179 colleges from 33 countries and regions received awards, with 37 colleges from eight nations—Bangladesh, Uganda, the Congo (Kinshasa), South Africa, Russia, Indonesia, Egypt, and

China—earning a total of 69 gold medals. Of these, Chinese colleges won 51 gold medals, representing 28 colleges. This premier competition has established a global stage for professional schools and students from around the world, including China, to foster friendships, exchange expertise, and display their talents.

CHINA'S STRATEGIC APPROACHES TO INTERNATIONALIZING VOCATIONAL EDUCATION TO BECOME A LEADING COUNTRY IN EDUCATION

The internationalization of vocational education in China began with the analysis and adoption of educational models and advanced experiences from developed countries such as Germany, the United Kingdom, and Australia. China then developed a practical approach suited to its developmental needs, moving from a primary focus on "introduction" to progressively "reaching out" internationally. In recent years, China has disseminated its expertise, experiences, and solutions in vocational education, showcasing a positive representation of modern China.^[19] Empirical studies indicate that the progress of vocational education in China ought to take an international approach, actively promoting reform and development through open collaboration. The endeavor to transform China into a leading educational powerhouse requires the internationalization of vocational education, which calls for improved coordination of both "inbound" and "outbound" strategies. This approach will effectively utilize world-class educational resources and innovation to reinforce China's role as a significant and influential player on the global education stage.^[20]

Strengthening strategic Planning at the national level to enhance China's competitive edge in the international marketplace

Establishing a strong education system is essential for boosting China's capabilities and addressing its shortcomings in a global context. It demonstrates China's trust in its educational approach, strengthens its distinctive educational attributes, and advances the modernization of its educational development model.^[21] Therefore, countries need to formulate well-defined strategies and policies that are consistent with their national development goals and the requirements of the global labor market. It is crucial to actively promote international dialogue and collaboration, encourage harmonization and benchmarking of vocational education standards, integrate strategies into international accreditation and recognition systems, and greatly enhance the international integration of vocational education.^[22]

First, policy support and resource allocation should be

ensured. Countries should formulate succinct strategies and policies aimed at the internationalization of vocational education, clearly outlining their objectives and priorities in this field. In light of the demands of the global labor market and the developmental needs of the country, participation by educational institutions in international projects should be promoted. The creation of funds for international cooperation, the establishment of incentive mechanisms, and the provision of support for the internationalization of vocational education through information sharing, financial investments, resource allocation, and infrastructural advancements should also be promoted.^[23]

Second, international interactions and collaborations should be enhanced and strengthened. Countries can foster stable and enduring collaborative relationships by signing cooperation agreements and memorandums of understanding, participating in student and teacher exchanges, conducting joint research initiatives, and formulating mutual standards and guidelines. The goal is to create a cooperative framework and mechanisms that actively enhance partnerships with educational institutions and organizations abroad, ensuring the quality and effectiveness of collaborative and exchange projects. This will ultimately elevate the standard and international competitiveness of national vocational education.^[2]

Third, China should integrate global certification and recognition systems. The government can promote and support the involvement of vocational schools in global certification and accreditation systems. This will guarantee that China's vocational education meets international standards, enhancing its global recognition and prestige.^[24] Supportive and favorable policies and measures can be developed to assist organizations involved in international certifications and accreditations.

The development of cooperation through a project-based approach to create high-quality products for the internationalization of vocational education

Working collaboratively on project-based tasks will organize content around specific projects or assignments, each guided by real-world problems and challenges. This approach allows participants to improve their problem-solving abilities through practical experience. In China, international collaboration in vocational education typically involves three forms: cooperative programs, colleges, and universities. The primary focus is on fostering project collaboration that aligns closely with the real-world development needs of internationalizing vocational education. This approach also effectively meets the Construction Requirements in

the Fourteenth Five-Year Plan for implementing the national education enhancement project. Thus, it is crucial to enhance the advantages of project-based collaboration across different sectors such as cross-border initiatives, international student exchanges, certifications aligning with international standards, and cooperative international research.

First, cross-border project collaboration should be developed. Vocational schools can engage in partnerships with foreign institutions or relevant stakeholders to collaboratively develop projects, courses, teaching materials, and pedagogical approaches. They may select flagship projects such as skills training programs for multinational corporations or initiatives that involve setting up overseas branches. Such collaborations will facilitate the sharing and exchange of international educational resources, enhance the quality of education, and strengthen international competitiveness.

Second, international student exchange programs should be improved. Developing vocational education exchange programs in collaboration with foreign schools, companies, or institutions can enhance student participation in overseas internships, exchanges, and learning activities. These opportunities will allow students to engage in international internships or short-term training programs, thereby acquiring cross-cultural experience and a global perspective, which ultimately enhances their international competitiveness.^[25]

Third, China should engage in projects certified by international standards. Vocational schools can achieve international accreditation, enhancing their curricula and teaching methods to meet international standards and providing students with competitively superior educational content. Moreover, aligning vocational education with international benchmarks can cultivate international partnerships by engaging in initiatives that certify international standards.^[26]

Fourth, international collaborative research programs should be explored. Vocational schools have the opportunity to partner with international research entities, educational institutions, and corporations to undertake joint research initiatives. Such collaborations will facilitate the exploration and resolution of issues prevalent in vocational education, encourage the sharing and exchange of educational resources, and drive innovation and reform. Moreover, these partnerships will enhance the quality of education and elevate its global competitiveness.

Digitized empowerment for development: facilitating steady progress towards Chinese-style modernization

Modernization in a way that is uniquely Chinese should

not simply replicate Western patterns. It is crucial to understand the principles of universal modernization and comply with international standards. Furthermore, it is essential to maximize the effects of digital technology on economic growth, promote international cooperation and exchange in vocational education, transcend the boundaries of time and space, enable worldwide mutual learning and the adoption of vocational education resources and standards, and cultivate professionals who possess digital competencies and a global perspective. Digitizing vocational education and promoting its internationalization can positively influence the following aspects.

First, strive to provide platforms for intercultural communication. Digital tools and online platforms can be utilized by vocational schools to enhance cross-border communication and collaboration effectively. By jointly developing courses, teaching materials, and resources, these institutions can exchange educational resources and experiences to enrich the learning content and enhance the quality of education for students. Through online courses, virtual practical environments, and other digital methodologies, students can interact with peers from various countries, collaborate on research projects and teaching initiatives, and gain insights into professional development and practical experiences from different cultural contexts. This will foster essential skills in cross-cultural communication and collaboration.

Second, the professional skills of both faculty members and students should be enhanced. Digital technology empowers educators to delve into and understand diverse educational models and methodologies globally, thereby broadening their educational perspectives and enhancing their teaching skills and professional expertise through international exchanges and training. In addition, it will help students to gain hands-on experience and professional competencies, augmenting their project management, creative thinking, and problem-solving skills through online collaboration tools and virtual project experiences. Such a robust foundation will facilitate their career advancement.^[27]

Third, the aim should be to address the global job market. The internationalization of vocational education, enhanced by digital empowerment, allows students to access information and opportunities within the global job market seamlessly through online recruitment platforms and international vocational exchange activities. In addition, they receive the necessary support and guidance to strengthen their competitiveness in the international employment arena.^[28]

Internationalizing vocational education will effectively promote Chinese culture and deepen the exchange and

cooperation between China and other countries. This initiative holds immense practical significance as it updates thinking, enhances international reputation and influence, breaks down educational barriers, boosts international competitiveness, and supports the upgrading of the industrial structure.^[29] Following years of empirical research, the internationalization of vocational education has greatly enhanced China's ties with the international community, notably through the collaborative development of the Belt and Road Initiative. This initiative offers training and employment opportunities in vocational education to students around the world.

Moving forward, the internationalization of vocational education is poised to significantly enhance China's educational framework. It will also serve as an essential channel for increasing employment opportunities and elevating living standards in countries involved in the Belt and Road Initiative. Furthermore, it will promote mutual understanding among nations and create a new platform for international economic, trade cooperation, and cultural interactions with other countries.

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Author contributions

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Conflict of interest

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