

The Development Path and Adaptation of China's Higher Vocational Education Towards Southeast Asia

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ABSTRACT

Since the formalization of the China-ASEAN "strategic partnership" and the launch of the Belt and Road Initiative (BRI), China has emerged as ASEAN's largest trading partner, exerting growing economic influence across Southeast Asia. This geopolitical shift has catalyzed a surge in educational exchanges, with China's higher vocational education (HVE) systems demonstrating heightened appeal to Southeast Asian students. This trend is driven by a convergence of factors: while Southeast Asia's higher education sectors grapple with systemic challenges—including mismatches between talent cultivation and industrial demands, acute shortages of qualified instructors, and deficits in practical pedagogical capacities—the institutional frameworks of the BRI and China-ASEAN cooperation platforms provide critical enabling environments for cross-border educational collaboration. To leverage these synergies, Chinese higher education institutions are adopting diversified strategies: establishing foundational assistance programs (e.g., equipment donations, joint curriculum development), fostering bilateral faculty exchange mechanisms, designing localized student recruitment initiatives, and creating overseas internship pipelines. These measures not only address vocational education gaps in Southeast Asia but also enhance China's soft power projection within the region.

Keyword-Higher vocational education; Southeast Asia; The Belt and Road; internationalization

INTRODUCTION

In the context of globalization, China's accession to the WTO and proactive engagement in the Belt and Road Initiative (BRI) have catalyzed multifaceted international cooperation. By integrating global resources and exporting domestic development models, China seeks to achieve comprehensive progress in economic, technological, and educational domains. As a pivotal subsector of higher education, vocational and technical education (VTE) is increasingly tasked with fostering globally competitive technical talents.

Under the guidance of international vision, China has joined the WTO, put forward and practiced the strategy of "One Belt and One Road", actively explored channels of cooperation with other countries, brought in advanced foreign experience, and sent out good domestic products, in order to seek comprehensive prosperity and development in the fields of economy, science and technology, education and so on. Higher vocational education is an important component of higher education in China. It has become inevitable to run a school to face the world and move towards globalization.

Current Status of Higher Education Collaboration Between China and Southeast Asia

A. Diversification of Collaboration Modalities and Expansion of Scale

From the perspective of talent mobility, statistical data indicates a significant eastward flow of tertiary-level students between China and ASEAN. Specifically, by 2022, the number of Southeast Asian students enrolled in Chinese institutions reached 317,200 individuals, accounting for approximately two-thirds of China's total

international student population for that year. Concurrently, outbound mobility from China exhibited robust growth, with 66,100 Chinese students studying in BRI-participating countries—a 15.7% year-on-year increase compared to 2021 figures.

In the realm of institutional collaboration, the number of Sino-foreign cooperative education programs in China exceeded 300 by June 2023. Notably, institutions from Singapore, Malaysia, and Indonesia demonstrated active engagement, with participation spanning 26 provincial-level administrative regions across China. These initiatives span vocational training centers, joint-degree programs, and industry-aligned curricula development projects.

Regarding cross-border institutional partnerships, China-led vocational education entities have been strategically deployed in Southeast Asia. Notable examples include technical colleges established in Cambodia and Myanmar, which integrate Chinese pedagogical models with localized industrial standards. In terms of foreign aid provision, China has adopted a multi-dimensional approach characterized by:

1. Teacher Exchange Programs: Deploying skilled educators to deliver vocational training workshops
2. Infrastructure Development: Constructing educational facilities in underserved regions
3. Material Assistance: Donating cutting-edge vocational training equipment

These efforts align with ASEAN's "Skills for Digital Transformation" initiative and China's "Vocational Education Quality Improvement Plan," creating synergies for regional skill ecosystem development.

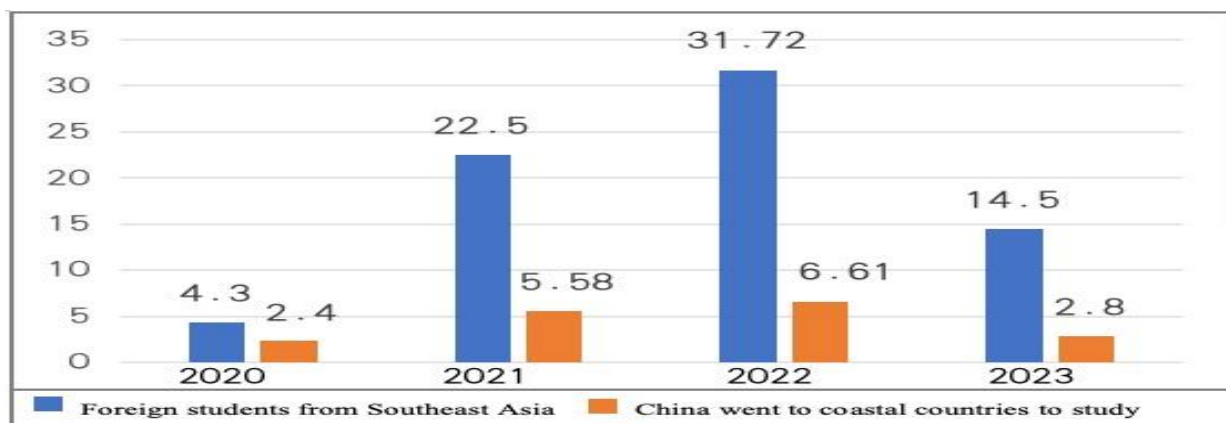


Figure 1 : Statistics of the number of international students in China and Southeast Asia (unit: 10 000)

Data source: The author collated data based on the official websites of provincial education departments and relevant literature.

Table 1 Statistics of Chinese-foreign cooperative-run schools and projects in each province

province	Cooperative education institutions	Cooperative education projects	province	Cooperative education institutions	Cooperative education projects
Beijing	9	100	Hunan	1	66
Shanghai	17	144	Shaanxi	6	29
Tianjin	6	42	Shanxi	2	20
Chongqing	4	47	Heilongjiang	2	59
Jiangsu	18	310	Liaoning	12	38
Zhejiang	15	144	Ji Lin	4	79
Guangdong	3	74	Guangxi	0	30
Hainan	1	24	Yunnan	0	32
Fujian	5	28	Guizhou	2	22
Shandong	13	139	Gansu	0	4
Jiangxi	0	53	Inner Mongolia	0	21
Sichuan	6	52	Xinjiang	0	12
Anhui	1	45	Ningxia	0	0
Hebei	3	82	Xizang	0	0
Henan	5	121	Qinghai	0	0
Hubei	6	112			

Data source: Information Platform for Supervision of Chinese-Foreign Cooperation in Running Schools, Ministry of Education, PRC.

The strategic advancement of transnational collaboration under the Belt and Road Initiative (BRI) necessitates the cultivation of high-caliber professionals possessing trilingual competencies (Southeast Asian languages,

Chinese, and English) coupled with cross-cultural adaptability. This imperative aligns with China's policy framework for building human capital pipelines that address regional development asymmetries.

Institutional responses to this demand manifest through three strategic dimensions:

1. **Curriculum Innovation:** Chinese universities have established dual-track language programs integrating technical disciplines with linguistic training, exemplified by the "Chinese + Engineering" pedagogical model.
2. **Regional Case Studies:** Empirical evidence from Thailand reveals that enrollment rates in Chinese-language courses exceed those of English courses by 38% within higher education institutions (ASEAN Education Statistics, 2023).
3. **The proliferation of Confucius Institutes and language resource centers across ASEAN member states** reflects institutionalized efforts in cultural diplomacy.

This tripartite strategy establishes a symbiotic relationship between language acquisition and vocational expertise, effectively addressing the BRI's demand for professionals capable of operating within multilingual sociocultural contexts. The ascendancy of Chinese language education in Southeast Asia synergizes with China's soft power projection strategy, operationalized through educational infrastructure deployment and curriculum standardization initiatives.

Institutional Mechanisms for Collaborative Governance

The Belt and Road Education Community (BREC) represents a multi-tiered governance architecture characterized by three-dimensional synergy:

1. **Regional Coordination:** Anchored in the China-ASEAN strategic partnership, this dimension emphasizes policy alignment through mechanisms such as the ASEAN-China Education Ministers Meetings and the Lancang-Mekong Cooperation framework.
2. **Institutional Coordination:** China has established 26 provincial-level Sino-foreign cooperative education pilot zones to facilitate cross-border academic mobility and joint degree programs.
3. **Inter-institutional Coordination:** Institutionalized through platforms like the New Silk Road University Alliance (NSRU), which aggregates 148 member institutions from 38 countries, this dimension promotes disciplinary collaboration.

Recent advancements in institutional design encompass normative innovations exemplified by China's leadership in drafting the APEC Education Strategy 2030, which harmonizes cross-border credential recognition processes with the United Nations Educational, Scientific and Cultural Organization (UNESCO) Education 2030 Agenda. This strategic alignment establishes an international benchmark for global educational standards while reinforcing China's role in shaping regional educational governance frameworks.

Rulemaking Contributions: Active participation in formulating the Washington Accord and Seoul Accord has enhanced mutual recognition of engineering and technical qualifications across jurisdictions.

1. **To operationalize these frameworks,** China has developed a dual-track engagement model:
2. **Top-down Diplomatic Channels:** Utilizing high-level dialogues like the Belt and Road Forum for International Cooperation to negotiate intergovernmental agreements
3. **Bottom-up People-to-People Exchanges:** Mobilizing Confucius Institutes and industry-academia consortia to foster grassroots connectivity

This governance architecture creates a self-reinforcing feedback loop: institutionalized cooperation platforms generate empirical data on cross-border education flows, which in turn inform policy adjustments and resource allocation.

The main problems of higher education cooperation between China and Southeast Asia

A. The cooperation environment is full of complexity and uncertainty

Although China and Southeast Asia have put forward a common development vision on the cooperation in the field of higher education, there are still big differences in language, culture, ethnic religion, etc., so the setting of common goals is full of complexity. In particular, when it comes to religion, only 28.6% of the 65 countries along the Belt and Road share the same official religion, and prominent religious differences will create important cultural risks.

At the same time, a unified language, as a basic communication tool for academic mobility, is also very important for higher education cooperation. The main language of communication can determine the overall direction of talent mobility, especially for those countries with small languages, a compromise method is needed to achieve the purpose of communicating through universally recognized international languages while spreading their own culture. There are 53 official languages in Southeast Asia, and these languages belong to nine different language families. In addition to English, which is the common language of the countries covered by the "Belt and Road" Initiative, the languages of other countries are called minority languages. At present, the "minority language" talents for the "Belt and Road" construction in China are very scarce and the foundation is weak, and there are problems such as inadequate professional Settings and advanced teaching concepts, which are difficult to meet the practical needs of large-scale projects and enterprises of the "Belt and Road", which greatly limits the implementation of the "Belt and Road" initiative.

In addition to the complexity of language, culture and ethnic religion, peace and stability between countries and regions is also a prerequisite for development. However, some countries along the Belt and Road are still faced with uncertainties such as political imbalance, social unrest and constant conflicts. Therefore, in such a cooperative environment, the dual challenges of domestic and foreign troubles have undoubtedly increased the difficulty of developing cooperation in higher education between China and Southeast Asia.

B. The system design shows the tendency of homogeneity

China's commitment to advancing the Belt and Road Education Action (BREA) reflects a strategic imperative to strengthen regional collaboration in higher education. However, effective implementation of such cooperation necessitates the establishment and refinement of institutional frameworks, including mutually agreed policies, regulatory guidelines, contractual commitments, and formalized agreements between participating nations. These frameworks serve as essential safeguards to facilitate bilateral exchanges and partnerships. While China has signed diverse cooperation agreements with BRI partner countries, persistent disparities persist in both regional and developmental dimensions. For instance, beyond ASEAN nations, educational exchanges—including faculty-student mobility and research collaboration—reveal substantial gaps between China and South Asian countries.

Compounding these challenges are inadequate communication channels among participating nations and limited comprehension of the BREA's operational tenets. Such deficiencies may engender cautious or passive attitudes among stakeholders, thereby stifling proactive collaboration. Equally critical are the overlooked discrepancies in pedagogical standards, faculty expertise, and disciplinary strengths across partner institutions. Neglecting these variations risks homogenized curricular designs that fail to accommodate diverse institutional needs, ultimately undermining the development of contextually appropriate collaborative practices. Addressing these systemic issues demands coordinated efforts, including regularized inter-institutional dialogues to align educational priorities and strengthen cross-border governance mechanisms.

C. Challenges in Ensuring Process Integrity and Outcome Quality

Quality assurance frameworks serve as critical determinants of effective cross-border higher education collaboration. While initial achievements in expanding the scale and deepening institutional engagement between China and ASEAN have been realized, systemic deficiencies persist across multiple operational dimensions. Personnel exchange programs exhibit quantitative growth through increased international student

recruitment, yet frequently neglect pedagogical quality control mechanisms, resulting in paradoxical "negative growth" where numerical expansion undermines educational value creation. This imbalance is exacerbated by dual management frameworks and divergent assessment criteria for domestic and international students, reflecting institutional fragmentation that obstructs operational excellence. Although progress has been made in establishing mutual recognition systems for academic credentials and credit transfers with partner countries, the absence of robust quality tracking mechanisms for teaching and research collaboration limits the operational efficiency of educational partnerships.

Compounding these challenges, sustainable financing emerges as a prerequisite for advancing regional cooperation, with funding shortages directly constraining the quality and efficiency of international higher education initiatives under the Belt and Road framework. The expanding scale of academic exchanges between China and Southeast Asia has intensified demands for financial resources, yet persistent deficits in research funding, outdated laboratory infrastructure, and inadequate technological equipment in partner institutions critically impede the fulfillment of education's foundational and leading roles in advancing BRI developmental objectives. These structural deficiencies—spanning quality assurance and resource allocation—highlight an urgent need for integrated policy reforms. Harmonizing pedagogical excellence with financial sustainability through mechanisms such as blockchain-based academic credential verification and transnational education bonds could transform quantitative accumulation into qualitative transformation, aligning regional collaborations with UNESCO's Education 2030 Agenda while reinforcing China's strategic positioning in global knowledge economies.

The exploration of the development path of China's higher vocational colleges in Southeast Asia

A. Carry out basic assistance to help the higher vocational and technical education in Southeast Asia to make up for its "deficiencies"

In the process of internationalization, China's higher vocational education should not only learn advanced ideas and experience from Germany, Australia, the United States and other countries, but also have a "great power spirit" and share its own experience and achievements in running schools with Southeast Asian countries, especially Cambodia, Laos, Myanmar and other countries. In view of the lack of vocational higher vocational education, we can participate in the evaluation of professional Settings, the formulation of talent training programs, curriculum development and other activities of these countries' higher vocational colleges through cooperative projects, and share relevant practices and results with each other. In view of the shortage of teaching infrastructure and equipment, vocational colleges can provide one-to-one assistance under the leadership of the government, providing scientific research equipment and building practical training rooms. Germany, for example, has provided 20 laboratories in Indian universities with complete equipment, providing much-needed new laboratories. Under the leadership of the China-Asean Center, China has also donated corresponding equipment to Myanmar, Thailand and Indonesia.

B. To carry out exchanges and cooperation in teacher training and promote the common development of higher vocational education between China and Southeast Asia

The construction of higher vocational teaching teams in Southeast Asia is currently facing significant challenges.

The traditional approach of solely relying on academically-oriented teachers does not align with the practical requirements of higher vocational education classrooms. What is needed in this field are experienced teachers who possess both theoretical knowledge and industry experience. In response to the demand for teachers in higher vocational education from Southeast Asian countries, a cooperative agreement can be reached between the two sides, where China's higher vocational colleges can send exceptional teachers and industry experts to provide targeted teacher training to these countries. It is crucial that such training reflects the distinctive characteristics of vocational education as well as the integration between industry and academia. This should encompass not only showcasing professional skills but also disseminating up-to-date industry information, sharing effective teaching techniques, and exchanging experiences in school management. Additionally, it may be beneficial to establish a "China-Southeast Asia Vocational Education Teacher Training Center" within China while setting up corresponding funding projects to attract Southeast Asian educators and administrators

specializing in vocational education for further studies.

C. Develop Southeast Asian students and absorb Southeast Asian students to study in Chinese higher vocational colleges

Whether a country can attract more foreign students indicates on the one hand the degree of openness of its educational system. Whether a country can attract more foreign students reflects, on one hand, the level of openness in its educational policy determined by its economic development, and on the other hand, the extent to which its educational resources leverage absolute or relative comparative advantages. Since establishing a "strategic partnership" with ASEAN and implementing the development strategy of the "21st Century Maritime Silk Road," China has emerged as ASEAN's largest trading partner, leading to an increasing economic influence in Southeast Asia. The local human resources market has shown a growing demand for individuals familiar with China's situation.

Chinese higher education, particularly higher vocational education, is gaining popularity among students from Southeast Asia. According to statistics up until 2023, there were 71,000 students from ASEAN countries studying in China; among them are 12,694 from Indonesia, 19,976 from Thailand, 10,031 from Vietnam, 6,918 from Laos and 6,650 from Malaysia ranking within the top fifteen countries of origin.

As more Southeast Asian students enroll in international vocational colleges and provide feedback about their experiences in China, it contributes to shaping the brand image of Chinese higher vocational education in Southeast Asia and facilitates the exportation of vocational education by Chinese institutions to this region. This holds significant and far-reaching implications for sustainable development not only for individual higher vocational colleges but also for overall higher vocational education between China and Southeast Asia.

D. Develop overseas internship programs in Southeast Asia with the combination of industry and education

The remarkable feature of higher vocational education is vocational, and the combination of production and study, construction and development of practice base are the effective ways to realize it. There are three aspects of significance for China's higher vocational education to develop overseas internship programs in Southeast Asia. First, as far as vocational colleges themselves are concerned, the establishment of overseas internship bases in Southeast Asia is conducive to expanding the international visibility of colleges and universities, improving the international competitiveness of colleges and universities, and attracting more international students. Second, for students, overseas internship bases in Southeast Asia are more acceptable in terms of distance and economic factors, and through exposure to different local customs, professional skills and business models, students can broaden their horizons. Third, by sending students to overseas internship bases in Southeast Asia, it is conducive to solving the employment problem of higher vocational graduates. The development of overseas internship bases can learn from the development concept of active contact, active expansion, standardized management, and continuous cooperation of universities in Hong Kong, as well as the implementation mode of inter-university cooperation, school-enterprise cooperation, school-place cooperation, and cooperation between universities and ngos (non-profit organizations).

CONCLUSION

This research delineates the developmental pathway of China's higher education internationalization strategy within the synergistic realms of regional economic integration and technological metamorphosis. Through the development of a tripartite analytical model encompassing policy harmonization (BRI), institutional evolution (multi-tiered governance systems), and digital innovation (blockchain-enabled academic certification), the study proposes a sustainable framework for optimizing transnational educational synergies. Empirical findings demonstrate that the strategic deployment of vocational education corridors, integrated with machine learning-driven quality assurance mechanisms, could enhance labor market adaptability. These outcomes establish a theoretical scaffold for policymakers navigating regional educational governance complexities and provide actionable insights for institutions reconciling global integration imperatives with localized

developmental priorities. Future investigations should examine the ethical ramifications of decentralized digital credentials and formulate predictive frameworks for optimizing transnational human capital pipelines within emerging economic corridors.

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