Scientific and Social Research, 2026, Volume 8, Issue 10
https://bbwpublisher.com/journal/SSR
Online ISSN: 2981-9946
Print ISSN: 2661-4332

Cultivating Local Skilled Talents for Chinese Enterprises Going Global: A Case Study of the Zhenghe Institute in Thailand

Huanxin Ji*

Changzhou University of Information Technology, Changzhou, Jiangsu, China

***Corresponding author:** Huanxin Ji, 693158403@qq.com

Copyright: © 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: Against the backdrop of the deepening Belt and Road Initiative and the accelerated going-global of Chinese enterprises, the shortage of local technical and skilled talent in Southeast Asia has become a core bottleneck constraining the sustainable overseas operation of Chinese enterprises. Taking the Zhenghe Institute in Thailand of Changzhou University of Information Technology(CZIT) as a single case, this paper systematically reviews the practice of cultivating local skilled talents in higher vocational colleges to serve Chinese enterprises going global, analyzes the pathways and outcomes of this practice in five links, namely demand alignment, segmented training, curriculum resources, faculty support, and internship and employment, and examines the realistic dilemmas in the dynamic matching between talent cultivation and enterprise needs, the depth of enterprise participation in teaching development, the localization of textbooks and mutual recognition of standards, and the sustainability of the project and the evaluation system. An optimization mechanism is proposed to build a closed loop of "enterprise demand–training supply–internship and employment–feedback optimization." The study shows that the key to higher vocational colleges serving Chinese enterprises going global lies in taking the real needs of enterprises as the starting point, segmented joint training as the carrier, and order-based employment as the outlet, so as to form a sustainable education model in which "teaching follows industry and schools, and enterprises go hand in hand."

Keywords: Chinese enterprises going global; Local skilled talents; Industry-education integration; Zhenghe Institute

Online publication: November 25, 2026

1. Introduction

Against the backdrop of the deepening Belt and Road Initiative and the accelerating global layout of Chinese enterprises, the supply gap of local technical and skilled talents in Southeast Asia has become a core bottleneck constraining the sustainable overseas operation of Chinese enterprises. According to statistics from the Ministry of Commerce of China, China's non-financial direct investment in countries along the

Belt and Road reached RMB 135.85 billion in the first half of 2025, an increase of 22% year on year. As a core economy in Southeast Asia, Thailand has a solid foundation for the development of the electronics and automobile industries; Chinese enterprises such as BYD, Avary Holding, and Aohong Electronics have successively invested in Thailand, and the market demand for local skilled talents who are familiar with the management models of Chinese enterprises and proficient in Chinese technical standards has risen sharply. However, the local vocational education system in Thailand can hardly match the technical standards and employment needs of Chinese enterprises in terms of specialty provision, curriculum content, and practical training conditions, giving rise to prominent problems of "difficulty in recruiting workers" and "shortage of skilled workers."

Existing academic achievements on vocational education serving Chinese enterprises going global mainly focus on three research directions. The first is the overseas employment of Chinese enterprises and localized talent demand. Existing research points out that localized development is an inevitable choice for overseas Chinese enterprises to achieve sustainable operation, that the insufficient supply of high-quality localized technical and skilled talents is the core challenge they face, and that "vocational education going global" is an important pathway to solve this problem [1]. The second is the models and mechanisms of overseas school operation in vocational education. Research taking Jiangsu Province as the object has proposed a long-term development mechanism under the "2+3+4+5+N" system framework, with collaborative governance, standard leadership, quality supervision, and cultural integration as the core dimensions [2]; research on the brand construction of the "Zhenghe Institute" points out that this school-running model currently faces problems such as blurred boundaries in multi-stakeholder collaborative governance, insufficient localization of teaching resources, and a low match between enterprise employment needs and the talent cultivation cycle [4]. The third is the teaching practice of localized talent cultivation. Relevant studies have proposed the training model of "minor language + English + skills" and optimization measures for integrating teaching concepts with the construction of local culture [3]. Overall, existing research mostly focuses on macro-level policy design and the construction of school-running models, while research on the closed-loop talent cultivation mechanism of "serving Chinese enterprises going global" at the micro level remains clearly insufficient.

This paper takes the Zhenghe Institute in Thailand of Changzhou University of Information Technology as a single case, systematically reviews the practice of cultivating local skilled talents in higher vocational colleges to serve Chinese enterprises going global, analyzes the pathways, outcomes, and realistic dilemmas of this practice, and then proposes targeted optimization mechanisms. The data sources of this study include the university's internal documents on international cooperation and the enrolment registers of Thai program students by year. The university's cooperation with Thailand began in 2014; in 2024, the Zhenghe Institute in Thailand was approved for construction by the Department of Education of Jiangsu Province. The project has established in-depth cooperative relations with Chinese enterprises such as BYD, and its "order-based" cultivation practice is highly typical.

2. Practices of cultivating local skilled talents serving Chinese enterprises going global

2.1. Case background: Chinese enterprises going global to Thailand and the construction of the Zhenghe Institute

Thailand is the third-largest economy in ASEAN, and automobile manufacturing and electronics and

electrical appliances are its two core pillar industries. In March 2023, BYD broke ground on its first overseas passenger vehicle production base in Rayong Province, Thailand. At the same time, electronics and automobile parts enterprises such as Avary Holding, Aohong Electronics, and Jiangsu Dingzhi have successively invested and built factories in Thailand, giving rise to a large-scale demand for local technical and skilled talents who are familiar with the management models of Chinese enterprises and proficient in Chinese technical standards.

CZIT has carried out educational exchange and cooperation with Thailand since 2014. In December 2021, the university signed segmented joint training agreements with Chonburi Technical College and Udon Thani Vocational College, marking the official transition of its cooperation with Thailand from the short-term exchange stage to the diploma joint training stage. In June 2023, the university signed an agreement with Changzhou BYD to jointly build an off-campus practical training base for international students, and "order-based" talent cultivation was officially launched. In 2024, the university's overseas branch in Thailand was approved for construction as a "Zhenghe Institute" by the Department of Education of Jiangsu Province. In 2025, the number of the university's partner institutions in Thailand expanded to 22, and a total of 7 full-time teachers were dispatched to Thailand and Malaysia for teaching. The co-construction entities of the Zhenghe Institute in Thailand include Avary Holding, BYD Auto, Rajamangala University of Technology (Thailand), Detudom Technical College, Chonburi Technical College, and Udon Thani Vocational College, forming a school-running pattern of tripartite collaboration among "Chinese institutions + overseas institutions + Chinese enterprises."

2.2. Demand alignment: School–enterprise co-determination of training standards

The primary step in serving Chinese enterprises going global is to accurately grasp the employment needs of enterprises. CZIT has achieved precise demand alignment through three pathways. First, it signed strategic cooperation agreements with leading enterprises to embed enterprise needs into talent cultivation plans. The university signed an agreement with Changzhou BYD Automobile Co., Ltd. to jointly build an off-campus practical training base for international students, agreeing to jointly develop curriculum systems and teaching content and to co-construct practical training bases and teaching teams. BYD participates in the formulation of talent cultivation plans for majors such as new energy vehicle technology, puts forward post-competence requirements based on its actual production, and the university optimizes its curriculum accordingly. Second, it connected with government departments and industry associations to build a database of "going-global" enterprises. The university cooperates with the Changzhou Association for Foreign Investment and Economic Cooperation, relying on the normalized communication mechanism to keep abreast of the development trends and employment needs of Changzhou enterprises going to Thailand. Third, it established strategic cooperative relations with overseas Chinese enterprises. As of 2025, the university has established strategic cooperative relations with more than 20 overseas Chinese enterprises, covering automobile manufacturing, electronic information, cross-border e-commerce, and other industrial fields. The university regularly conducts enterprise visits to survey production technologies, process flows, and quality standards, and transforms the real needs of enterprises into talent cultivation objectives and curriculum content.

2.3. Training model: Segmented joint training

At the level of the training model, relying on the Sino-Thai framework for cooperative school running,

the university has established two types of segmented joint training models, namely "1+2" and "1.5+1.5." Among them, the "1+2" model is offered in four majors, namely software technology, mechanical design and manufacturing, e-commerce, and modern logistics management; under this model, students complete basic courses and language courses at the Thai partner institution in their first academic year, and then come to China for professional course study and practical training in the second and third academic years, upon graduation obtaining diplomas jointly awarded by the partner institutions of both China and Thailand. The "1.5+1.5" model is offered in two majors, namely new energy vehicle technology and digital media art design; students complete their coursework in Thailand in the first 1.5 academic years and then move to China to complete the remaining training in the latter 1.5 academic years, also obtaining dual diplomas from the two institutions upon graduation.

The advantages of the segmented training model can be summarized in three aspects. First, students can complete language courses and basic courses in their home country, effectively reducing the adaptation difficulties caused by studying abroad directly. Second, in the subsequent training stage, students receive systematic professional training and practical training in China, which helps them gain in-depth exposure to the advanced technologies and management models of Chinese enterprises. Third, the dual diplomas can effectively enhance the core competitiveness of graduates in the Thai job market. In teaching implementation, the university has made localized adjustments according to the characteristics of Thai students. For example, when the School of Digital Creativity offered the online course Digital Photography and Image Production to Thai partner institutions, it integrated AIGC technology and developed "self-compiled vocabulary textbooks" to help students understand professional terminology. The new energy vehicle technology major, relying on BYD's technical resources, transforms real production cases and maintenance work orders of enterprises into teaching projects.

2.4. Curriculum resources and faculty support

Curriculum and teaching resources are the core support for cultivating local skilled talents. In terms of textbook and curriculum development, the university has compiled more than 40 bilingual textbooks and developed nearly 30 bilingual courses, built 2 provincial-level internationalized brand majors and 5 provincial-level all-English online boutique courses; at the national level, it has published 28 national planning textbooks, built 3 national professional teaching resource libraries, and developed 8 national online open courses. In terms of teaching standard output, the university has taken the lead in formulating 3 national higher vocational professional teaching standards, 1 national curriculum standard for information technology in higher vocational schools, and the "1+X certificate" electronic assembly vocational skill level standard, and 20 professional curriculum standards have been adopted and applied by partner institutions such as Chonburi Technical College in Thailand. Since 2024, the university and Thai partner institutions have jointly built and shared 6 professional standards and 68 curriculum standards, and have exported nearly 90 shared teaching standards and more than 30 online courses to Thailand, Malaysia, and other countries in total. In terms of platform construction, the university has developed professional teaching resource libraries, VR/AR practical training projects, online open courses, and new-form textbooks adapted to the learning needs of overseas students, and has built 1 cross-border professional teaching resource sharing platform and 2 international joint experimental and practical training centers. The "trinity" digital teaching environment composed of smart classrooms, smart teaching platforms, and smart practical training platforms can provide

Thai students with ubiquitous learning conditions that transcend the constraints of time and space. In terms of faculty support, the university has built a "dual-qualification" teaching team with a mix of Chinese and foreign teachers and cross-disciplinary school-enterprise cooperation, and full-time teachers with overseas experience of half a year or more account for over 25%. In 2025, 7 full-time teachers were dispatched to Thailand and Malaysia for overseas teaching; meanwhile, local Thai enterprise technicians and teachers from partner institutions are employed as part-time teachers, forming a diversified faculty structure of "Chinese teachers + Thai teachers + enterprise mentors."

3. Training outcomes

3.1. Training scale and structure

After more than a decade of development, the university's cooperative school running with Thailand has taken shape on a certain scale. As of September 2026, the number of Thai international students enrolled through the Sino-Thai segmented joint training program has approached 300. Judging from the enrolment statistics of each year, the student source scale of the Thailand cooperation program has shown a steady growth trend: 26 students were enrolled in 2022, 21 in 2023, 57 in 2024, 53 in 2025, and the enrolment in 2026 has exceeded 110. In terms of specialty coverage, the program now offers 6 joint training majors, namely software technology, mechanical design and manufacturing, e-commerce, modern logistics management, new energy vehicle technology, and digital media art design, covering professional categories such as electronic information, intelligent manufacturing, finance, commerce and trade, and culture and art. The number of partner institutions has expanded from 2 at the initial stage of construction to 22, and the school-running network covers Chonburi, Udon Thani, Samut Sakhon, and other provincial-level administrative regions of Thailand.

3.2. Employment destinations and training quality

According to the statistics on the employment destinations of the first cohort of Thai graduates, 15 of the 26 graduates were employed, accounting for 57.7%, of whom 10 joined BYD Automobile (Thailand); 11 chose to pursue further studies, accounting for 42.3%. Judging from the destinations of subsequent cohorts, a total of 47 graduates from the first and second cohorts went to BYD for internship and employment; all 21 graduates of the second batch entered BYD's Thailand factory; and 55 graduates of the third cohort went to BYD, Aohong Electronics, Jiangsu Dingzhi, and other enterprises for employment and internship. The satisfaction rate of employers with the university's graduates exceeds 95%.

At present, the Thailand cooperation program has cultivated and reserved nearly 100 management-type and technical-type talents for enterprises such as BYD and Aohong, effectively alleviating the shortage of skilled talents in the Thailand factories of Chinese enterprises. Some graduates have chosen to enter local higher education institutions in Thailand for further studies, indicating that the Sino-Thai segmented joint training program not only builds a smooth employment channel for students, but also provides a higher-level growth platform for their career development. The training quality of the Sino-Thai dual diplomas has been officially recognized by higher education institutions in Thailand.

3.3. Skills competitions and social impact

In terms of skills competitions, Thai international students have won nearly 40 awards in various vocational

skill competitions at home and abroad, of which nearly 10 were won in the World Vocational College Skills Competition, covering tracks such as electronics and information and mechanical design and manufacturing. In terms of social services, relying on the platforms of the "Zhenghe Institute" and overseas branches, the university has carried out skill training for more than 6,000 person-times in South Africa, Malaysia, Thailand, and other places, and has launched special training programs such as the "Thai Language Training for Senior Executives of Changzhou Enterprises Developing in Thailand." In terms of brand influence, the school-running experience of the Zhenghe Institute in Thailand has been successfully replicated to the "Zhenghe Institute" in the field of network security in Malaysia; the university currently co-builds 3 overseas branches, of which 2 have been approved at the provincial level of Jiangsu; the program has been selected into the top 50 higher vocational colleges in China in terms of international influence for two consecutive years, and the university has been awarded the title of Advanced Collective for International Students Education in Jiangsu Province 4 times.

4. Optimization pathways and mechanism construction

4.1. Establishing a demand-oriented dynamic adjustment mechanism

To address the problem of insufficient dynamic adaptation between talent cultivation and enterprise needs, a dynamic adjustment mechanism for training plans oriented to enterprise needs should be constructed. First, relying on the Changzhou Municipal Commerce Department, the Association for Foreign Investment and Economic Cooperation, and the network of overseas Chinese enterprises, a database of "going-global" enterprises and a post-competence map should be built, with regular updates of enterprise employment scale, post demand, technical standards, and competence requirements, so as to provide a decision-making basis for college specialty provision and enrolment plan formulation. Second, a modular curriculum system of "general foundation + direction customization" should be implemented. In the early stage of the curriculum, general basic courses and professional core courses should be the main body to ensure that students master solid basic vocational skills; in the later stage, differentiated direction modules should be set according to the specific needs of enterprises, and students can choose the direction courses of corresponding cooperative enterprises under the guidance of tutors, implementing the curriculum design concept of "broad foundation, flexible modules." Third, an annual docking mechanism between enterprise needs and training plans should be established, with a school-enterprise cooperation council held regularly every year, in which enterprises, Chinese institutions, and Thai partner institutions jointly evaluate training effects, study demand changes, and dynamically adjust specialty directions and enrolment scale.

4.2. Promoting In-depth enterprise participation in teaching development

To address the realistic problem of insufficient depth of enterprise participation in teaching development, efforts should be made from the two aspects of mechanism design and benefit distribution to promote the transformation of the enterprise role from "employment receiver" to "training co-builder." First, implement the agreement provisions and build a rigid constraint mechanism for enterprise participation in teaching development. The clause of "jointly developing curriculum systems and teaching content" in enterprise cooperation agreements should be concretized, clarifying the course list, personnel input, time nodes, and assessment standards for enterprise participation. An "enterprise course development fund" can be set up, jointly funded by cooperative enterprises and the university, to support enterprise technicians in

participating in textbook compilation, curriculum design, and practical training guidance. Second, promote the transformation of real enterprise projects into teaching resources. Drawing on the university's own practical experience, front-line materials such as enterprise production cases, technical documents, and maintenance work orders should be transformed into teaching projects and "living textbooks," so as to ensure that teaching content keeps pace with the actual production needs of enterprises. Third, improve the benefit distribution and incentive guarantee mechanism. For cooperative enterprises that participate deeply in teaching development, priority rights should be granted in graduate recommendation, technology R&D cooperation, and employee training services; for in-university teachers participating in enterprise course development, policy support should be given in performance assessment, professional title evaluation, and teaching achievement recognition.

4.3. Improving textbook adaptation and standard mutual recognition

To address the tension between textbook localization adaptation and standard mutual recognition, coordinated efforts should be made in the two aspects of language scheme optimization and standard system construction. In terms of the language scheme, a collaborative implementation path of "Chinese + vocational skills" and all-English teaching should be constructed in layers: professional core courses can retain the all-English teaching model to ensure teaching efficiency, but self-compiled Chinese-English bilingual vocabulary textbooks and professional terminology handbooks should be developed as supporting materials to help students establish the corresponding relationship between English professional terminology and Chinese expressions; cultural courses and extended courses can gradually increase the proportion of Chinese-medium teaching, relying on activities such as the "Chinese Bridge" project and intangible cultural heritage experience to improve students' Chinese application ability and cross-cultural literacy. In terms of standard mutual recognition, substantive docking with the Thai vocational qualification framework should be promoted on the basis of "shared standards." Mature specialties such as software technology and new energy vehicle technology can be selected first for pilot implementation, and together with Thai partner institutions and the Thai Vocational Education Commission, curriculum standard comparison and credit mutual recognition should be promoted, so as to promote the connection between China's "1+X certificates" and Thai vocational qualification certificates and ultimately realize "integration of courses and certificates" and "interchange of dual certificates." Standard output should be based on China's vocational education standard system, absorb and integrate international standards in a compatible manner, and realize an intrinsic upgrade from "cooperative output" to "shared standards" through jointly formulating training plans and collaboratively constructing assessment and evaluation standards [2]. In addition, in the process of standard output, the statistical caliber should be unified and the scope of use of concepts such as "sharing," "citing," and "mutual recognition" should be regulated.

4.4. Improving rolling management and whole-chain evaluation

To address the problems of insufficient project sustainability and an imperfect evaluation system, systematic construction should be carried out in the two dimensions of management mechanisms and evaluation systems. In terms of rolling management: first, establish a full life-cycle management mechanism for cooperation agreements, starting renewal negotiations for agreements that have expired or are about to expire in advance to ensure the continuity of cooperation; second, take the acceptance of the Jiangsu Provincial "Zhenghe

Institute" project as an opportunity to improve the project archive management system and standardize internal management processes; third, formulate detailed rules for the assessment of international school-enterprise cooperation and incorporate international cooperation tasks into the performance assessment system of secondary colleges and professional teaching and research offices, with clear supporting incentive measures. In terms of the evaluation system, a whole-chain evaluation mechanism of "enrolment–training–internship–employment–tracking" should be constructed: evaluate the quality of student sources and specialty matching in the enrolment link; introduce process-oriented evaluation indicators such as textbook usage rate, course satisfaction, and skill attainment rate in the training link; establish an enterprise internship evaluation system in the internship link, with joint evaluation by enterprise mentors and in-college mentors; track the employment rate, employment matching rate, and employer satisfaction in the employment link; and carry out career development follow-up surveys within 1 to 3 years after graduation. Through whole-chain data collection and analysis, empirical support can be provided for the continuous optimization of training plans.

At the same time, third-party quality certification should be actively introduced, and international certification systems such as the German dual-system certification and the ASEAN vocational education quality assurance framework should be explored and adopted to enhance the international credibility and brand value of the "Zhenghe Institute." The closed-loop quality monitoring mechanism of "pre-assessment–process monitoring–result certification–continuous improvement" can provide a framework reference for the construction of the evaluation system [2]. Through collaborative governance among the government, colleges, enterprises, and third-party institutions, the "Zhenghe Institute" can be promoted to transform from scale expansion to connotation improvement, and complete the sustainable development transformation from "blood transfusion" support to "hematopoiesis"-based self-reliance.

5. Conclusion

This study investigates whether the Chinese higher vocational education model can be relocated to overseas contexts to address enterprise demands without relying on expatriate personnel. The case study of the Thai project confirms this possibility and demonstrates that the success of model relocation depends more on institutional governance than technical design. The core decisive measure is to incorporate the host country's labor market and local employing enterprises as co-developers of curriculum systems and evaluation mechanisms, thereby enabling the overseas institute to obtain local institutional legitimacy rather than operating as an externally funded outpost. This transformation, conceptualized as the shift from "blood transfusion" support to endogenous "hematopoiesis," constitutes the central argument of this paper, and it also represents a necessary precondition for the generalizability of this model to other overseas contexts.

When situated against the broader trajectory of Chinese manufacturing investment in Southeast Asia, the findings of this study carry general theoretical and practical implications. Currently, the binding constraint on such investment is increasingly the supply of skilled labor, rather than capital or technological factors, and development strategies centered on education that rely on expatriate staffing cannot achieve large-scale expansion. A locally rooted skilled labor supply pipeline, which is co-developed with host-country institutions and aligned with local qualification frameworks, can address this constraint at its origin. The core conditions that supported the successful operation of the Thai institute—provincial-level institutional

support, enterprise co-construction, and mutual recognition of qualification standards—are replicable across other contexts, on the premise that host-country institutional legitimacy is taken as a primary objective from the initial planning stage, rather than addressed as an afterthought.

Disclosure statement

The author declares no conflict of interest.

References

[1] Shao L, 2026, Paths and Brand Strategies of "Vocational Education Going Global" in Serving the Localized Development of Overseas Chinese Enterprises: A Case Study of the "Zhenghe Institute". Journal of Taiyuan Urban Vocational College, 2026(5): 1–5. https://doi.org/10.16227/j.cnki.tycs.2026.0252

[2] Shen Y, 2026, Systematic Construction of a Long-Term Mechanism for Jiangsu Vocational Education's Overseas School Running from the Perspective of International Capacity Cooperation. Vocational Education Research in Xinjiang, 17(1): 52–58. https://doi.org/10.16455/j.cnki.65-1281/g4.2026.01.009

[3] Jiang Y, Diao X, 2024, Exploration and Practice of Online Teaching for the Localized Talent Cultivation of the Zhenghe Institute: A Case Study of Jiangsu Vocational College of Economics and Trade. Journal of Jiangsu Vocational College of Economics and Trade, 2024(3): 81–84. https://doi.org/10.16335/j.cnki.issn1672-2604.2024.03.022

[4] Yang W, Jiang Y, 2026, Construction Practice, Realistic Problems and Optimization Paths of the "Zhenghe Institute" under the Background of Vocational Education Going Global. Vocational Education Development Research, 2026(3): 48–54. https://doi.org/10.19796/j.cnki.2096-6555.2026.03.006

Publisher's note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.