

# Research on the Innovative Path of Localized Talent Training Mode in Higher Vocational Education under the Background of “Vocational Education Going Global”

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**Abstract:** Against the backdrop of the “Vocational Education Going Global” strategy, China’s higher vocational education has gradually shifted from “technical skill training” to “talent ecology cultivation”. Based on this, this paper focuses on how higher vocational education serves international capacity cooperation and regional economic development through localized practices, and conducts an in-depth exploration in terms of curriculum systems, teaching staff, school-enterprise cooperation, and quality assurance, hoping to provide some references and assistance to readers.

**Keywords:** “Vocational Education Going Global”; Higher vocational education; Talent training

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## 1. Introduction

With the deepened promotion of the “Belt and Road” Initiative, the scale of Chinese-funded enterprises’ layout in overseas markets continues to expand, and the demand for compound talents with cross-cultural communication skills and localized professional skills has shown a significant upward trend. As an important practice for education to serve the national strategy, the core goal of “Vocational Education Going Global” is to provide talent support for the localized operation of overseas Chinese-funded enterprises through the internationalization reform of higher vocational education. However, when serving overseas markets, higher vocational education generally faces practical dilemmas such as the disconnection between the curriculum system and local industrial needs, the insufficient international literacy of the teaching staff, and the lack of cross-cultural adaptability in school-enterprise collaboration mechanisms. Therefore, exploring the innovative path of the localized talent training mode in higher vocational education has become an important topic in the

education reform of higher vocational colleges.

## **2. The important role of localized talent training in vocational education going global**

In the process of deepening the “Vocational Education Going Global” strategy, localized talent training, as a key link connecting Chinese vocational education with overseas market demands, has become the core driving force supporting the overseas operation of Chinese-funded enterprises and promoting the sustainable development of vocational education internationalization, with its importance exceeding the simple level of skill teaching. In essence, localized talent training is not a simple “technology export” but a talent cultivation system with localized adaptability constructed based on the real needs of overseas markets, local cultural contexts, and industrial development characteristics. This training model demonstrates multi-dimensional strategic value in vocational education going global.

For Chinese-funded enterprises, localized talent training is the key path to break through the “talent bottleneck” in overseas operations. When enterprises such as Sany Group expand their businesses in overseas markets like Indonesia, they face the dual challenges of local technical talent shortages and high cross-cultural management costs. The “Overseas Lighthouse Factory College” of Sany Vocational College has targeted training local technicians in construction machinery, enabling local employees to not only master operation skills meeting enterprise standards but also be familiar with local market rules and cultural customs, effectively reducing the labor costs and cultural barriers risks caused by dispatched talents. This “localized employment” model not only improves enterprise operation efficiency but also enhances the stickiness between the enterprise and the local society through the rooting of talents locally, laying a foundation for the long-term and stable development of the business <sup>[1]</sup>.

From the dimension of vocational education internationalization development, localized talent training is the core carrier for the Chinese vocational education model to “go global.” Traditional education export often stays at the level of hardware aid or curriculum transplantation, while localized training requires the deep integration of the concept of industry-education integration and the work-study combination model of Chinese vocational education with the local education system. For example, in its practice in Indonesia, Sany Vocational College has docked modular courses such as excavator operation and electrical hydraulic system maintenance with local vocational education standards, retaining the advantages of Chinese construction machinery technology while integrating the special requirements of the Indonesian industry for talents. This “adjusting measures to local conditions” training model has broken cultural and institutional barriers, explored a feasible path for the international export of Chinese vocational education standards, and promoted the upgrading of vocational education internationalization from “physical migration” to “chemical reaction.”

At the level of promoting local economic and social development, localized talent training reflects the essential attribute of vocational education serving regional development. By cultivating local technical talents for countries like Indonesia, the “Overseas Lighthouse Factory College” of Sany Vocational College has not only met the employment needs of Chinese-funded enterprises but also filled the skill gap in the local construction machinery field, driving the technical upgrading of related industries. When local technicians master advanced equipment operation and maintenance skills, the generated technology spillover effect can radiate to local industries, promoting the efficiency improvement of the entire industrial chain. This “teaching

fishing” training model goes beyond simple labor supply, forming a positive cycle of “talent training—industrial development—economic growth”, truly realizing the social value of vocational education going global <sup>[2]</sup>.

### **3. Case analysis of “Overseas Lighthouse Factory College” of Sany Vocational College**

#### **3.1. The construction and operation mode of “Overseas Lighthouse Factory College”**

Driven by the “Vocational Education Going Global” strategy, the construction and operation mode of the “Overseas Lighthouse Factory College” of Sany Vocational College presents distinct features of deep industry-education integration and school-enterprise collaborative symbiosis. Guided by the overseas business needs of Sany Group, it has constructed a talent cultivation system that combines localized adaptability and international standards. The implementation of the college in Indonesia and other places first relies on the tripartite linkage mechanism among Sany Group, local universities, and enterprises. For example, it forms a cooperation community with Karawang University in Indonesia and Sany Indonesia, with the enterprise putting forward specific employment needs and the university being responsible for teaching implementation, achieving resource integration, and complementary advantages. In terms of talent training objectives, focusing on the cultivation of local technicians in the construction machinery field, the curriculum setting adopts a “modular + localized” design, covering core technical modules such as excavator operation, electrical system maintenance, and hydraulic principles, while integrating courses on local construction machinery industry norms and cultural customs in Indonesia. It also develops bilingual teaching resources and digital training platforms to ensure that the teaching content is seamlessly connected with industrial needs.

At the teaching implementation level, the college adopts a dual-track model of “theoretical teaching + enterprise practical training.” Chinese teachers are responsible for teaching core technologies and cultivating local teachers in Indonesia through the “mentor-apprentice” mechanism. Enterprise technical backbones participate in practical courses as part-time teachers, transforming the overseas project cases of Sany Group into teaching content. Students need to complete on-the-job internships in Sany Indonesia factories to master equipment operation and fault handling skills in real production scenarios. In terms of operation and management, the college has established a dynamic adjustment mechanism, optimizing the curriculum system in real time according to changes in local market demands and enterprise feedback. At the same time, it introduces the technical standards and assessment systems of Sany Group to ensure that the talent training quality meets the international operation requirements of the enterprise. This model of “joint construction by schools and enterprises, integration of standards, and collaborative cultivation of talents” not only solves the localized needs of Chinese-funded enterprises for overseas employment but also provides a practical sample for the international export of Chinese vocational education standards <sup>[3]</sup>.

#### **3.2. The training achievements and influences of “Overseas Lighthouse Factory College”**

The “Overseas Lighthouse Factory College” of Sany Vocational College has demonstrated significant multiple values in terms of training achievements and influences. Focusing on the cultivation of local technicians in construction machinery, it has not only provided talent support for the overseas operation of Chinese-funded enterprises but also had a far-reaching impact on the upgrading of local vocational education and technical and cultural exchanges. In terms of the effectiveness of talent conveyance, the college has cultivated hundreds of qualified technical talents for overseas enterprises such as Sany Indonesia. These local employees have

mastered the standardized operation and maintenance skills of equipment such as excavators and cranes and can independently handle common mechanical failures, significantly improving the construction efficiency of the enterprise overseas projects and reducing the operation costs caused by technical talent shortages. Some excellent trainees have been promoted to technical supervisors through advanced training, playing a bridging role in cross-cultural team management and achieving a positive interaction between talent training and enterprise development.

At the level of local vocational education development, the college has combined the industry-education integration model of Chinese vocational education with the Indonesian education system, introducing innovative methods such as modular teaching and project-based learning, and promoting the transformation of local university curriculum systems to a practice-oriented direction. The digital training centers and bilingual teaching resource libraries it has built provide learnable teaching paradigms for Indonesian vocational colleges, and some course standards have been incorporated into the local vocational qualification certification system, improving the international level of local vocational education. This “blood-making” education cooperation goes beyond simple skill training, promoting the systematic upgrading of the talent training system in the Indonesian construction machinery field <sup>[4]</sup>.

From the perspective of the demonstration effect of “Vocational Education Going Global”, the college’s successful practice has provided a replicable “school-enterprise collaboration” sample for the internationalization of Chinese vocational education. Its model of deeply integrating enterprise technical standards with vocational education teaching has verified the adaptability of the Chinese vocational education model in overseas markets and promoted the international export of vocational education standards in the construction machinery field. At the same time, the college has promoted the two-way understanding between Chinese and foreign technical workers through the combination of technical training and cultural exchanges. While mastering Chinese construction machinery technology, local technicians have also become messengers of cultural exchanges between China and Indonesia. This dual output of “technology + culture” has injected humanistic momentum into the “Belt and Road” construction, highlighting the unique value of vocational education in international capacity cooperation.

## **4. Optimization paths for localized talent training under the background of vocational education going global**

### **4.1. Deepening school-enterprise cooperation and strengthening industry-education integration**

Under the background of “Vocational Education Going Global”, deepening school-enterprise cooperation and strengthening industry-education integration are the core paths for optimizing localized talent training, with the key being to construct a collaborative education system of “enterprise demand-driven, college teaching response, and resource element integration.” Educators can refer to the practice model of the “Overseas Lighthouse Factory College” of Sany Vocational College, where overseas Chinese-funded enterprises such as Sany Indonesia take the lead in establishing a school-enterprise cooperation council together with local vocational colleges, jointly formulating talent training programs that meet the enterprise’s overseas project needs, and transforming enterprise technical documents such as excavator operation specifications and hydraulic system maintenance standards into teaching modules to ensure that the curriculum content is seamlessly connected with job requirements. Enterprises need to deeply participate in the entire teaching process. For example, they



can open overseas production bases as training classrooms, arrange technical backbones to undertake practical course teaching as “enterprise tutors”, transform real engineering cases, such as the construction of the Jakarta power station, into teaching projects, and enable local students to master core skills in practical operations such as equipment installation and fault troubleshooting. At the same time, implement an “order-based” training mechanism, enroll students targetedly according to the employment plans of the enterprise’s overseas branches, and implement a “1 + 1 + 1” training cycle—1 year of basic theory study in school, 1 year of on-the-job training in the enterprise, and 1 year of actual combat in overseas projects, forming a training closed loop of “enrollment is employment, and admission is job entry.” In addition, schools and enterprises can jointly build overseas industry-education integration training bases, develop bilingual teaching resource libraries and virtual simulation teaching systems, combine Chinese construction machinery technical standards with local industry norms, not only meet the enterprise’s immediate needs for localized technical talents but also enhance the international influence of Chinese vocational education through “technology export + standard export”, achieving multiple wins for enterprise overseas operations, vocational education internationalization, and local talent development.

#### **4.2. Strengthening international exchanges and cooperation and sharing high-quality educational resources**

Under the background of “Vocational Education Going Global”, the core of strengthening international exchanges and cooperation and sharing high-quality educational resources lies in constructing an educational cooperation ecology of “mutual exchange of Chinese and foreign resources, mutual learning of standards, and collaborative development.” Vocational colleges can refer to the cooperation model between the “Overseas Lighthouse Factory College” of Sany Vocational College and Karawang University in Indonesia, establish “sister college” relationships with overseas local colleges, and jointly develop curriculum systems that have both the characteristics of Chinese vocational education and local adaptability. For example, dock the hydraulic transmission technical standards in the construction machinery field with the Indonesian vocational education curriculum framework, compile bilingual teaching materials in Chinese and English, and support them with virtual simulation teaching resources to achieve the integration of international and localized teaching content. At the same time, actively introduce advanced experience in international vocational education. For example, learn from the “enterprise-led training” model of Germany’s dual-system education, combine it with the teaching characteristics of China’s “work-study integration”, and cooperate with local industry associations to formulate training standards for construction machinery technical talents, promoting the connection between course certification and international vocational qualification certificates and improving the international recognition of local talent training <sup>[5]</sup>.

#### **4.3. Innovating talent training models to adapt to international demands**

Innovating talent training models to adapt to international needs is an important support for optimizing localized talent training. Higher vocational colleges need to establish a three-dimensional training system featuring “hierarchical ability cultivation, cross-cultural integration, and dual-track development.” A “layered and progressive” training model of “basic skill layer-professional technology layer-comprehensive application layer” can be adopted. Aiming at the different educational foundations of local students in Indonesia and other overseas regions, general basic courses such as mechanical drawing and tool operation are offered in the first

year, professional modules such as excavator electrical systems and hydraulic transmission are set in the second year, and comprehensive courses such as overseas project management and cross-cultural communication are integrated in the third year, forming a spiral-upgrading ability training chain. The “integration of teaching, learning, and practice” teaching method is promoted. The equipment installation projects of Sany Indonesia are transformed into teaching tasks. Under the dual guidance of teachers and enterprise mentors, students complete the whole process of practice from drawing, reading, component assembly, to complete machine debugging, and master core skills in solving real problems such as mechanical failures in Jakarta Port. In addition, higher vocational colleges should also pay attention to the cultivation of cross-cultural adaptability, offer courses such as “Introduction to the Culture of the Belt and Road” and “International Business Etiquette”, and improve the collaboration ability of local students in multicultural teams through ways such as Chinese and Indonesian technical workers completing simulation projects together and holding transnational cultural workshops. The dual-track parallel model of “academic education + vocational training” is explored. Cooperate with local Indonesian colleges to establish construction machinery technology majors and issue academic certificates recognized by both sides. At the same time, open “skill improvement classes” for on-the-job employees of Sany Indonesia, carry out short-term training on topics such as the application of new technologies for crawler cranes, and meet the enterprise’s dual needs for “academic technical talents” and “skilled job experts.” The “micro-certificate” system is introduced, and single-skill certifications such as welding technology and equipment programming are embedded in the curriculum system. Students can choose modular learning paths according to their career plans to achieve seamless connection of “learning-certification-employment.” This innovative training system that integrates the Chinese vocational education model and local educational characteristics can not only enhance the international competitiveness of local talents but also provide a replicable talent training paradigm for “vocational education going global.”

## 5. Conclusion

To sum up, under the background of “Vocational Education Going Global”, higher vocational colleges can construct a talent cultivation system with both localized adaptability and international standards through paths such as deepening school-enterprise collaboration, integrating international resources, and innovating training models. This process can not only solve the talent bottleneck for the overseas operation of Chinese-funded enterprises but also promote the international export of Chinese vocational education standards, achieving the leap from “technology export” to “standard export” and then to “ecological co-construction”, providing a solid talent support and cultural link for the “Belt and Road” construction, and finally achieving a diversified win-win situation of enterprise development, local benefit, and vocational education upgrading.

## Disclosure statement

The author declares no conflict of interest.

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