

Study on Internationalization of Maritime Vocational Education in the New Era

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Abstract: *"The Belt and Road Initiative" poses a great challenge for the internationalization of maritime vocational education and COVID-19 pandemic has a great impact on it. This paper analyses the problems existing in the internationalization of maritime vocational education in China, including poor awareness of internationalization, lack of internationalized English teachers, campus culture and legal system of maritime education as well as difficulty in carrying out Sino-foreign cooperation project. Based on the above analysis, it proposes several development strategies, i.e., enhancing international awareness, paying attention to the cultivation of students' intercultural communication skills, strengthening the construction of internationalized teachers, creating an internationalized campus culture, establishing the legal system of navigation education, setting up training institutions, exploring a new mode of Sino-foreign cooperation in running schools and developing education for overseas students.*

Keywords: *"the Belt and Road Initiative"; maritime vocational education; internationalization; study*

1. Introduction

In September and October in 2103, during President Xi's visit to Central Asia and Southeast Asia, he successively proposed major initiatives to jointly build the "Silk Road Economic Belt" and the "21st Century Maritime Silk Road" (referred to as the "the Belt and Road Initiative" for short), which attracted great attention from the international community ever since.

In order to promote the "the Belt and Road Initiative", the Chinese government has taken a series of measures, such as providing loans to countries along the "the Belt and Road", reducing tariffs, increasing aid, and eliminating debt. But the most important thing is to help them cultivate talents. Internationalized talents are the fulcrum and key to the construction of the "the Belt and Road". The realization of the "policy connectivity, facility connectivity, smooth trade, financial integration, and people to people connectivity" proposed in the Vision and Action to Promote the Joint Construction of the Silk Road Economic Belt and the 21st Century Maritime Silk Road lies in people to people connectivity. The core is to cultivate a large number of composite talents who are familiar with and understand the countries and regions along the "the Belt and Road" and professionals in urgently needed fields. It is urgent to strengthen talent exchanges with countries along "the Belt and Road".

In October 2015, the Ministry of Education issued the Action Plan for Innovative Development of Higher Vocational Education (2015-2018), which introduced high-quality overseas resources, support high-quality production capacity, cooperate with the "the Belt and Road Initiative", expand vocational education cooperation with countries along the "the Belt and Road", and take expanding the international influence of vocational education as a continuous task.

Internationalization is an important feature of maritime education, because maritime education itself is open, fulfilling international conventions and training specialized personnel for international shipping. Maritime colleges and universities should combine their own school running experience and disciplinary advantages, highlight key points and characteristics, overcome difficulties in the process of internationalization, deeply participate in the "the Belt and Road Initiative", actively adapt to the requirements for shipping talents in the new era, and create an international path with their own characteristics.

2. Problems in internationalization of maritime vocational education

Maritime vocational education is an open and international education, which cultivates high-level

skilled talents in line with international standards. In order to achieve this goal of international talent training, maritime vocational colleges must adhere to the opening of schools and take the road of international development. In fact, some of China's maritime vocational colleges have gradually promoted the implementation of the international development strategy through the following practices: introduction of foreign advanced navigation simulators, automated cabins, and computer-aided teaching methods; encouraging teachers to go on board for practice or recruiting teachers with senior crew qualifications to teach in schools; building a double-qualified team with both maritime qualifications and teacher titles: abiding by ISO9000 international certification standards and STCW95/10 convention; establishing an education and training quality management system to meet the requirements of the International Maritime Organization and the world shipping industry for the training of maritime talents; adopting order-based training in accordance with the labor service requirements of international shipowners and the cultural spirit of foreign-funded enterprises; strengthening English learning, especially maritime oral English; carrying out multi-faceted cooperation with multinational companies; etc. However, despite these measures, there are still some problems in the process of internationalization for maritime vocational colleges, which are mainly reflected in the following aspects:

2.1 The awareness of internationalization needs to be strengthened

Some middle-level cadres and even school-level leaders of higher vocational colleges do not have a strong sense of internationalization, believing that international exchanges and cooperation are what excellent 4-year colleges and universities should do, and vocational colleges only need to train students well so that they can master some skills, and carrying out international exchanges and cooperation in vocational colleges and universities is a waste of resources. It is conceivable that under the influence of this wrong concept, the promotion of internationalization will inevitably be subject to various resistances, and more often than not, when a project has just began, it may meet with obstacles due to internal reasons, or even stopped somewhat. Since many vocational colleges do not include international exchanges and cooperation in the annual assessment system of each secondary teaching unit, some projects will encounter some resistance in the process of implementation^[1].

2.2 Lack of internationalized English teachers

Teachers are the core resources of talent training, professional construction, discipline construction, and scientific and technological innovation in vocational colleges, and are also the key factors affecting the internationalization level of vocational colleges. Therefore, the primary premise of internationalization of vocational colleges is to cultivate internationalized teachers^[2]. At present, some vocational colleges have taken some measures to improve the internationalization level of teachers, but there is still a considerable gap between them and the real internationalization of teachers. Taking Jiangsu Maritime Institute as an example, in order to improve the teaching effect of maritime English, the school has integrated some teachers, reorganized English teachers and professional course teachers, and formed the maritime English Teaching and Research Department, this hybrid team can enable English teachers and professional course teachers to communicate with each other, and has a certain role in promoting the quality of maritime English teaching, but it cannot be regarded as an internationalized team.

2.3 Lack of internationalized campus culture

Some leaders of vocational colleges believe that as long as all the signs on campus are bilingual, and some foreigners walk on campus, the school has some international campus atmosphere and culture, and this understanding lacks the essence of the internationalization of campus culture. Some leaders of vocational colleges do not do a good job in top-level design when planning campus culture construction as a whole, ignoring that campus culture construction should include international factors. The school's operating mechanism and management system have not been in line with internationalization, for example, many vocational colleges have not yet established a "one-stop" service center, and students need to go back and forth between different administrative departments when handling various procedures, which is inefficient and students generally complain a lot. Many vocational colleges have not established English websites, or some schools with English websites lack designated personnel to maintain them. The content of the websites cannot be updated in a timely manner, and they cannot be synchronized with the Chinese websites, and the publicity effect is greatly reduced.

2.4 Lack of legal system of maritime education

In order to cultivate international shipping talents and meet the needs of the international shipping market, China has been strictly implementing *the Manila Amendment to the STCW Convention* and *the Maritime Labour Convention*. The country has also issued a series of laws and regulations on seafarer education and training, including *Several Opinions on Further Improving the Quality of Maritime Education*, *the Rules of the People's Republic of China for Competency Examination and Certification of Seagoing Ship Crew*, *Rules of the People's Republic of China for the Administration of Crew Training*, etc. However, a complete legal system of maritime education has not been formed. Due to the impact of the international financial crisis, since 2010, China's shipping market has entered a downturn, and the treatment of crew members has declined significantly. More and more crew members and marine graduates are reluctant to work on ships. It is precisely because of the lack of relevant navigation education laws in China that the state cannot intervene and adjust against the loss of navigation talents. In the process of promoting the "the Belt and Road Initiative", the problems faced by maritime vocational education are more complex than those existing in China, which will involve problems at the legal level in many countries. The lack of legal system will seriously restrict the internationalization of maritime vocational education.

2.5 Difficulty in Sino-foreign cooperation in running schools

At present, Sino-foreign cooperation in running a school in domestic maritime vocational colleges is often targeted at universities in developed countries in Europe and the United States. The cooperation mode is 2+1. After two years of study in China and corresponding IELTS scores, students can study in foreign institutions in the third year. By studying abroad for one year, students can not only master the advanced navigation teaching concepts and professional knowledge of foreign universities, but also have a great breakthrough in English. They may become elite talents in the field of navigation in the future. Generally speaking, students who can participate in Sino-foreign cooperation in running schools and really study abroad should have the following conditions: First, students have their own enthusiasm for further study abroad, and they want to improve their quality and ability in all aspects by studying abroad; Second, their families are relatively rich and can afford to study and live abroad; Third, English proficiency needs to meet relevant requirements. Not many students majoring in navigation meet the above three requirements at the same time. Unless students have a strong desire to be sailors themselves, families with good conditions are generally reluctant to let their children apply for this major; There are also some students who have good English scores and have the desire to go abroad for further study, but the economic conditions at home do not allow them to do it.

3. Internationalization development strategy of maritime vocational education in the context of the "the Belt and Road Initiative"

3.1 Enhance international awareness

If the internationalization strategy can be truly implemented and achieve practical results, school leaders must pay attention to it, put internationalization in the position of the school's strategic development, incorporate the internationalization strategy into the school's overall development plan, make overall arrangements, establish and improve the school's various systems for implementing the internationalization strategy, and provide support from human, financial and material aspects. The whole college, especially the leading cadres in key positions, should be fully aware of the necessity and urgency of international exchanges and cooperation in vocational colleges, and vigorously support and promote internationalization projects. At the same time, international exchanges and cooperation should be incorporated into the annual assessment system of each second-level teaching unit, mobilize the enthusiasm of all parties, form a joint force, and promote the implementation of the internationalization strategy with the efforts of the whole school. Only in this way can the internationalization strategy of vocational colleges be smoothly implemented and achieve practical results. Taking Jiangsu Maritime Institute as an example, the school clearly listed "internationalization and opening strategy" as one of the five major development strategies of the college at the second/third party congress in 2013/2018, and in the process of second-level institutional restructuring in 2013/2018, an international education exchange and service center/school of international education was specially established to promote the implementation of the college's "internationalization and opening strategy".

So far, Jiangsu Maritime Institute has made certain achievements in international exchanges and cooperation.

3.2 Pay attention to the cultivation of students' intercultural communication skills

Considering that a considerable number of students of maritime colleges will work in multinational shipping companies after graduation, it is particularly important to enhance students' cross-cultural communication awareness and ability, which can not only promote cross-cultural communication, enhance students' cognition and understanding of different countries and cultures, but also avoid communication barriers or friction between students and crew members from other countries due to different living habits and thinking styles. English is the working language of seafarers. The improvement of intercultural communication skills is inseparable from the cultivation of students' English communication skills^[3]. Taking Jiangsu Maritime Institute as an example, Jiangsu Maritime New Oriental Learning Center was jointly established with Nanjing Gulou New Oriental Training School in 2014, aiming to introduce high-quality teaching resources of New Oriental School into the campus, improve students' English application ability, and cultivate students' cross-cultural communication ability.

3.3 Strengthen the construction of internationalized teachers

The internationalization of teachers is a strong guarantee and embodiment of the internationalization strategy implemented by vocational colleges. The internationalization of teachers is mainly achieved through two ways: hiring foreign teachers and training teachers to reach the internationalized level. At present, many foreign teachers employed by vocational colleges are still only teaching basic English courses and improving students' oral English skills, which is far from enough. You can try to hire teachers of professional courses from foreign institutions or senior experts from foreign companies to teach professional courses in schools, so that students can enjoy high-quality foreign teaching resources without going abroad. In terms of training our teachers to reach an internationalized level, the first thing is to improve their English skills, which can also be achieved in two ways: "sending out" and "bringing in". "Sending out" refers to sending teachers to English-speaking countries to learn English, in the English environment, English skills will be quickly improved, and at the same time, you can learn advanced teaching concepts and methods abroad, and improve your international level. "Bringing in" refers to hiring English training experts from English-speaking countries to do training in schools. Internationalized teachers should have the following requirements: 1) having international ideas and international vision; 2) having cross-cultural communication knowledge and strong cross-cultural communication skills; 3) be able to grasp the international status quo and trend of the professional field of the discipline, guide students to form a correct concept of internationalization, and cultivate students into high-end talents with an international perspective.

3.4 Create an internationalized campus culture

To create an international campus culture, it is not only necessary to build an international campus environment from the surface and add international elements to the campus, but also to build an international campus culture from the connotation, which can be started from the following aspects: First, when vocational colleges carry out the construction of international campus culture, they must closely focus on their own school-running characteristics, combine with the international school-running goals set by themselves, and formulate sustainable development plans; The second is to reform the management system of vocational colleges, gradually realize de-administrativeization, and make flexible and scientific improvements to the school's management system and management process, so as to be in line with international standards; Third, all external publicity materials are available in Chinese and English, including school brochures, enrollment materials, websites, etc.; The fourth is to regularly hold various English cultural exchange activities to create an international campus cultural atmosphere, such as holding English corners, English culture festivals, English song competitions, English talent competitions, English drama competitions, etc.

3.5 Establish the legal system of navigation education of countries

In terms of maritime education legislation, there is a big gap between China and western developed countries. At present, the international laws and regulations related to navigation

include the STCW, SOLAS, MARPOL and *Maritime Labour Convention*. The contracting parties actively implement the Conventions in accordance with the requirements of the International Maritime Organization. The legislation on crew education and training has laws to follow. In order to better promote the "the Belt and Road Initiative", it is suggested that the Chinese government, on the basis of fully soliciting the opinions and suggestions of countries along the "the Belt and Road", take the lead in building a legal system for crew education and training in countries along the "the Belt and Road" to ensure a good and sustainable development of maritime vocational education in countries along the "Belt and Road". Through maritime vocational education legislation, the maritime vocational education standards of the countries along the "the Belt and Road" in terms of school running purpose, school running scale, school running level, training objectives, teaching conditions and teacher strength are formulated to ensure the availability of teaching places, education funds, experimental facilities, etc., and ensure the quality of maritime vocational education personnel training^[4].

3.6 Set up training institutions in countries along the "the Belt and Road"

Maritime vocational colleges should give full play to their advantageous majors, cooperate with overseas Chinese enterprises, set up training institutions in countries along the "the Belt and Road", and carry out maritime vocational skills training, which can not only solve the problem of overcapacity of overseas Chinese enterprises, but also cultivate localized maritime professional talents for countries along the "the Belt and Road", meet the actual needs of overseas Chinese enterprises, and promote the development of the "the Belt and Road" country.

3.7 Explore a new mode of Sino-foreign cooperation in running schools in countries along the "the Belt and Road"

China's maritime vocational colleges can actively seek cooperative colleges and universities in countries along the "the Belt and Road" and explore new modes of Sino-foreign cooperation in running schools. The previous mode of Sino-foreign cooperation in running schools was mainly to cooperate with universities in western developed countries. In order to introduce high-quality foreign resources, learn from the advanced navigation education concepts and talent training objectives of western developed countries, improve the level of China's navigation education, and improve the international competitiveness of our sailors. After years of learning, many domestic maritime vocational colleges have formed their own characteristics and curriculum systems, and have the ability to "export education" to developing countries^[5]. Therefore, we can fully explore the new mode of Sino-foreign cooperation in running schools and adopt the 1+2 cooperation mode. The cooperative colleges and universities of the countries along the "the Belt and Road" are responsible for recruiting students. The first year is mainly for Chinese learning. We send teachers to the cooperative colleges and universities to teach Chinese. After passing the Chinese test, students will study professional knowledge and skills in China Maritime Vocational College in the second and third years. After passing the test, they can obtain diplomas from both sides. This cooperation mode can help countries along the "the Belt and Road" train better maritime professionals and expand the influence of China's maritime vocational education.

3.8 Develop education for overseas students

After the implementation of the "the Belt and Road Initiative", China has recruited more and more students from countries along the "the Belt and Road", and maritime vocational education is no exception. In fact, the new mode of Sino-foreign cooperative education mentioned above, after students pass the language test, they will already study in China as foreign students when they come to China to study. The other type is to directly recruit post-secondary or equivalent graduates from countries along the "the Belt and Road" to study in China. Similarly, they will learn Chinese in the first year, and learn professional knowledge and skills in the second and third years. Carrying out education for overseas students can not only enable students to learn professional knowledge and operating skills of navigation, but also enable them to know more about China, become talents who know China and love China, and serve the country's grand diplomatic strategy.

4. Conclusion

The implementation of the "the Belt and Road Initiative" has brought opportunities to the international development of China's maritime vocational education. Maritime vocational colleges should comply with the overall national strategy, fully seize this opportunity, and achieve leapfrog development in internationalization. All maritime vocational colleges should appeal to the state to improve the construction of the maritime education legal system and provide legal basis and guarantee for China's maritime vocational education to "go global". The establishment of training institutions or overseas branch schools in countries along the "the Belt and Road", the exploration of new models of Chinese foreign cooperation in running schools, and the vigorous development of education for overseas students, on the one hand, can serve the country's grand strategy and cultivate the specialized talents needed by the country to promote the "the Belt and Road Initiative"; on the other hand, through continuous practice, the internationalization ability of maritime vocational colleges is also constantly improving, The position of China's maritime vocational education in the international community will also continue to improve.

Acknowledgments

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