

Research on the International Education Model of Wuhan Institute of Technology under the New Development Pattern of Double Circulation

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Abstract: With the advancement of China's reform and opening up, the internationalization of higher education has become an inevitable trend. Under the new development pattern of double cycle, the importance of internationalization of higher education is more prominent. As a key university in Hubei Province, Wuhan Institute of Technology has disciplinary advantages and resource advantages. Actively promoting international education can improve education quality and educational level, and promote the university to find new development opportunities in the double cycle of domestic and international development, which has important theoretical and practical significance for studying the international education model of Wuhan Institute of Technology. This paper uses SWOT analysis, performance improvement cycle and value chain to deeply analyze the specific practice and related policies of international education in Wuhan Institute of Technology, aiming to provide reference for other universities to carry out international education and promote the overall development of China's higher education internationalization.

1. Introduction

With the development of the reform and opening up in our country, the development of higher education internationalization is inevitable. Under the new development pattern of double cycle, the importance of internationalization of higher education is more prominent. The strengthening of the trend of economic globalization makes the international scientific and technological cooperation and cultural exchanges increasingly frequent, and the internationalization of higher education has become a key means to cope with this trend. At the same time, the reform and development of China's higher education is also faced with many challenges, such as uneven distribution of educational resources, slow updating of educational ideas, etc., and the introduction of international education mode can promote the development of China's higher education system to a higher level [1-5].

The new development pattern of double cycle is a kind of economic development model proposed in the new historical period of China, aiming to take the domestic cycle as the main body, promote the domestic and international double cycle to promote each other and achieve high-quality development. In this context, internationalization of higher education has become an important way to promote educational reform and innovation [6-7]. The state has issued a series of policy documents,

such as Several Opinions on Accelerating the Opening of Education to the Outside World in the New Era, to encourage colleges and universities to carry out international education and cultivate high-quality talents with an international perspective.

As a key university in Hubei Province, Wuhan Institute of Technology has certain disciplinary advantages and resource advantages, which provide a good foundation for its promotion of international education. International education can promote the exchanges and cooperation between Wuhan Institute of Technology and universities around the world, introduce advanced foreign teaching concepts, teaching methods and teaching resources, and improve the discipline construction level and talent training quality of Wuhan Institute of Technology. At the same time, international education can also help the school expand the field of international cooperative research, jointly promote scientific and technological innovation, and improve the international influence of the school [8-9].

The new development pattern of double cycle brings new development opportunities for Wuhan Institute of Technology. Through international education, the school can better integrate into the exchanges and cooperation in the global economy, science and technology, culture and other fields, enhance its core competitiveness, and make greater contributions to the development of the country. In addition, international education can also drive the reform and innovation of the internal management of Wuhan Institute of Technology, and promote the improvement of the overall level of the school. Therefore, it is of great theoretical and practical significance to study the international education model of Wuhan Institute of Technology under the new development pattern of double cycle. This study aims to explore the international education model of Wuhan Institute of Technology under the new development pattern of double cycle, analyze its current situation, existing problems and causes, and put forward corresponding countermeasures and suggestions. By excavating the practical experience and theoretical support of Wuhan Institute of Technology's international education, this research will provide reference for other universities to carry out international education, and promote the overall development of China's higher education internationalization.

In the following research, this paper will conduct an in-depth analysis of the specific practice and related policies of international education in Wuhan Institute of Technology under the new development pattern of double cycles through SWOT analysis, performance improvement cycle and value chain and other methods. SWOT theory [10] will sort out the development status of colleges and universities from domestic and foreign environmental analysis, and provide theoretical support for subsequent research.[11] Each stage of international education of Wuhan Institute of Technology will be selected for in-depth analysis to reveal its successful experience and existing problems; Value chain analysis [12] will investigate various activities of teachers, administrators and international students engaged in international education in Wuhan Institute of Technology, understand their needs and suggestions, and make innovations and improvements. Through the above methods, this study will draw relevant conclusions and put forward corresponding countermeasures and suggestions, in order to provide references for Wuhan Institute of Technology and other universities to promote international education.

2. Relevant theories and ability analysis of international education mode in universities

2.1 Relevant theories of internationalization education model in colleges and universities

Theory of internationalization of higher education: Internationalization of higher education means that in the context of globalization, institutions of higher education actively integrate into and participate in international educational exchanges and cooperation, and cultivate talents with international vision and cross-cultural competence. Relevant theories include world citizenship

education, international educational exchange and cooperation, cross-cultural education, etc.

Double cycle development theory: Double cycle development refers to the new development pattern with the domestic great cycle as the main body and the domestic and international double cycle promoting each other. Under this theoretical framework, Hubei provincial universities should integrate domestic development needs with international cooperation to promote mutual promotion and coordinated development when promoting international education mode.

SWOT analysis: SWOT analysis is a comprehensive assessment of the enterprise's internal and external environment, including Strengths, Weaknesses, Opportunities and Threats. This analytical approach can help companies understand their strengths and weaknesses and identify opportunities and threats in the external environment.

The Performance Improvement Cycle theory (PDCA cycle) is a commonly used management method that consists of four steps: Plan, Do, Check, and Act. These four steps constitute a continuous circular process, through continuous implementation and reflection, improvement, to improve the performance of the organization.

Value Chain Analysis: The value chain refers to the internal and external activities of a company, from the procurement of raw materials to the delivery of final products to customers. Through the analysis of enterprise value chain, we can determine the competitive advantages and disadvantages of enterprises in different links, and find out the key links to enhance competitiveness.

The above theoretical basis provides guidance and support for universities to formulate and implement international education model. In practice, universities can combine these theories to actively explore the international education model suitable for their own characteristics and development needs, so as to adapt it to the new dual-cycle development pattern and enhance the international influence and competitiveness of higher education.

2.2 Ability analysis of international education model of colleges and universities

Under the new dual-cycle development pattern, the international literacy of Chinese college students not only includes proficiency in foreign languages and cross-cultural communication, but also includes global vision, critical thinking, innovation, independent learning and lifelong learning. These abilities will help Chinese undergraduates better adapt to the trend of globalization, promote international exchanges and cooperation, and enhance the international competitiveness of China's higher education. This paper holds that the international literacy of undergraduates in Chinese universities requires the following abilities:

2.2.1 International awareness and intercultural communication ability

Undergraduate students in Hubei Province should have an open international perspective and a broad international consciousness, and understand and respect people and things from different cultural backgrounds. They need to have good intercultural communication skills and be able to communicate and cooperate effectively with people from different countries and regions.

2.2.2 Foreign language ability

With the continuous advancement of globalization, foreign language ability has become an important part of international literacy of undergraduate students in Hubei Province. They should be fluent in spoken and written English in order to communicate with international students and professors, and to read, understand and write materials in English.

2.2.3 Interdisciplinary knowledge and comprehensive ability

The international literacy of undergraduate students in Hubei Province should include interdisciplinary knowledge and ability. They need to have a broad disciplinary background, be able to apply multi-domain knowledge to solve problems in a global context, and have comprehensive skills such as innovative thinking, problem solving and teamwork.

2.2.4 International literacy and teaching level

Hubei provincial universities need to strengthen teachers' international training and support, and improve teachers' international quality and teaching level. Through introducing foreign teachers, carrying out teacher exchange programs, organizing teacher training and other ways, teachers' cross-cultural awareness and teaching ability are enhanced, so as to provide students with better international education services.

3. Current situation analysis of international education mode of Wuhan Institute of Technology

3.1 Development status of Wuhan Institute of Technology

Wuhan Institute of Technology, located in Wuhan, Hubei Province, China, is an undergraduate university with engineering as its main feature. The university was formerly part of Wuchang Institute of Water Conservancy and Electric Power founded in 1952. After decades of development and evolution, it was officially renamed Wuhan Institute of Technology in 2000.

The school adheres to the school motto of "thick morality, erudite, fine workmanship, and good practice", carries forward the spirit of "diligence and truth-seeking, innovation and entrepreneurship", and is committed to cultivating application-oriented and composite senior engineering and technical talents. At present, there are 9 disciplines including engineering, Science, management, economics, literature, law, education, art and agriculture, covering many fields such as engineering, science, management, literature, law, education, art and agriculture. The university has 60 undergraduate majors, covering engineering, science, management, economics, literature and other disciplines. The international talent training model of Wuhan Institute of Technology is gradually improving, but there are still some challenges. The following is an analysis of the current situation of this model:

3.2 Analysis of the current situation of Wuhan Institute of Technology

SWOT analysis is a common strategic analysis tool used to assess the strengths, weaknesses, opportunities, and threats of an organization or project. The following is a SWOT analysis of the international talent training model of Wuhan Institute of Technology:

3.2.1 Advantages

(1) Rich professional resources: Wuhan Institute of Technology has rich professional resources and disciplinary advantages in many disciplines, and can provide diversified international talent training courses. The school actively promotes the cross-integration of foreign languages and other disciplines, innovates the personnel training model, and forms the "E+" dual professional integration and compound personnel training path.

(2) Teaching quality and reputation: Hubei Provincial University enjoys a good reputation for its excellent faculty team and excellent teaching quality, which provides a reliable guarantee for the cultivation of international talents.

(3) Excellent geographical location: Hubei Provincial University is located in the central region

of China, surrounded by relatively developed economic and cultural centers, which provides broad practice and employment opportunities for international talents.

3.2.2 Disadvantages

(1) Relatively weak international influence: Compared with some well-known international talent training institutions, universities in Hubei Province have relatively weak international influence and may face competitive pressure from other competitors.

(2) Language and cultural barriers: The cultivation of international talents involves the exchange of languages and cultures, so Wuhan Institute of Technology may need to strengthen the cultivation of English education and cross-cultural communication skills.

3.2.3 Opportunities

(1) Support from national policies: The Chinese government encourages the internationalization of higher education and provides policy support. Hubei provincial universities can take advantage of this opportunity to further promote the cultivation of international talents.

(2) Increased opportunities for cooperation and exchange: With the advancement of globalization, Wuhan Institute of Technology has more opportunities to cooperate and exchange with internationally renowned universities, enterprises and other institutions to jointly cultivate international talents.

In terms of threats:

(1) More competitors: More and more universities begin to pay attention to international talent training, and Hubei provincial universities may face competitive pressure from other universities.

(2) Risk management challenges: International talent training involves various risks, including cultural conflicts, enrollment and recruitment problems, etc. Schools need to effectively manage these risks.

Wuhan Institute of Technology has rich professional resources and geographical advantages in the international talent training mode, but it needs to strengthen the cultivation of international influence and cross-cultural competence. At the same time, with the help of national policy support and cooperation and exchange opportunities, universities can further promote the cultivation of international talents. However, there are also threats such as an increase in competitors and risk management challenges that require effective strategies.

3.3 Organizational performance of Wuhan Institute of Technology

Universities need to apply the performance improvement cycle, because international talent training is one of the development directions of higher education, and the performance improvement cycle is an effective tool suitable for management and improvement. Through continuous evaluation, adjustment and improvement, Wuhan Institute of Technology can continuously improve the quality and level of international talent training, better meet the social demand for high-quality talents, and improve the international competitiveness and adaptability of students. The following is an analysis of the performance improvement cycle applied to this model:

Plan stage: In this stage, Wuhan Institute of Technology can formulate clear goals and plans to determine the strategic positioning and development direction of international talent training. This may include developing an international curriculum, expanding international exchange channels, and cooperating with foreign universities. Key performance indicators (KPIs) can also be identified to measure the effectiveness of international talent development, such as the number of international students, the number of international exchange programs for teachers, and the availability of international courses.

Implementation Phase (Do) : In this phase, the school will implement the developed plan and implement the measures and activities of international talent training. For example, conducting

international courses, inviting international experts to give lectures, and organizing overseas internship programs. The university can provide students with international exchange opportunities through cooperation with domestic and foreign universities and enterprises, and encourage students to participate in international conferences, competitions and other activities to broaden their international vision and cross-cultural communication skills.

Check stage: In this stage, the school needs to evaluate and check the effect of international talent training. Data can be collected, surveys and interviews conducted to understand students' satisfaction with internationalized education, employment rates, outcomes of international cooperation projects, etc. At the same time, it can also compare with other universities to understand their own position and competitive advantages in the field of international talent training, and find existing problems and room for improvement.

Action Phase (Act): Based on the feedback and evaluation results of the inspection phase, the school can develop appropriate improvement measures and action plans. For example, the school is to improve the identified problems, optimize the curriculum, increase international exchange opportunities or improve teaching methods. At the same time, it can also sum up successful experiences, promote good practices to other colleges or majors, and promote the internationalization level of the whole school.

Through the application of the performance improvement cycle, Wuhan Institute of Technology can continuously optimize the international talent training model and achieve continuous improvement and promotion. At the same time, the cycle can also help schools find problems in time and take measures to ensure the smooth realization of international talent training goals, and further improve students' international competitiveness and adaptability.

4. Analysis of innovative countermeasures for the international education model of Wuhan Institute of Technology

According to the theory of value chain, enterprise activities can be divided into two categories: main activities and support activities. Therefore, we divide the innovation strategy of international talent training mode of Wuhan Institute of Technology into main innovation activities and support innovation activities. The main innovation activities are considered as follows from the aspects of internal procurement, production operation, sales and marketing, and after-sales service.

4.1 Internal Procurement

Wuhan Institute of Technology can obtain high-quality education input resources through the introduction of international teaching materials, teaching resources and advanced educational technologies in the mode of international talent training, so as to improve teaching quality and internationalization level.

4.2 Production and Operation

In the teaching process, schools can adopt diversified teaching methods and forms, including international curriculum, bilingual teaching, practical teaching, etc., to put students in an international learning environment and promote the cultivation of their international vision and cross-cultural communication ability.

4.3 Sales and marketing

Wuhan Institute of Technology can actively promote and publicize its own international talent training model, attract more domestic and foreign students to apply, and establish cooperative relations with foreign universities, attract more international students to exchange and study on

campus, and increase international exchange opportunities.

4.4 After-sales Service

For international students, Hubei provincial universities can provide comprehensive support services for international students, including accommodation, life counseling, cultural adaptation and other aspects of help, as well as career guidance and employment support after studying abroad, to ensure that international students can get good support and development opportunities during and after graduation.

The supporting innovation activities of the school value chain can be analyzed as follows:

(1) Enterprise infrastructure: Wuhan Institute of Technology can strengthen the construction of management system, improve the quality and management level of teachers, improve academic resources and teaching facilities, and provide good basic support for the training of international talents. For example, the school can strengthen exchanges and cooperation with foreign universities, introduce high-quality international education resources, provide modern teaching facilities, and constantly improve teaching quality and internationalization level.

(2) Human resource management: The school can support the needs of international talent training by recruiting, training and motivating a high-level team of teachers, providing teachers with international background and cross-cultural communication experience, and providing professional teams with international communication and career guidance for students. For example, schools can strengthen the introduction, training and incentive of teachers, encourage teachers to participate in international curriculum development and teaching practice, and provide more international education resources and services.

(3) Technology development: relevant departments and departments can actively promote the innovation and application of educational technology, including online education platforms, virtual laboratories, etc., to improve teaching effects and teaching experience. For example, through the construction of modern teaching facilities and platforms, the use of new educational technology means, such as "Internet + education", "mobile + education", etc., to improve the quality and efficiency of teaching.

(4) Medical security and safety protection: The school attaches great importance to the health and safety of international students. The school is equipped with professional medical teams and medical facilities for international exchanges, and provides comprehensive medical security for international students. At the same time, the school also strengthens security management, establishes a sound security system, and provides 24-hour security services to ensure the safety of international students on campus.

In summary, through the activity analysis of the above value chain, it can be seen that the core competitiveness and value-added points of universities in Hubei Province in the mode of international talent training are identified, and based on this, corresponding strategies and measures are formulated to continuously improve the quality and level of international talent training. At the same time, it is also necessary to pay close attention to the needs of students and market changes, cooperate closely with international universities and enterprises, and constantly optimize and improve the international talent training model to adapt to the changing international education needs.

5. Conclusion

The international talent training model of Hubei provincial universities can be realized through close cooperation between universities, industry and the government. Universities can provide educational resources and environments, industry can provide practical opportunities and career development, and governments can provide policy support and international exchange platforms. Through the close cooperation of these three subjects, Hubei provincial universities can effectively

promote the cultivation of international talents and cultivate talents with international vision and cross-cultural communication ability.

International talents are always the human resources support to promote the double cycle pattern. Only by increasing the cultivation of compound multi-language talents can we solve the structural shortage of international talents. At present, most studies focus on speculation and do not draw validity conclusions through empirical studies.

Through data collection and investigation and analysis, the effectiveness of the international talent training model can be evaluated, and the repeated implementation of the performance improvement cycle based on the evaluation results can improve the employment rate of students, enhance the quality of talent training, enhance the competitiveness of students and accelerate the integration of industry and education.

In view of this, this study generally analyzes the development status of Wuhan Institute of Technology and the problems existing in the process of international talent training, analyzes and summarizes the organizational performance and value chain promotion, and gives corresponding solutions.

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