Framework of International Development Index System in Higher Vocational College

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Abstract. With the rapid development of economic globalization and integration of science and technology, China economy needs a large number of complex, high-skilled and high ability talents. Under the circumstances, vocational education must take the road of international development. This article points out dimensions of measure on the internationalization degree based on analysis. Then, the scientific framework will help vocational colleges to realize their international objectives.

Introduction

With the rapid development of economic globalization and integration of science and technology, China has been on the road of accelerating industrial upgrading and transformation. From "Made in China" to "Created in China", we need a large number of complex, high-skilled and high ability talents which can compete against high-quality innovative talents of other countries on the world stage. Vocational education taking technology and application as its core part, the goal is to cultivate high-end technology talents for production, construction, management and service line. Vocational education has been burdened with the responsibility with Training high-skilled personnel with modern industrial development and international competitiveness of to adapt to the new requirements \cite{1}.

It is because of the historical mission, responsibility and current state of the development of vocational education that vocational education must take the road of international development.

In recent years, many vocational colleges explore international talent training mode through joint development and construction of specialized courses, introduction of professional qualifications, teacher training, recruiting students, short-term exchange student learning, mutual learning base, setting up Sino-foreign cooperative dual certification courses and other projects. Vocational education internationalization is a gradual process of development. There are also quite differences between all regions and institutions of the country.

Therefore, it has become an urgent problem to construct a comprehensive and scientifically measurement for the degree of internationalization of vocational institutions, specifically for its international development goals. Internationalization refers to the vocational colleges should place teaching, learning, research, service, management and training, etc., in global education and culture, while showing openness, communication and versatility characteristics during operation.

Openness is the basis and premise of the vocational colleges’ international Management \cite{2}. Vocational institutions should not only develop teaching, learning, research, service, management and training and other aspects related to the open-door policy, but also implementing the specific results of the open policy.

Communication based on the openness, it refers to the exchange of teaching, learning, research, service, management and training between a vocational college and foreign institution. For example, the number of sending teachers and students study around the world, the proportion of introducing foreign teachers and students to the college and the number of items and trainings of multinational companies overseas.
Versatility is a high-level international level for vocational institutions. It is a country vocational schools can be recognized and accepted as similar institutions in other countries, including the disciplines and professional settings, lesson plans, teaching standards, qualifications and mutual credits recognition, as well as the mutual recognition of service and management standards institutions.

From the aspect of international versatility, the Vocational College has a unique condition. Because knowledge has no borders, skills are universal. Many scholars study from different angles on the degree of internationalization of vocational colleges. However, these studies are only for a stay in the international status quo in vocational schools or theoretical description of the overall architecture level. In reality, we need establish not only an efficient applicable assessment, but also a keen and intuitive to find international vocational institutions to measure the extent of the problem and analysis methods.

**Dimensions of Measure on the Internationalization Degree in Higher Vocational Colleges**

At present, China mainly focus on international education concept of internationalization, international student exchange, international teaching, international academic exchange and collaborative research, teaching environment and international cooperation to share educational resources, etc. According to the status and characteristics of international development of vocational colleges, combined with Sino-foreign cooperative education project undertaken by our college, as well as to explore many aspects of international vocational colleges, our study establish the degree of internationalization of vocational colleges Metrics from eight aspects as follows.

1. **An open international ideas, organization system and policy support**

   The openness of international ideas for vocational colleges is mainly determined by awareness and recognition of students and staff to the international goal of evaluation.

   For the construction of the organization system, mainly assessed by the establishment of international organizations of college-related work\(^3\).

   Security policy is based on the establishment of college-related incentives, and is provided for similar international exchanges between educational institutions of learning special budget and other indicators.

2. **The multi-faceted international hardware and resources**

   Vocational college management whether to pay attention to the associated hardware construction is very important. Vocational college’s international hardware is determined by whether it has exchange students, students’ various hardware conditions that meet international standards. As advanced digital classrooms, student dormitories and specialized activities and so on. Chinese and Foreign Digital Library and Archive paper books newspapers, school sites or pages in English and foreign language textbooks excellent introduction and development of capacity-building resources is also an important indicator for professional international hardware construction.

3. **Professional and curriculum as well as qualifications international recognized**

   Training objectives vocational institutions, professional and curriculum, teaching content and design should be consistent with international standards and requirements, or in line with international industry standards talents.

   The number of colleges teaching in English or bilingual courses offered, whether the colleges have the qualifications issued by internationally recognized professional qualification certificate, whether to create the public understanding of international courses is also an important measure\(^4\).
4. Professional teachers team including foreign teachers and bilingual teachers with international standards

International faculty is an important indicator on the international level including full English or bilingual teachers. Teaching ability, foreign teachers and experts (including part-time teachers) and the proportion of qualifications to teach in schools, overseas or foreign institutions of learning, the proportion of teaching, training and work experience of teachers, school internationalization structure of teachers and other professional teaching team. For foreign teachers recruited from abroad, the level should be recognized foreign educational institutions and Chinese educational institutions.

5. Exchange of students, academic exchange and non-degree students.

"International Student Exchange Program" started after World War II, and its main purpose is to strengthen the cultural communication and academic exchanges between the countries in the world, to promote friendly exchanges among nations. There are more than 90 countries and regions participated in the exchange program each year. In recent years, exchange students in vocational colleges also expanding, which primarily reflects the diversification of Vocational College Students and its transnational flows. Therefore, the proportion of exchange students and foreign students has also become an important aspect to measure the degree of internationalization of vocational colleges.


Measure index Includes the status undertaken with foreign universities, educational institutions and training institutions cooperation projects with large multinational corporations and enterprise cooperation training output situation overseas, as well as international cooperation projects with sister cities, sister schools as a platform for the international projects.

7. International academic exchange and technical cooperation projects

It mainly focuses on organizing international or regional academic conferences, carrying out academic exchanges with similar international institutions and technological exchanges research and development projects (products) as well as a visiting scholar exchange and so on[5].

8. International campus atmosphere of Education and Culture

International atmosphere can be created mainly through the construction of a multicultural campus, to create open education, open education study for students of multicultural background and experience of international experience situation.

Table 1. Dimensions of Measure on the Internationalization Degree in Vocational Colleges.

<table>
<thead>
<tr>
<th>International targets have been included in the school development plan</th>
<th>Specialized agency responsible for international exchange and cooperation</th>
<th>Relevant provisions Encouraging international exchange and cooperation</th>
<th>Students and staff’s awareness of the international importance</th>
<th>Held a meeting on foreign affairs</th>
<th>Annual budget of international exchange and cooperation projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>The multi-faceted international hardware and resources building</td>
<td>Full page or site in English</td>
<td>Dormitories and specialized activities for returned students</td>
<td>The proportion of foreign language journals or electronic journals library costs account for total funding</td>
<td>Construction training base with advanced equipments</td>
<td>Apartments and activities for foreign teachers</td>
</tr>
<tr>
<td>Professional and curriculum as well as qualification international recognized</td>
<td>The number of professional s with international personnel training objectives</td>
<td>The number of professionals developing courses According to international industry standards of</td>
<td>The number of professionals may award international recognized professional qualification certificates</td>
<td>The number of professional s introducing professional foreign materials or teaching in English</td>
<td>The number of professionals developing courses with well-known international companies</td>
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<td>Professional teachers team including foreign teachers and bilingual teachers with international standards</td>
<td>The proportion of teachers with Bilingual teaching ability</td>
<td>Proportion of Foreign teachers and experts accounting for total number of teachers</td>
<td>The number of professional s whose professional core courses are taught by bilingual teacher or foreign teachers</td>
<td>The number of professional s having experience abroad teaching team</td>
<td>The number of professionals having specialized masters from well-known international companies teaching professional main courses</td>
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<td>Exchange of students, academic exchange and non-degree students</td>
<td>Number of each year</td>
<td>The proportion of professionals enrolling returned students</td>
<td>Organizing students to go to foreign universities to participate in the winter camp, summer camps, internships abroad</td>
<td>Accepting and arranging students from foreign universities to participate in summer winter camp</td>
<td>The proportion of selecting Students to participate in well-known international companies practice</td>
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<td>Sino-foreign cooperative education and training cooperation projects.</td>
<td>The number of professional s having foreign joint training program</td>
<td>The number of professionals having Foreign joint professional qualification s</td>
<td>The number of professional s developing courses in cooperation with foreign</td>
<td>The number of professional having cooperation with foreign enterprises</td>
<td>The number of professional having training items with foreign enterprises</td>
</tr>
<tr>
<td>International academic exchange and technical cooperation projects</td>
<td>The proportion of teachers publishing results in international academic journals</td>
<td>The proportion of teachers Participating in international cooperation projects</td>
<td>Funds of International research cooperation project</td>
<td>The proportion of teachers or students participating in international competitions</td>
<td>The number of papers published by teachers in international conference</td>
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<tr>
<td>International campus atmosphere creating for Education and Culture</td>
<td>Organizing various international cultural exchange activities in Campus</td>
<td>The number of foreign delegations school for exchange visit each year</td>
<td>The number of lectures given by international celebrities</td>
<td>School logo are bilingual</td>
<td>The proportion of international professional societies</td>
</tr>
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</table>
Summary

Therefore, we can make a Framework of International Development Index System based on dimensions of measure on the Internationalization Degree. This Index System can reflect the International Development status. Then vocational colleges can find their weaknesses and strengthen their strengths to realize their objectives.

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