

5. RESEARCH ON INTERNATIONAL COMPARISON OF INDUSTRY EDUCATION INTEGRATION IN VOCATIONAL EDUCATION

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Annotation. This paper presents an attempt to explore the vocational education in different countries (China, Canada, New Zealand). It is shown that the vocational education is a part of the whole education system. The development of the education system may also affect the vocational education model and even the curriculum. The vocational education includes the conditions of vocational education facilities, the quality of education and teaching, the rationality of specialties and curricula, etc.

Keywords. Management, educational management, education establishments, Chinese universities, vocational education.

Vocational education refers to the education implemented for the purpose of cultivating high-quality technical and skilled personnel, and equipping the educated with the comprehensive vocational qualities such as vocational ethics, scientific and cultural and professional knowledge, technical skills, and the ability to take action required for engaging in a certain occupation or realizing vocational development.

Vocational education is a type of education that has the same importance as general education, and is an important part of the national education system and human resources development; it is an important way of cultivating diversified talents, passing on technical skills, promoting employment and entrepreneurship, and is a basic project for cultivating high-quality personnel.

Vocational education includes vocational school education and vocational training. Vocational school education is academic education, divided into secondary and higher vocational school education; vocational training is non-academic education, including pre-employment training, on-the-job training, re-employment training and other vocational training. The purpose of vocational education is to cultivate applied talents and socialist laborers and socialist builders with certain cultural level and professional knowledge and skills. Compared with general education and adult education, vocational education focuses on the cultivation of practical skills and actual working ability [1].

Integration of industry and education means that vocational schools actively start professional industries according to the specialties they set up, closely combine industry and teaching, support and promote each other, and turn the schools into industrial business entities. Integrating talent training, scientific research and scientific and technological services promotes forming a mode of schooling in which the school and the enterprise are integrated. The integration of industry and education is an important support for vocational education. Industry-education integration is the in-depth cooperation between industry and education, and it is the in-depth cooperation between institutions and industrial enterprises in order to improve the quality of their talent training.

"Combination of industry and education, school and enterprise" mode of operation, is currently a vocational school to open up a new road to development, but this is just the beginning, and because of the actual situation of each school is different, the characteristics of the different specialties, so the specific practices are not the same. But the development of vocational education tomorrow will certainly be able to embark on a healthy development of the road [2].

The significance of vocational development education lies in the fact that vocational education is a product of social development, a product of the development of human civilization, which can also be said to be a product of the development of man himself. And it is a product of development to a particular period. Vocational education benefits from the society, and the society can also benefit from vocational education, and it is the due meaning and sacred duty of vocational education to promote the development of the society.

The purpose of vocational education is to satisfy the individual's demand for employment and the objective needs of the workplace, and then to promote the development of social productive forces and accelerate the adjustment and transformation of the national industrial structure.

Compared with basic education, vocational education has its own characteristics. To summarize, the essence of vocational education should contain at least four aspects:

- it is people-oriented;
- teaching according to ability;
- scientific management;
- culture shaping.

People-oriented, one is to fully mobilize the enthusiasm of all teaching staff to form a strong atmosphere of school as home, teaching as fun, and teachers as proud. The second is to fully respect the student's subjective consciousness, fully establish the student's subjective position, give full play to the student's main role. For example, some schools let students to serve as classroom teacher assistant, assistant principal, proactive, scientific and democratic participation in the management of school affairs is extremely innovative attempts to cultivate the students' sense of ownership, participation in the consciousness, but also improve the students' ability to work and management level, which in itself is one of the important elements of vocational education.

Vocational education can be divided into four steps as shown in figure 1.



Figure 1 – Vocational education four steps

So vocational education orients people for work and development citizens' skills to remain employable and respond to the needs of the economy.

Current situation of vocational education in various countries [2–5]

China. Chinese students use vocational education as a springboard. After two years of graduation, it is relatively easy to work for one year and then transfer credits to go to university. Moreover, it will be more beneficial for those who want to immigrate to have work experience. In vocational schools, the schools will clearly indicate which credits can and cannot be transferred, making it easier for students to choose.

On October 18, 2017, Comrade Xi Jinping pointed out in his report to the 19th National Congress that priority should be given to the development of education. Improve the vocational education and training system, deepen the integration of industry and education, and school-enterprise cooperation. Accelerate the construction of first-class universities and first-class disciplines to achieve the connotative development of higher education. So in China the task is to improve the student financial aid system so that the vast majority of the new urban and rural labor force will receive high school education and more will receive higher education.

On January 24, 2019, the State Council issued the "National Vocational Education Reform Implementation Plan".

On July 6, 2023, Minister of Education Huai Jinping stated that China has built the world's largest vocational education system.

Canada. In Canada, vocational education majors can be changed. If you have studied for a while and feel that this major is not suitable for you, you can apply to transfer to another major, and the credits of some courses can also be transferred. The formalities and procedures for changing majors are very simple, giving students a lot of choice. This should be a talent training model that Chinese vocational education can actively explore and learn.

The Toronto Polytechnic in Canada has launched a new graduate diploma course, which includes some highly practical majors such as computer engineering technology, computer operating system technology, film and television and animation arts, real estate operation and management, and health care management, which can satisfy some self-study, adult education The academic needs of undergraduate students.

Singapore. The Singapore Institute of Vocational Education is specialized in training vocational personnel cradle, professional settings are very complete, and the school is like a composite factory, the experimental equipment is quite perfect, the students in the school will be able to work in the future all the contact with the assembly line, learning to. Moreover, the college also arranges paid internships for students, usually for 2-4

months. The college itself is a talent processing plant, the output of graduates can be directly qualified for the workplace.

In addition, Singapore's polytechnics also focus on vocational education, completely market-oriented schooling, but the standard is much higher than the domestic higher vocational education. Singapore's vocational education is a very important feature is that business executives, government officials involved in the school board, so that the latest occupational demand will be communicated directly to the school, the school will be based on the country's overall demand for talent and business demand for talent and timely adjustments to the professional settings.

Like Temasek St. Tausha College of Tourism is a good example, to 2008 Singapore for tourism, hotel management talent demand gap will reach 35,000 people, enterprises and colleges immediately start to set up specialized colleges to train talents, the response is quite rapid.

In Singapore, logistics, tourism, hotel management, electronics, securities, finance and other industries are hot employment, but also become the first choice for students to choose vocational education specialties.

New Zealand. According to experts in the field, the proudest part of New Zealand's education system is New Zealand's secondary and tertiary vocational education.

Vocational education in New Zealand has a history of more than one hundred years. Many courses are long-term immigration or short- and medium-term immigration shortage courses, and the duration of the course is not long, usually 1-2 years to obtain a tertiary qualification, and the graduates can master the appropriate vocational skills. This means they can be employed soon and apply for immigration to New Zealand. For example, western chef, pastry chef, mechanic, construction carpenter, horticulturist, designer, photographer, etc. are all immigration shortage talents. All relevant courses are offered at the 20 National Polytechnics located throughout the North and South Islands of New Zealand. Christchurch Poly technic, located in the largest city on the South Island, offers a range of engineering skills tertiary programs, including civil engineering, automotive mechanical engineering, electrical engineering, computer engineering and computer-aided design. Courses are taught in small classes of no more than 15 students each to achieve the best teaching results. In addition to public colleges, New Zealand's private tertiary institutions also have their own distinctive characteristics, which make them unique in certain fields.

Industries that are closely related to New Zealand's future economic development, such as horticulture, have also been one of the most popular courses in recent years, with most polytechnics offering 1-2 year tertiary and 3 year undergraduate programs. According to the Department of Labor, there is a national shortage of 27,000 horticultural professionals. Horticulture is an excellent program for international students, as it meets both market demand and immigration policy requirements.

Classification of vocational education in China

1. Secondary vocational education. Secondary vocational education has cultivated hundreds of millions of skilled personnel for China, and has achieved certain results in terms of talent cultivation mode and cultivation path. Under the background of the new era, the talents cultivated by secondary vocational education are out of line with the social and economic development and market demand, and there are real problems such as "skilled labor shortage" and "structural unemployment". In order to accelerate the innovation of secondary vocational education talent cultivation mode and build a modern vocational education system, we propose a secondary vocational education talent cultivation mode of school-enterprise cooperation and industry-teaching integration with Chinese characteristics.

2. Higher vocational education. China's higher vocational education has formed a relatively complete system covering four levels: specialized, undergraduate, master's and doctoral.

Vocational education at the specialized level mainly cultivates high-skilled talents for enterprises [6].

Vocational education at the undergraduate level is mainly divided into applied undergraduate education and teacher-oriented undergraduate education, with applied undergraduate education emphasizing the strengthening of practical teaching and teacher-oriented undergraduate education focusing on the strengthening of students' "dual-teacher" capacity building.

Master's level vocational education includes professional master's degree, in-service master's degree for teachers of secondary schools and full-time professional master's degree in vocational and technical education, with clear cultivation objectives, flexible education and teaching modes, and increased practical teaching.

Vocational education at the doctoral level includes professional doctoral degrees and doctoral education in vocational and technical education, which focuses on the major practical problems in the field, and strives to enhance the degree applicants' practical contributions to the field and stimulate the emergence of innovative results.

The vocational education is a part of the whole education system, so the development of other parts of the education system will inevitably affect the development of vocational education, and sometimes this role is even very great. The development of the education system may also affect the vocational education model and even the curriculum. This is because when the development of vocational education encounters difficulties, vocational schools may seek new models of vocational education. The reality of vocational education itself: the

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conditions of vocational education facilities, the quality of education and teaching, the rationality of specialties and curricula, etc., are also important factors affecting the development of vocational education.

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