

Enlightenment and Reference of Swiss Secondary Vocational Education and Employment Model

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Abstract: Switzerland only with a century, from a small agricultural country into a developed capitalist country, investigate its root cause — the high-quality labor force has played a great role. The secondary vocational education in Switzerland has cultivated a large number of high-quality talents for the society. This paper expounds the current situation, characteristics, successful experience and enlightenment of Swiss vocational education.

1. Current situation of secondary vocational education in Switzerland

1.1 The development situation of secondary vocational education in Switzerland

In Switzerland, after the nine-year compulsory education, students begin to divert. About 85 percent of junior high school graduates choose secondary vocational education, while other students choose regular high school education. When students study in secondary vocational education, about 80% of students choose apprenticeship learning methods, that is, learning technical skills in the factory and learning general education in schools, and about 20% of students choose to study in full-time schools.

Secondary vocational education plays an important role in the Swiss education system, including 2-year secondary vocational education and 3-4-year secondary vocational education. In the 2-year secondary vocational education study, students can master more practical skills and obtain quite professional professional qualifications [1]. About 90 percent of students receive a federal career certificate when they complete a two-year course, with which students can get direct employment and continue to study, such as taking three-or four-year courses to obtain a federal career diploma. Three-year or four-year secondary vocational education not only gives students a certain ability to work, but also provides students with the great opportunity to participate in the federal vocational college examination. After passing the federal career examination, students can apply directly and ask to attend the University of Applied Technology. As shown in Table 1.

Table 1: School choice for Swiss Junior high school graduates in 2018

Student classification	number of people
Ordinary high school students	29653
Apprenticeship students in secondary vocational schools	65685
Full-time vocational school students	7126

1.2 Training objectives of Swiss secondary vocational education

The secondary vocational education in Switzerland adopts the apprenticeship system, no matter which way of class is, its training goal is also based on the employment of students, that is, to cultivate diversified, multi-skilled and all-round technical talents who are in line with the progress of the new era. With the development of social economy and the continuous transformation of industrial structure, the labor market is also constantly having new demands, and has higher and stricter requirements for apprentices, from the traditional can only master operational skills in the work, to meet the needs of modern development of compound talents [2]. In order to meet the needs of the society for talents, students should not only master the professional skills of their major, but also master the problems encountered in different working situations, such as the basic professional knowledge, language communication skills, interpersonal communication and other abilities.

2. Swiss secondary vocational education running mode — ternary system

The so-called ternary system is the Swiss secondary vocational education around enterprises, schools and training centers [3]. Most of the enterprises that Switzerland cooperates with schools are small and medium-sized enterprises, which have limited resources and do not have the conditions to train students alone. In this case, training institutions are created. In order to better promote the close cooperation between schools and enterprises, as well as the constraints of the training institutions, so the industry associations will manage the training institutions. The training center develops students from two aspects: first, to train students to master the theoretical knowledge and practical operation of the major; second, to promote general education learning, develop students' personality and interest, and enhance students' sense of social responsibility.

3. Characteristics of the Swiss secondary vocational education

3.1 Developed the dual system of teaching mode — ternary system

Through continuous practice and experience summary, the secondary vocational education model in Switzerland has been transformed from the traditional "dual system" to the "ternary system" gradually adapting to the national characteristics, that is, enterprises, vocational schools and training centers. In fact, we can still call it the binary system, that is, the teaching model of schools and enterprises. Because the training center is produced according to the needs of enterprises, in order to better train apprentices, and the training school is an independent existence, so it can also be called the ternary system. In this teaching mode in Switzerland, enterprise teaching plays a pivotal role in the whole teaching process, and its teaching time reaches two-thirds of the total teaching time [4]. Apprentices who can often train and improve their skills by completing specific tasks, and deepen their understanding of what they have learned in vocational schools. "The close cooperation between schools and enterprises, strong alliance, make full use of limited resources and maximize, and industry associations will actively cooperate with schools and enterprises, and provide them with more perfect learning and training programs, so that this model has long-term development.

3.2 One theme, the tripartite collaboration

One theme is the high development of secondary vocational education in Switzerland. The three parties of cooperation are the federal level government, the state level government and some professional organizations such as guilds and enterprises [5]. At the federal level, the management

of vocational education is at the federal level of the national administration of vocational and technical education and the Swiss Vocational Education and Training Association that delivers teachers to secondary vocational education institutions and provides learning and services. In the state level government, the education council of the states is responsible for specific education matters and training related matters, formulate the state regulations and policies, the 26 states are mainly responsible for the implementation of the policies and regulations; including employment, education learning and career planning, service centers can provide a variety of relevant guidance information to help students in employment and employment; the professional institutions include industry associations, enterprises and some professional organizations, stipulate the courses and contents of vocational education and training, and provide a large number of apprenticeship and internship positions. The ultimate goal of these is to cultivate talents who meet the needs of society and enhance the attractiveness of vocational education.

3.3 The curriculum complies with the development of The Times

In secondary vocational school in Switzerland, students in school learning time is very short, only 1-2 days a week, but not because of less time, on the contrary, in the limited time, students can learn German courses, business courses, economics knowledge content, but also learn the basic knowledge of the professional, related design of professional courses. In Switzerland, secondary vocational education trains students for the purpose of employment, accompanied by corporate development, demographic changes and the interests of apprentices [6]. At present, Swiss secondary vocational schools offer students more than 200 career types to choose from, with very popular majors in all industries.

3.4 Strict requirements for teacher training

In Switzerland, teachers in secondary vocational schools are divided into three categories: (1) teachers who teach general education and basic subjects, (2) teachers who teach professional courses who teach professional technical knowledge in schools or industry association training centers, and (3) teachers teachers who guide students in enterprises. The employment of these three types of teachers requires two aspects of learning to work, on the one hand, to master very professional knowledge and skills or to master professional knowledge and skills in practical application; on the other hand, SFIVET (Swiss Federal Vocational Training Institute) should develop the knowledge of pedagogy and teaching theory [7]. Teachers who teach general education are mostly trained by universities, and at the same time they must receive at least 300 credit hours of education organized by the Swiss Federal Institute of Vocational Training. The teacher who teaches specialized courses can graduate from a higher vocational college or university, and must have two years of work experience, with no less than 600 hours of working experience through the Swiss Federal Vocational Training Institute. Teachers who teach practical training must obtain master qualifications and have no less than two years of practical work experience, and simultaneously complete 100 class hours of relevant educational knowledge training.

4. How the secondary vocational education has succeeded in Switzerland

4.1 Perfect and scientific education system

Swiss education is highlighted in the practicality of people-oriented employment, and students can apply what they have learned to their practical work after graduation. It now seems that Switzerland has a complete, systematic lifelong vocational education system from primary to

advanced. This system is composed of four parts: vocational preparation education, secondary vocational education, higher vocational education and vocational continuing education, and each education composition is inseparable and complementary [8]. In Switzerland, many middle school students and their parents do not join the pursuit of famous colleges, nor do they blindly pursue higher education. Currently, about 72 percent of young students in Switzerland do not choose to go to high school, but prefer secondary vocational education.

4.2 Progressive service thought

Switzerland relies on an export-oriented economy, with 95% of its necessary raw materials required for production and 60% of its necessary consumer goods dependent on imports. And 70 percent of home-manufactured goods are sold overseas. In Switzerland, the service sector is quite developed, with the employment population of 72%. The vocational education in Switzerland conforms to the economic development of the region and even the whole country, while taking into account the development of the EU market and the needs of the international talent market, so that the vocational education in Switzerland can maintain a good development situation. Its higher professional college pays attention to scientific research, and takes this as its responsibility, closely contact factories and enterprises, conduct industry research, constantly update teaching content, strive to integrate social needs into teaching, and look for teaching projects in enterprises, broaden the research field, and promote the common development of economy and society.

4.3 A brand-new teaching model

Students who receive secondary vocational education go to enterprises for internship two or three days a week. After the internship, they go back to school to consolidate their theoretical knowledge and perfectly combine theory with practice. Internship is carried out in the specific work of the enterprise, so the practice has the characteristics of pertinence, practicability and operability, which is of great benefit to improve students' professional quality. In the practical teaching mode, on the one hand, students can receive on-site vocational guidance for free, and on the other hand, they can also get a certain salary. There is a cooperative relationship between factory enterprise and vocational college, during which it is not only convenient for students to study and practice, but also to earn about 20% of the salary of regular employees. After the internship, the person in charge of the factory enterprise will write the internship comments and give the internship results according to the work performance of the interns.

4.4 Give top priority to vocational quality education

In Switzerland, vocational quality education should be put first, that is, students' vocational quality education first, learning skills second. Quality education is very important. Only with good professional ethics, correct code of conduct and industry norms, can students meet the continuous progress and development of the society.

4.5 Employees must undergo vocational training

In Switzerland, engaging in any occupation requires a certain experience of vocational education and training, and even in the service industry has to go through specialized vocational education and training. In Switzerland, the salary is not determined by academic qualifications, but by competence. In Switzerland, no matter what profession or profession you do, no one will discriminate against you. Because of the good education system and the bright employment situation, many parents and

students will choose vocational colleges to learn their skills. Switzerland has made continuous progress in vocational education, adapted to the needs, had the courage to innovate, and continuously transported diversified talents to the domestic and even global talent market. Therefore, Switzerland has performed the world miracle of continuous high employment rate and low unemployment rate for 11 years. Developed vocational education, so that the Swiss watch industry, processing industry, financial industry, hotel tourism and other industries, have a large number of high-quality industry talents.

5. The enlightenment to our country's vocational education

5.1 Strengthen the social understanding of the necessity of secondary vocational education

In Switzerland, students' choice of secondary vocational education depends entirely on their interests and hobbies, rather than their forced choice after failing in the gaokao. In addition, the students who choose secondary vocational education will also be respected by the society and people. In the values of the Swiss people, people who are not famous universities and have high degrees will be valued by the society. People with certain skills who can play their strengths and meet the needs of the society will also be valued by the society. Vocational education in Switzerland produces mostly intermediate skilled people, who belong to the middle class as measured by their social income. The Swiss believe that vocational education mainly involves economic problems and career selection, which is highly related to the issue of talent allocation, and secondly involves education.

Comparatively speaking, there has always been a phenomenon of not paying attention to secondary vocational education in China, believing that secondary vocational education is the "helpless choice" after failing in the college entrance examination. In most people's opinion, people think that going to vocational school is to go to the bottom of the society, do the most tiring work to earn the lowest salary, and even will be looked down upon. Therefore, how to strengthen the social understanding of the necessity of secondary vocational education is a major problem in education. Therefore, in thought, China's government departments, enterprises, social organizations and individuals should change their ideas, correctly understand the necessity of secondary vocational education, and put their understanding into the country's economic development. In action, we should really and effectively improve the salary income of secondary vocational school graduates and their social status, actively publicize the educational results, carry forward the spirit and responsibility of cultivating students, and encourage students to regard it as a choice of success in life.

5.2 Create a scientific vocational education system, exudes its own charm

In Switzerland, secondary vocational students can obtain a federal vocational certificate by taking an exam after two years of graduation. With which they can work directly and choose to study 3-4 year courses. After the end of the course, they can obtain a federal vocational diploma by taking the exam and study in higher vocational colleges. Students who want to go to the University of Applied Technology for their studies can take the federal Vocational Education exam and apply directly after they pass the exam. Students studying in higher vocational colleges can also study in a research-oriented university after taking the university entrance ability test after graduation. Graduates of secondary vocational colleges that have obtained "professional examination certificates" can directly enter higher vocational colleges or the University of Applied Science and Technology for further education. Graduates of ordinary high schools who have more than one year of practical work experience and obtain relevant vocational certificates can also enter higher

vocational colleges or the University of Applied Science and Technology to receive education.

Switzerland has built a vocational education system of mutual integration, so that students can flexibly switch between the two Bridges of general education and vocational education, and the vocational and technical certificates and general education certificates obtained by students have been widely recognized by the society. In addition, students who choose vocational education can still go to USTC for college education. All of the above advantages highlight the charm of vocational education, and students are more willing to choose vocational education. Therefore, China should also create a sound and scientific vocational education system that adapts to the development of The Times, so that the vocational qualification certificates and academic certificates obtained by students can be converted to each other and accepted by the society, so that students can choose their own education types according to their learning interest and learning situation.

5.3 Let enterprises play their subjective and positive role in school-enterprise cooperation

In Switzerland, where companies strongly support vocational education, offering more than 200,000 apprentices each year, small and medium-sized enterprises regard it as their duty to train and guide apprentices and help them find jobs. The long-term and continuous work of apprentices can bring higher value to enterprises, so that enterprises are keen to participate in vocational education activities. What enterprises bring to apprentices is practical ability, and gives guidance to problems, so that they can adapt to the working environment and fulfill their responsibilities as soon as possible.

In Switzerland, companies pay their apprentices, the government provides financial support to schools, and trade associations offer certain employment options and experience guidance. China's secondary vocational education exists the phenomenon of insufficient funds, perfunctory, many students in secondary vocational schools after three years, no experience, no practical operation opportunities, employment is a problem. And some schools due to lack of funds, facilities are not perfect, but empty table. Some enterprises do not play their proper role in school-enterprise cooperation. Therefore, we should change the original concept, let the enterprise in the dominant position, for enterprises, recruiting internship students can not only reduce the national tax, but also get cheap labor; for the school, enterprise leading to cultivate students can improve the overall quality of labor force; for individual students, can earn internship wages and practice opportunities, but also improve their professional technical skills.

5.4 Create a systematic career planning, and start with the baby

In Switzerland, after graduating from junior high school, students can choose according to their own interests and hobbies, and do not choose a high school or a vocational school according to their grades. This is because Switzerland has its own strong career planning system and consulting system, which will help students to make the right choices at each stage of their learning career, so that each student can choose his or her favorite career. Both primary schools and junior high schools in Switzerland have professional career planning teachers to guide students to correctly understand their own preferences, and to guide and analyze students' future employment choices.

Therefore, in China's secondary vocational education to achieve high quality and comprehensive development, it is necessary to pay attention to the career planning of students in primary school and middle school stage, so that students realize their own preferences and ability, understand the characteristics of each occupation. For example, career planning courses are arranged 1-2 times a week, and professional career planning teachers will attend classes, so that students can personally participate in work practice, understand and understand their own strengths in practice, so that students can realize that the choice of secondary vocational education is their preferences and

strengths.

5.5 Expand enrollment and increase professional efforts

In recent years, the enrollment of secondary vocational schools in China has shown a downward trend, and Swiss vocational schools have tried to increase the number of students by receiving immigrants. For China, we can increase the number of students by expanding the scope of enrollment, especially to strengthen the training of farmers and professional farmers. According to the data released by the National Bureau of Statistics in 2020, the number of migrant workers in China reached 290 million. Compared with the statistics in 2019, "most of the 290 million migrant workers are relatively low, and the proportion of junior high school education, college degree or above is 72.3%, 16.6% and 11.1% respectively". Other data show that "in 2017, only 32.9 percent of farmers had received agriculture or non-agricultural vocational training, of which 30.6 percent had received non-agricultural vocational and technical training". It is not difficult to see that these farmers need to improve their education and professional skills, so they will become the main force of vocational schools.

6. Conclusion

With a perfect and scientific education system, progressive service thought, new teaching mode and awareness on professional quality education and staff training, Swiss vocational education has ranked in the forefront of the world and has become a model for all countries to learn from. This paper from strengthening the social understanding of the necessity of secondary vocational education, to create scientific vocational education system, let the enterprise in the subjective positive role, create a system of career planning, and from the baby, expand the recruitment of students, increase the intensity of vocational to learn and draw lessons from the enlightenment of Swiss secondary vocational education in our country, provide certain significance for China to establish a modern vocational education system.

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