

# Research on Talent Training of Veterans' Educational Enhancement Plan Under Higher Vocational Expansion

Chibing Gong<sup>1,\*</sup>

<sup>1</sup> College of Electric Power Engineering, Guangdong Polytechnic of Water Resources and Electric Engineering, Guangzhou, Guangdong 510635, China

\*Corresponding author. Email: spencergong@qq.com

## ABSTRACT

Enrolment of one million more people in higher vocational colleges is an effective way to solve the problem of shortage of high-quality technical skills. In the course of Guangdong province's implementation of the veterans' educational enhancement plan, there is a general shortage of applicants. After the purpose, tasks, and talent training requirements of higher vocational enrolment expansion were analyzed, six reform paths for talent training were proposed to ensure the quality of talent training for these veterans.

**Keywords:** Veterans, Higher vocational enrolment expansion, Educational enhancement plan, Talent training.

## 1. INTRODUCTION

In March 2019, Premier Li Keqiang clearly stated in the "Government Work Report": in order to allow more migrant workers, laid-off workers, and veterans to attend higher vocational colleges, the enrolment of higher vocational colleges will be expanded by one million within 2019. For the purpose of more social workers study in higher vocational colleges and train more high-quality technical personnel, this decision can not only solve the shortage of highly skilled talents, but also ease the current employment pressure. Higher vocational college enrolment expansion can stabilize and expand the employment of the right-age labor force, continuously meet the needs of industrial transformation and upgrading, and promote high-quality social and economic development.

The enrolment expansion of one million students has a profound background: it is the development requirement for china's economy to enter the "new normal". Vocational education needs continuously deep reforms to meet the development, transformation and upgrading of the regional

In October 2019, the major of architectural electrical engineering technology was arranged by

my college to implement the educational enhancement plan for veterans. Due to the serious shortage of applicants, only ten veterans were admitted, and finally five of them entered the school. This situation is common in other vocational colleges of Guangdong province, so this paper discusses how to implement high-quality talent training for these small numbers of veterans.

## 2. THE PURPOSE, TASKS AND TALENT TRAINING OF HIGHER VOCATIONAL ENROLMENT EXPANSION

### 2.1 Solving the Problem of Shortage of High-quality Technical Skills

After more than thirty years of rapid economic development in China, the shortage of high-quality skilled personnel has become more and more serious. The United States, the United Kingdom, and Germany have also encountered a shortage of skilled talents, and their solutions are worth learning [1].

United States issued the "Revitalizing American Advanced Manufacturing Industry" in 2014, and proposed that American community colleges should

deepen cooperation with enterprises in production, education and research, enhance the new image of manufacturing and community colleges, and train urgently needed advanced manufacturing through measures such as vocational certificates and regional apprenticeships.

In 2013, United Kingdom proposed the Industrial 2050 Strategy, vigorously developed information technology and new material technology, and attached importance to the key role of vocational education in manufacturing. In order to ensure the continuous improvement of the quantity and quality of vocational education, advanced manufacturing is integrated into the curriculum, and apprenticeship is strongly supported.

In 2013, Germany presented the Industry 4.0 strategy to investigate the needs and gaps of skilled talents in order to realize intelligent manufacturing production systems, processes and logistics, help students plan their careers, modify the professional qualification framework, and improve the international level of talent training.

## ***2.2 The Task of Enrolment Expansion in Vocational Colleges Is One Million***

Six ministries including the Ministry of Education issued the "Special Work Implementation Plan for Vocational Colleges Enrolment Expansion" in May 2019, and made specific arrangements on how to guarantee the completion of the amount of one million students.

Vocational colleges in Guangdong province need to complete about 80,000 enrolment expansion tasks, which will be finished in two phases. The registration for the first phase was valid by the end of May 13, 2019. Beginning in October 2019, the second phase of the special action is for about 70,000 people including modern apprentices, veterans, high-skilled talents, grassroots health talents and kindergarten teachers.

The statistical results show that the task of enrolment expansion by one million has been finished in 2019, and the related task in Guangdong province has also been completed well.

## ***2.3 Guaranteeing the Quality of Talent Training***

There are about 1,400 vocational colleges in China by the end of 2018, which have to undertake the task of one million more students. On average,

each college needs to have about 700 more students. The total enrolment of vocational colleges' students is about 3.7 million in 2018. As a result, the enrolment in 2019 increased by 27%.

"Implementation Plan of National Vocational Education Reform" points out that vocational education should no longer pursue scale expansion, but should turn to improving the quality of talent training. The process of enrolment expansion in vocational colleges and the quality of personnel training after the enrolment have aroused strong attention from many scholars.

Some scholars are concerned about the construction of the "vocational college entrance examination" system under the expansion of vocational education [2]. It is necessary to reasonably allocate the assessment ratio of "culture + skills", to conduct training, teaching, assessment and management at all levels, and finally to establish a system of classified assessment, comprehensive assessment, and multiple admissions.

There are conflicts between the expansion and the quality of higher vocational education [3]. However, by deepening the reform of the talent training model, regional economic development can be promoted and the high-quality of higher vocational education can also be jointly enhanced.

The "one million enrolment expansion" presents both opportunities and challenges for higher vocational colleges [4]. Due to the major changes in the source of students, there should be six reform paths for higher vocational colleges: the way of enrolment changes from single to diversified; the teaching mode changes from classroom to practical operation; the management system changes from rigid management to flexible management; and the training mode changes from "easy entry and easy exit" shifting to "easy entry and strict exit"; innovation and entrepreneurship shift from universal education to personalized guidance; employment services shift from graduate career selection to on-campus employment.

The development path of vocational colleges was given [5] after enrolment expansion: completing the task of enrolment expansion; reforming the current teaching and management modes based on the diversified sources of students; improving teaching quality; enhancing teacher quality; evaluating teaching quality by use of "benefit increment".

The enrolment expansion of vocational colleges enables many workers to study in higher vocational colleges [6]. According to the learning characteristics of adults, it is necessary to carry out personalized teaching and career planning guidance. Training based on core competence and information technology-based skill learning should be focused on. Integration of work and study, school-enterprise cooperation, and combination of production and education should also be carried out to improve the quality of talent training.

After the enrolment expansion of vocational colleges, it is necessary to establish the concept of lifelong education, to construct a talent view for everyone's success, to study the characteristics of adult learners, and to build a new teaching, management and service model for adult students [7] to ensure the quality of education and promote students' academic success.

At the end of December 2019, the General Office of the Ministry of Education issued the "Guiding Opinions on Doing a Good Job in Higher Vocational Education and Teaching Management after Enrolment Expansion", which clearly

regulates 10 aspects of teaching management and is an important guidance document after enrolment expansion. This document should be studied in depth and apply it to our actual teaching work.

### **3. THE NUMBER OF APPLICANTS FOR VETERANS IS SERIOUSLY INSUFFICIENT**

In October 2019, Guangdong province launched an educational enhancement plan for veterans. Two majors of architectural electrical engineering technology and drainage engineering technology were arranged in my college. It is planned to admit 40 students for each major. Due to the serious shortage of applicants, the number of admissions is only 10 and 7, respectively. Online investigations of other vocational colleges in Guangdong indicate that the number of applicants for veterans is also seriously insufficient.

The following "Table 1" is a summary of the admissions for veterans in relevant vocational colleges in Guangdong province.

Table 1. Summary of the applicants for veterans

Name of vocational college	Name of major	Number of planned admissions	Number of admissions
Shunde Polytechnic	E-commerce	30	14
	Marketing	30	7
Zhongshan Polytechnic	Electrical automation technology	60	6
Guangdong Teachers College of Foreign Language and Arts	Cooking technology and nutrition	60	1
Huizhou Engineering Vocational College	Computer application technology	30	17
Huizhou Health Sciences Polytechnic	Rehabilitation technology	30	5
	Pharmacy	30	3
Guangzhou Railway Polytechnic	Railway vehicle	30	12
	Railway engineering technology	30	5
Zhuhai City Polytechnic	Social work	30	2
	Cloud computing technology and application	30	3
Jiangmen Polytechnic	Communication and planning	30	1
	E-commerce	30	2
	Computer network technology	30	4
Qingyuan Polytechnic	Automobile inspection and maintenance technology	30	2
	Digital media application technology	30	6
Jieyang Polytechnic	Sports education	50	13
Heyuan Polytechnic	Automobile application and maintenance technology	30	4

Name of vocational college	Name of major	Number of planned admissions	Number of admissions
	Logistics management	30	14
Guangdong Polytechnic	Mechatronics technology	30	4
	Business management	30	13
Private Hualian College	Business management	50	2
Chaoshan Vocational and Technical College	7 related majors	210	29
Total		970	169

From the data in the above "Table 1", it can be seen that due to the serious shortage of applicants, the number of students admitted is seriously low. The average admission rate is only 17%, which is far from reaching the number of planned admissions.

Therefore, in order to achieve high-quality talent training for veterans, the following reform paths of talent training were proposed.

#### **4. REFORM PATH OF TALENT TRAINING FOR VETERANS**

##### ***4.1 Paying Special Attention to Veterans***

Although the number of veterans entering the school is insufficient, in order to pay special attention to these students, a separate class is needed. Instead of teaching in the small classes, they are taught together with ordinary students. The relevant personnel of the school, not just all the teachers, need to pay special attention to their learning and living, and timely discover the various problems that arise in their study and life, so as to achieve the quality of talent training.

These veterans are generally discharged after graduating from high school and serving as conscripts for two years. Some have even served in the army for more than 5 years. Compared with ordinary students, the age gap is large. In mixed classes, a special group of veterans is difficult to integrate with ordinary students, and it is easy to isolate from ordinary students. Relevant school personnel, counselors, and class teachers need to pay more attention to veterans' life and psychological problems in order to integrate them into the overall school environment. For example, when allocating the dormitories, they are arranged

to live together. It is helpful for them to get used to the new learning environment as soon as possible. However, due to at least two years of military camp life, they are isolated from ordinary life. The isolation from ordinary students will aggravate their sense of isolation. It is recommended to organize various clubs and carry out extracurricular activities between classes, so that they have the opportunity to integrate into the whole student life, to find their place and to enrich their university life.

Veterans leave the high school to enter the military camp, and then leave the military camp. They return to school to their educational enhancement. Compared with ordinary students, to continue learning is a big challenge for them, and their learning is also different from ordinary students. Our teachers should pay attention to this difference and improve own teaching concepts to help them.

Teachers should have the concept of life-long education, establish a talent view for everyone's success, and continue to study and explore the characteristics of adult learners. Teachers need to meet each semester to discuss and exchange relevant teaching methods, and to conduct regular face-to-face communication with these students in order to solve various problems.

##### ***4.2 Building a Targeted Talent Training Program***

It is necessary to adopt a variety of methods to fully understand these veterans. From the five aspects of students' academic status, technical skills, information technology application ability, learning goals and psychological expectations to test, analyze and evaluate the students' academic status, and finally to write a report.

Based on the report, teachers need to put forward a targeted talent training program for the veterans.

#### **4.3 *Enhancing the Information Technology Application Capabilities***

The students in the veteran class devote themselves to the life of the barracks after graduating from high school, they rarely have the opportunity to use the computer. They are urgently needed to enhance their information technology application capabilities.

In the veteran class of architectural electrical engineering technology, we teach them the basics of computer applications, such as the basic operation of Office software, and we will also provide them with an optional course, which is the foundation of virtual reality development, to expand their vision in the field of information technology.

#### **4.4 *Trying Holographic Teaching Based on Mixed Reality***

Drop-out fuse is the most commonly used type of protection switch for 10kV distribution lines and distribution transformers. The opening and opening of the fuse is a high-risk process, and such on-site maintenance can be fatal if an accident occurs.

In order to improve the quality of talent training for veterans, we try to provide brand-new teaching resources for operations of drop-out fuses. HoloLens with mixed reality and voice recognition are used to train students to operate the fuse. Two modules in the system: fuse structure and fuse operation. Each module includes three modes of operation: learning, practice and assessment. Students choose different modes of operation according to their skill levels. We use holographic teaching resources to explore the characteristics of adult learners.

#### **4.5 *Supplying Three Instructors for Veterans***

We supply three instructors for veterans: a professional instructor, a career instructor and an entrepreneurial instructor. A professional instructor serves the entire process of talent training and ensures veterans' academic success. A career

instructor focuses on the employment of veterans from the beginning of enrolment in order to guide and plan their careers, and finally help them find a good job. An Entrepreneurship instructor encourage veterans to achieve high-quality employment through entrepreneurship.

#### **4.6 *Changing the Assessment Method***

We change the evaluation method to the way of "benefit increment". Under the circumstances of differentiated student sources and individualized education, we should adopt a policy of "easy entry and strict exit". It is no longer a "one ruler" approach, we use a "benefit increment" to allow each student to gain increment and achieve success.

### **5. CONCLUSION**

Although the number of admissions for veterans is seriously insufficient, we must ensure the quality of talent training of these students. If we follow the paths of the above-mentioned talent training reform, we will be able to make veterans succeed in their studies and get good jobs.

### **AUTHORS' CONTRIBUTIONS**

This paper is independently completed by Chibing Gong.

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