

## Research and Practice on the "Three Cooperation" Mode of Personalized and Elite Talents Training in Higher Vocational Colleges

Hongmei Lei\*, Jianglin Zuo, Haiying Deng

Guangxi College of Water Resources and Electric Power, Nanning 530023, Guangxi Province, China

**Funding:** Research and practice on the construction of teaching innovation team of teachers in higher vocational colleges under the background of "20 Items of Vocational Education" Key Research Project of Guangxi Vocational Education Reform in 2019 (No.: gxgzjg2019a024).

**Abstract:** In view of the diversified structure of higher vocational college students with different experience and learning basis under the background of "one million enrollment expansion", this paper analyzes the current situation of higher vocational college students. In order to cultivate the innovative thinking and ability of the students in the three fields of "all staff, specialty, group and individual", the "school enterprise cooperation", "teacher-student cooperation" and "first and second classroom cooperation" talent training are implemented, and the "three cooperation" mode is studied and practiced to cultivate personalized and elite talents.

**Key words:** Personality; Elite talents; Innovative thinking; Ability

**Publication date:** December, 2020

**Publication online:** 31 December, 2020

\***Corresponding author:** Hongmei Lei, 3055449176@qq.com

### 1 Research background

#### 1.1 The cultivation of elite talents is one of the overall plans of China's educational reform and development

Today's high-speed economic society needs more high-end talents than any other era. Therefore, in the context of educational equity, China's colleges and universities must take the road of hierarchical

and classified education, so that mass education and elite education can be coordinated development. In the outline of national medium and long term education reform and development plan (2010-2020), it is repeatedly mentioned to "cultivate top-notch innovative talents with persistent belief, solid basic theory and excellent practical operation skills".

#### 1.2 Individuation and elite training is the inevitable choice for higher vocational education to solve the relationship between quantity and quality, equality and excellence

In the traditional education mode of our country, there is a tendency to pay attention to the common elements of students and pay attention to the cultivation of students' uniformity. In this traditional teaching mode, the class size is relatively large, the curriculum is single, can not meet the needs of different levels of students for knowledge, limit and suppress the development of students' personality. Therefore, respecting students' differences, paying attention to students' personality, people-oriented and teaching students in accordance with their aptitude are very important directions of the current higher vocational education reform. It is not only the requirement of education fairness, but also the correct handling of the relationship between the quantity and quality, equality and excellence of higher vocational education. It is the inevitable choice of the system.

## 2 Problems to be solved

Under the national vocational education policy of one million enrollment expansion, in addition to ordinary high school graduates and secondary vocational school graduates, there are also ex-servicemen, laid-off workers, migrant workers, high-quality farmers and in-service enterprise employees. The source of students is more diversified. How to cultivate personality and elite talents and improve the quality of education in vocational colleges is an urgent problem to be solved.

## 3 The main contents and methods of the study

As a higher vocational college with nearly ten million students, facing the reality of the need for "big country craftsmen" in the development of national strategy, it must cultivate elite talents and reserve high-end knowledge, skills and literacy for future big country craftsmen. Premier Li Keqiang pointed out at the Symposium on promoting the modernization of vocational education that it is necessary to "accelerate the cultivation of a large number of high-quality workers and talents with professional skills and craftsmanship spirit". In view of the diversified structure of higher vocational college students with different experience and learning basis under the background of "one million enrollment expansion", we take the cultivation of innovative thinking and ability of students in the three fields of "all staff-Specialty Group - individual" as the main line, implement the school enterprise cooperation, teacher-student cooperation, first and second classroom cooperation, and study and practice the "three cooperation" mode to cultivate personalized and elite talents.

### 3.1 School enterprise cooperation

Co construction and cooperation with vocational education group, industry association and leading enterprises, joint research on specialty setting and talent training scheme design, joint development of curriculum and teaching materials, joint establishment of curriculum team, joint construction of practical training platform, joint formulation of talent training quality standards, etc., so as to realize the integration of enterprise needs into all aspects of talent training. Work together with enterprise technical experts to

develop post standards and curriculum standards that meet the requirements of teaching rules and skills, and integrate elements such as "moral education" and "innovation and entrepreneurship" into the curriculum standards. According to the students of different sources, as well as different knowledge base and learning ability, the teaching objectives of different levels and different post needs are designed.

Co education cooperates with leading enterprises to implement the multi-point docking mode of provincial and ministerial teaching masters docking with provincial craftsmen, provincial excellent teaching teams docking with advanced grass-roots teams, to jointly guide personalized elite students, participate in the research projects of skill master studio and teacher studio, carry out basic research and practice activities, and realize the improvement of special skills and craftsmanship spirit of personalized elite talents It can effectively shorten the internship period of elite students. Students at different levels are organized to observe and study the on-site operation of enterprises, participate in the construction and installation of construction projects, and employ excellent employees of enterprises to enter the teaching workshop to carry out teaching, so as to realize that all students can learn from the original foundation, develop their knowledge and ability, and finally achieve the goal of personnel training.

### 3.2 Cooperation between teachers and students, co-management and co-research

Co-management: teachers with rich experience and strong sense of responsibility, according to their own professional advantages, set up various technical skills training classes based on the principle of professional teachers' recommendation and students' willingness, such as electric power elite training camp, relay protection craftsman alliance, new energy innovation group and UAV application innovation group. Teachers and students with special skills jointly formulate the semester activity plan and objectives of the training class, and communicate with each other Through the "old lead new" mode, that is, senior students lead junior students, participate in the daily management of training classes, and realize the sustainable development of the match between specialty teachers and characteristic students.

We should develop the reward system for special

teachers, implement the "flexible" credit system, expand the channels of evaluation and introduce process evaluation through the evaluation mechanism of qualitative and quantitative, internal and external, process and result, so as to stimulate teachers' enthusiasm for work and students' enthusiasm to participate in learning activities. The vocational skill grade certificate, innovation and entrepreneurship awards and other related courses should be corresponding, and credits should be recognized. Reduce the traditional evaluation weight of subject knowledge mastery degree, increase the evaluation weight of students' learning process, incorporate enthusiasm, enthusiasm for participation, team cooperation consciousness, innovation and invention spirit into the evaluation elements, and explore a long-term mechanism of "college + Department + specialty teacher" three-level management of "College guidance, department leading, school enterprise co-construction, school, enterprise, third-party evaluation", so as to ensure the quality of students This is the virtuous circle of the operation of the personalized elite talent training mode.

The research instructor led the students to carry out the practice and research of special technical skills in their spare time. Relying on the teaching workshop, teachers set up a number of different skill directions, allowing students to choose different directions for learning according to their own situation, so as to better improve students' learning autonomy and interest, promote each student to get the optimal development on their original basis, and enable students to quickly master key vocational skills in different post environments, So as to comprehensively improve students' social adaptability and employment competitiveness.

### **3.3 One, two classroom coordination, complement each other**

Complementary to carry out professional ability training based on the second classroom, such as the formation of skills and knowledge publicity team, held a series of second classroom activities such as students' single skill competition and training equipment explanation competition, to improve vocational skills and comprehensive quality, and promote the personalized development of the whole staff. For some students with poor foundation, through

the student union, Student League Committee, student associations and other organizations to carry out the second classroom professional basic knowledge and basic skills training activities, the implementation of make-up training. Under the guidance of the Party branch, we will carry out a series of activities and knowledge lectures for the first league and the first product, guide the student union, the Student League Committee and the student associations to undertake skill training and competition at the college and department levels, and realize the popularization of general ability, basic skills and professional quality. In addition to completing the first class training plan of the specialty, the instructor sets up a specific training plan, carries out research and practical activities through the specialty training class, and participates in the activities of skill master studio and famous teacher studio, so as to realize the personalized elite talent training. According to the idea of project attraction, low-end intervention, high-end guidance and system operation, we will lead the elite of specialty training class to participate in the activities of skill master studio and famous teacher studio, so as to promote the upgrading of technical skills and professionalism of elite students and the cultivation of innovation ability.

In the first classroom, the elements of "Curriculum Ideology and politics" are integrated to help cultivate professional quality education and craftsman spirit. Combined with professional basic courses, teachers tell students the story of patent invention and knowledge of intellectual property protection behind the courses, publicize innovative inventions, and promote the participation of invention patents and "Internet +" College Students' innovation and entrepreneurship activities. Relying on the national, District, industry innovation and entrepreneurship, professional skills and other competitions for embedded training, led by the experienced, professional skills, scientific research level and innovation and entrepreneurship ability, responsible teachers and skilled masters, gradually make students pay attention to high-end technology, participate in high-end skills, realize the upgrading of students' technical skills and professional quality, and complete the personalized training The cultivation of English talents.

## 4 Implementation effect

After more than six years of implementation, more than 1000 students have benefited and 269 students have won awards in skills competitions. The students of the specialty training class applied for 10 patents, published 6 papers, won 45 national, provincial and municipal awards, including 4 national awards, applied for 22 college students' practical innovation projects, 15 won national scholarships, 9 won the title of excellent individual, 2 cooperation projects with enterprises, and made more than 10 physical works. Compared with the students of non-specialty training class, they have high learning enthusiasm, more learning investment and their own quality has been greatly improved. The student innovation project "Nandering - Xin Xin infusion" was awarded the provincial gold medal and the national bronze medal in the third national Internet plus student innovation and entrepreneurship competition.

## 5 Conclusion

The implementation of "three collaborative" mode of elite talent training, so that all students can complete the education and teaching objectives, meet the graduation standards, at the same time, realize the personalized education services for potential students, lay a good foundation for the future skilled masters

and craftsmen of industry enterprises, and meet the requirements of the national medium and long-term education reform and development program to cultivate innovative elite talents.

Through the personnel training of "school enterprise cooperation, co construction and co education", "teacher-student cooperation, co management and co research", "first and second classroom cooperation, complementary and mutual integration", the overall planning and system construction of students' personalized training system are carried out, so as to realize the cultivation of innovative thinking and ability of the whole staff (universality), specialty group (professionalism) and individual (personality).

## References

- [1] Zhou TP. Research on the promotion of the second classroom construction by the personalized elite talent training project in Higher Vocational Education [J]. Vocational education communication. 2017 (26): 13-15.
- [2] Zhang S. On the possibility and practical path of elite talent cultivation in Higher Vocational Education [J]. Higher Vocational Education Journal of Tianjin Vocational University. 2017,26 (3): 7-10.
- [3] Zhang XY. Design of research ideas on the construction mode of tutorial system training elite talents in Higher Vocational Colleges [J]. Value engineering. 2016,35 (26): 276-278.