

Promotion and Implementation of “1+X” Certificate System in Higher Vocational Colleges

Qin Yang

Wuhan Railway Vocational College of Technology, Wuhan, China
Email: yangqin2097@163.com

ABSTRACT

“1+X” certificate system combining the professional skill level certificate and degree certificate, offers a new development model of vocational education. It is a brand-new design for vocational education system. Now society, the demand for professional modern talents is very big, single diploma education and vocational training mode is not conducive to innovation and development of talents, and need to innovate the traditional vocational education mode reform. With the development of various information technologies such as the Internet and big data, higher vocational colleges have been gradually implementing the “1+X” certificate system reform to meet the needs of enterprises in the talent market. This article analyzes the problems in the implementation of the system in higher vocational colleges, explains the significance of implementing the “1+X” certificate in vocational education, and then proposes the corresponding path of implementation, which has certain significance for the development of vocational education.

Keywords: “1+X” Certificate, Higher Vocational Colleges, Path of Implementation.

1. INTRODUCTION

With the rapid development of economy and structural transformation and upgrading in our country, the enterprises' demand for comprehensive skilled talents continues to increase. However, the employment rate of students from the higher vocational colleges has not been effectively improved, which shows that there is a certain gap between the talents cultivated by the colleges and the market demand [1]. The Ministry of Education has deepened the reform of vocational education and carried out the important strategic deployment of the “1+X” certificate system. This is a major breakthrough in the reform of vocational education and it provides a strong policy guarantee for cultivating high-quality compound talents. Under the background of the in-depth reform of vocational education, vocational colleges must not only do a good job in academic education, but also need to strengthen the training for acquiring vocational skills certificate, build a good platform for certificates of vocational skill level, and expand the channels for students to be employed or establish their own business [2]. In addition, vocational colleges should integrate their

own resources and expand the scope of vocational skills training based on their own characteristics and teaching advantages, so as to promote the regional economic development [3]. How to ensure a smooth and effective implementation of the “1+X” certificate system in vocational schools is somewhat worth thinking about and being studied and by the educator.

2. THE CONNOTATION OF “1+X” CERTIFICATE SYSTEM

The “1+X” certificate system means that the students of higher vocational colleges have obtained academic certificate and several certificates for vocational skills level as well in their graduation. Among them, “1” stands for the academic certificate [4]. In higher vocational colleges which aim to cultivate technical talents, academic certificate is the proof that students have finished their comprehensive education in the college and are qualified to graduate, and it is also the basis for the sustainable development of students. “X” stands for the certificates of vocational skills level, which certifies the technical qualification of the students in their major. The

"1+X" stands for "academic certificate + certificates of vocational skills level". The "1+X" certificate system is an organic connection and mutual integration. "1" is the foundation, the talent training program contains the elements of professional skill level certificates. "X" is an effective supplement, reinforcement and expansion of "1" [5]. The assessment standards of the certificate of vocational skills level should be consistent with the needs of enterprises, and the academic certificate and the certificate of vocational skills level are inseparable and mutually integrated. Only when we fathom the connotation of "1" and "X", we are able to better promote the smooth development of the "1+X" certificate system in vocational colleges [6].

3. ANALYSIS OF PROBLEMS OCCURRED DURING THE IMPLEMENTATION OF "1+X" CERTIFICATE SYSTEM

3.1 Activeness of Teachers

How to ignite the activeness of teachers? In a short term, this may increase a lot for the workload of teachers in vocational colleges sharply. In particular, for majors with low integration of certificate assessment content and existing courses, schools generally need to coordinate relevant resources and projects to carry out "X" certificate training for students, which will undoubtedly increase the work pressure of teachers; in the long run, teachers' professional learning intensity will continue to increase. Large, and for some "X" certificate projects, the trainer certificate obtained by the teacher is only valid for one year. The assessment content of some certificates is cutting-edge and comprehensive, and teachers can only master it through repeated study, which poses a huge challenge to teachers' own learning literacy and lifelong learning ability [7].

3.2 Textbooks and Requirements of Certificates are Poorly Connected and Integrated

How to realize the connection and integration of textbooks and requirements of certificates as soon as possible? At least four links are needed to realize it. The first is the establishment of a corresponding relationship between the vocational skill level standards and the training objectives of academic education; the second is that the certificate training and assessment content is linked to the professional talent plan, which complements each other in the training of compound skills; the third is the training of certificate teachers and certificate training. The arrangement is coordinated

with the teaching cycle of colleges; the fourth is the overall arrangement of certificate assessment and academic education related examinations. However, due to the rapid progress of the pilot work, the docking practice of the above links lags behind the system design.

3.3 The "X" Certificates are Leading to Another Examination-Oriented Education

How to prevent the "X" certificates from leading to another examination-oriented education? The "X" certificate has a certain orientation to the development of majors and student training in the colleges. As far as the certificates have been developed, the assessment generally adopts a combination of multiple-choice questions and practical questions. Some colleges and universities conduct intensive training for students, and help students quickly familiarize themselves with the content of the "X" certificate examination by repeating doing all kinds of exercises, gradually deviating from the 1+X certificate system and the original intention of vocational education reform in the core. Quite a few vocational colleges have expressed concern about the risk of "examination for verification and additional training for the pass rate".

3.4 Strengthen the University-enterprise Cooperation

How to promote the new school-enterprise cooperation? The objectives and tasks of 1+X certificate system are to promote school-enterprise cooperation; Build a good practical training base. Pilot colleges and universities actively cooperate with enterprises developing the "X" certificates, and deepen school-enterprise cooperation integrating industry and education. However, before the "X" certificate, vocational colleges had diversified exploration and practice in school-enterprise cooperation, joint construction of practice and training base, combination of education and training, etc. After the introduction of 1+X certificate system, vocational colleges are faced with the dual tasks of consolidating and deepening the existing achievements of school-enterprise cooperation and exploring a new school-enterprise cooperation model.

4. THE SIGNIFICANCE OF “1+X” CERTIFICATE SYSTEM IMPLEMENTATION

4.1 Deepen the Reform of Talent Training Model

The curriculum teaching of vocational colleges mostly adopts the undergraduate exam-oriented education mode. The syllabus, teaching mode and teaching content of the curriculum are mainly based on theoretical study, supplemented by practical teaching [8]. The implementation of the "1+X" certificate system in vocational colleges needs to reform the existing talent training plan for academic education, and revise the talent training plan in combination with the training goals of academic education and vocational skills appraisal, and combine the original subject-based methods. The curriculum standards and vocational skill level examination standards formulated under the following adjustments adjust the teaching plan and syllabus, and integrate the teaching content with the original subject-based courses and the requirements of vocational skill level certificates. Since the "1+X" certification system was launched, the enthusiasm for education in vocational schools has gradually increased. Some schools have reformed and innovated the talent training model and evaluation model, implemented changes in teaching materials, teaching methods, and teachers, and upgraded professional level training. Put it in the same important position as academic education and training to achieve high-quality talent training. The school innovates the talent training model, organically integrates the vocational skills training content and the special talent training plan, so that the curriculum teaching standards and the vocational skill level standards are accurately connected to effectively improve the quality of talent training.

4.2 Deepen School-enterprise Cooperation

Vocational colleges implement the "1+X" certificate system. From a school perspective, whether graduation can be recognized by employers depends on whether they have mastered relevant vocational skills. It is very effective for students to complete job skills training at school. Objectively speaking, colleges and universities alone cannot be effectively achieved [9]. To a certain extent, it needs to rely on enterprises that can issue and undertake corresponding vocational skill level certificates. From the perspective of enterprises, it is hoped that graduates will be able to take up posts, then enterprises can Participate in

the training, appraisal and testing of students' professional skill levels. Regarding the effect of talent training, on the one hand, vocational colleges encourage students to acquire relevant vocational practical operating abilities through learning and training during the school period, improve their vocational skills, vocational abilities and professional qualities, vocational colleges have improved the quality of talent training; on the other hand, enterprises have saved talent training costs and time, and at the same time improved the initiative and enthusiasm for participating in higher vocational education, which has become a win-win situation. Higher vocational colleges implement the "1+X" certificate system, so that students can also receive systematic vocational skills training when receiving academic education at school, and obtain academic certificates and corresponding vocational skills level certificates, which can fully improve students' comprehensive quality and professional skills. In short, the implementation of the "1+X" certificate system in higher vocational colleges is conducive to deepening the long-term and effective cooperation between the school and the enterprise.

4.3 Promote the Reform of Professional Qualification System Design

At present, the national vocational qualification certificates introduced by vocational colleges have strong independence and professionalism, but the teaching and training content of vocational qualification certificates cannot be effectively connected, and the teaching standards and professional talent training programs are not connected. In addition, professional and certificate curriculum resources, training conditions, and faculty construction cannot be improved simultaneously, teaching organization and training and assessment processes cannot be organically integrated, which invisibly increases the work pressure of teaching teachers and the burden of students' academic studies, and the training facilities of institutions. The cost of education in terms of construction, teacher training, training courses, training and teaching has also increased accordingly. As a new type of vocational qualification certificate, its function is positioned at two levels: dynamic and static: dynamic is a sign that students have mastered a certain level of vocational skills in a certain vocational field when entering a job field; static is for entering a profession. Provide diversified employment opportunities in the field. The "1+X certificate" system adheres to demand-oriented, problem-

oriented and goal-oriented, and has carried out a new top-level design of the main body and function positioning of the development and construction of certificates, which is the development basis for the deepening of the reform of the talent training model in vocational college.

5. PATH OF IMPLEMENTATION FOR THE "1+X" CERTIFICATE SYSTEM

5.1 Innovative the Talent Training Mode

The Vocational college should carry out the reform of talent training mode under the "1+X Certificate" system to promote students' learning from four aspects, constructing curriculum system, building teaching team, deepening teaching reform and perfecting incentive mechanism [10]. The specific technical route of reform is shown in the figure 1.

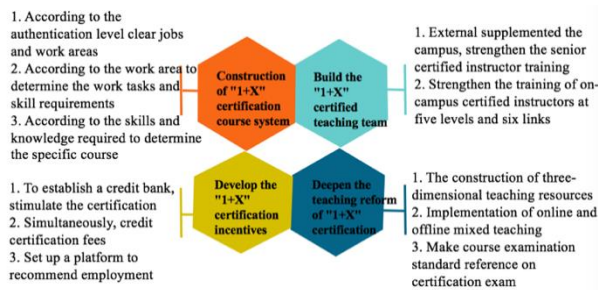


Figure 1 The mode reform of talent training

5.2 Accelerate the integration of academic education and vocational skill standards

According to the vocational skills standards, adjust the curriculum structure and curriculum content, promote the integration of academic education courses and vocational skills level standards, break the traditional four-stage curriculum structure, and adopt a "project-based" or "task-based" curriculum structure. If you want to truly achieve the goal of integrating academic education and vocational skill standards, first vocational college educators should analyze the comprehensive abilities required by the vocational post group and the specific theoretical and practical abilities required for the vocational skill level certificate to analyze the conclusions Adjust and set up courses as a basis. Secondly, the comprehensive ability and practical ability required by the analysis conclusion are decomposed into specific node tasks, and corresponding theoretical knowledge is interspersed at each task point, and then the task point is used as the basis to adjust and combine the course teaching content. The difficult knowledge points and skill requirements in the vocational qualification standards are integrated

into the teaching content, so that the integration of academic education and vocational skill level training standards can be finally realized

5.3 Build a Professional Combined Team of Full-time and Part-time Teachers

The implementation of the "1+X" certificate system in vocational colleges will inevitably have higher new requirements for professional teaching teams. Therefore, the professional teaching team of vocational colleges should have the following comprehensive qualities, such as noble teachers, exquisite skills, in-depth study of the overall design of vocational skill level courses, accurate grasp of the latest vocational education concepts, familiarity with assessment standards and assessment content, and familiarity Industry new technology demand, etc. In cultivating its own professional teaching team, colleges and universities should start from the following points: First, strengthen the training of professional leaders. Most teachers directly teach in schools after graduation. They lack corporate work experience and have weak practical skills. Professional leaders should be urged to study and research the new concept of the "1+X certificate" system, and accurately grasp the connotation and content of the professional skill level certificate [11]. Implementation requirements, strive to integrate the professional standards of the "1+X certificate" system into the professional talent training program and core curriculum teaching system; professional leaders should lead professional teaching team members to do a good job in the top-level design of talent training programs; secondly, expand the team of part-time teachers It is best to recruit part-time teachers from relevant companies for the selection and appointment of part-time teachers. The company's skilled talents have operational skills. Part-time teachers in colleges and universities will conduct certain theoretical training to improve the teaching ability and teaching level of part-time teachers. Finally, it focuses on strengthening the training of young and middle-aged teachers in the professional teaching team. Through participation in professional skill level standard training and participation in vocational college teacher quality improvement projects, etc., improve the teaching and assessment capabilities of professional backbone teachers, and comprehensively improve the teaching of professional teachers. Ability and training level

5.4 Enhance Service Capabilities for the Regional Economy

Serving the regional economy and increasing the full employment of workers are important measures to deepen the reform of vocational education. The implementation of a teaching system integrating the "1+X certificate" is the fundamental guarantee for continuously improving the ability of vocational education to serve regional economic development. With the rapid development of modern information technology, the pace of economic restructuring and industrial transformation and upgrading is accelerating, new technologies continue to emerge, and new occupations continue to appear; corporate career positions will continue to change, such as shortening the career cycle and accelerating the pace of job turnover, which means there are new and higher requirements for vocational education. At present, the demand for comprehensive skills talents in all walks of life is becoming more and more urgent, and vocational education needs to be highly adapted to the needs of economic development and scientific and technological development. In response to the needs of individual employment and entrepreneurship improvement and enterprise technology improvement and production and service upgrading needs, vocational colleges need to continuously update the professional talent training model, and timely integrate new enterprise requirements, new specifications, new technologies, etc. Shorten the time for students to adapt to their jobs, improve their social adaptability, and enhance their skills in employment and entrepreneurship.

5.5 Strengthen the Integration of Industry and Education

Vocational colleges need to strengthen the close contact with the industry committee and related enterprises, continuously deepen the cooperation with the industry and enterprises, and jointly build a technical and skill-based compound talent training platform. On the one hand, the school can provide more vocational skill training, vocational skill level test and vocational skill level certificate for students through the school-enterprise cooperation education platform by taking advantage of enterprise resources and practical training environment. On the other hand, invite enterprises to participate in the formulation and implementation of talent training programs, and fully mobilize the enthusiasm and initiative of

industry committees and related enterprises to participate in talent training in vocational colleges. The government should strengthen the formulation of relevant laws and regulations on school-enterprise cooperation, introduce corresponding incentive measures, encourage social enterprises to participate in vocational education, improve the utilization rate of enterprise resources, further improve the efficiency and quality of vocational education, and train real application-oriented talents for social enterprises.

6. CONCLUSION

As a major reform of China's vocational education system, the "1+X" certificate system is of irreplaceable significance for promoting the cultivation of vocational skills in China. The innovation of talent cultivation mechanism in colleges and universities not only attaches importance to the cultivation of professional curriculum knowledge, but also pays attention to the cultivation of practical skills, so as to make the cultivation of talents more closely related to the needs of enterprises in the industry, which effectively promotes the innovation of China's vocational training model and makes it more suitable for the current economic and social development.

The implementation of the "1+X" certificate system is a major breakthrough in our country's vocational education reform in the new era. The construction of the "1+X" Certificate system is a systematic project, which cannot be accomplished overnight. Vocational colleges should follow standards, deepen the integration of production and education, innovate talent training models, pay equal attention to academic education and vocational training, strengthen the guarantee of basic conditions, strengthen the construction of teachers team, improve the internal quality control system, and perform it well in the implementation of "1+X" certificate system which is a great chess game of vocational Education.

REFERENCES

- [1] Yusheng Ying, Wei Lv. A Study on Higher Vocational College Students' Academic Procrastination Behavior and Related Factors[J]. International Journal of Education and Management Engineering, 2012, 7(29): 29-35, DOI: 10.5815/ijeme.2012.07.05
- [2] Xiaowen Zhu, Zhiwen Zhu. Learned to Use or Learned not to Use?- An Application of the Wiles

- Test on Graduates of China's Newly-upgraded Universities[J]. *International Journal of Education and Management Engineering*, 2013, 1(29): 1-6, DOI: 10.5815/ijeme.2013.01.01
- [3] Guoqing Xu. The Fundamental Transformation of the Talent Training Model of Vocational Education in the Intelligent Era[J]. *Educational Research*, 2011, 37(3): 72-78. "in Chinese"
- [4] Ning Haicheng, Ling Yu, Research on the Perfection of Vocational Education and Training System under the 1+X Certificate System[J]. *Dual Vocations Education*. 2019, (10): 22-26. "in Chinese"
- [5] Yizhi Tang: "1+X" Certificate System: Innovation in the Design of Vocational Education System in the New Era[J]. *Vocational and Technical Education in China*, 2019(6): 6-11. "in Chinese"
- [6] Bin Li: Steadily Advance The Pilot Work of the "1+X Certificate" System in the Field of Vocational Skills for the Elderly[N]. *China Education News*, 2019 (4) Edition. "in Chinese".
- [7] A. Kangaiammal, R. Silambannan, C. Senthamarai, M.V. Srinath. Student Learning Ability Assessment Using Rough Set and Data Mining Approaches[J]. *International Journal of Modern Education and Computer Science*, 2013, 6(25): 1-11. DOI: 10.5815/ijmecs.2013.05.01
- [8] Zheng Li: Vocational Education "1+X" Certificate System: Background, Positioning and Pilot Strategy[J]. *Communication of Vocational Education*, 2019, (03): 37-41. "in Chinese"
- [9] Xi Bao. Investigation and analysis of talent training in Higher vocational Colleges based on "1+X" certificate system[J]. *Vocational Education Communication*, 2019, (05): 45-48.
- [10] ShouBing Li. Thoughts on the Pilot Work of 1+X Certificate System in Higher Vocational Colleges[J]. *Chinese Vocational and Technical Education*. 2019, (10): 43-47.
- [11] Zheng LI. Vocational Education 1 + X Certificate System: Background, orientation and Pilot strategy[J]. *Vocational Education Communication*. 2019(07): 15-18.