Discussion on talent training mechanism of "post course competition certificate" integration under 1 + X certificate system

Fei Hao
Department of Mechanical and Electrical Engineering, Hohhot Vocational College, Hohhot, 010051, China

Keywords: 1+X certificate system; post class competition certificate; talent training

Abstract: The 1+X certificate system is an important measure proposed by the state in deepening the reform of occupational education. The implementation of the 1+X certificate system is conducive to improving the modern occupational education system, improving the national occupational education system, improving the quality of talent training, and promoting the internationalization of talent training. In order to enhance the adaptability of occupational education and cultivate high-quality compound innovative talents, occupational education urgently needs to innovate the education model that reflects the characteristics of different types of education. To promote the comprehensive education of "post course competition certificate", we must comprehensively grasp and systematically implement it, and ensure that policies and measures are deeply rooted in the hearts of the people through strengthening publicity and education; Pay attention to students' differences and enhance the adaptability of accommodation courses. Therefore, from the perspective of learners, the pilot institution of higher learning should establish a professional "X" certificate selection and training guidance system, create a curriculum system of 1 + X documentary evidence connection and integration that can effectively promote students' learning, and build a guidance mode of students' career planning under the 1 + X certificate system. A deep understanding of the great significance of the innovation of 1 + X certificate system is extremely important for carrying out relevant pilot work.

1. Introduction

The 1+X certificate system is an innovative design of occupational education system, which connects the educational diploma with the professional labor certificate, and it is a major reform measure to cultivate compound technical and skilled personnel in vocational school in China [1]. Under the new development pattern, technological change and industrial transformation and upgrading have led to the improvement of the level and literacy demand of technical and skilled personnel in China [2]. Through the analysis of some clauses, it is found that there is a clear clue behind it, that is, to promote the further reform and innovation of occupational education, which echoes the concept of "innovation, coordination, green, openness and sharing" advocated by the state, and is a programmatic document guiding the further development of occupational education [3]. Education is an educational process that combines people with occupation. It is oriented by market, service development and employment promotion, and is characterized by the integration of production and education, school-enterprise cooperation, ability-based, combination of morality and technology, combination of work and study, dual education, equal emphasis on education and training, and facing everyone. In the modern society of industrial transformation and upgrading and digital development, the traditional school enterprise cooperation mode with secondary vocational school as the main body, work study alternation, on-the-job internship and order training needs to be aware of changes and adapt to changes. It is necessary to implement high-end guidance and develop vocational higher education [4]. In order to implement the relevant requirements of the implementation plan, the Ministry of education and other four departments jointly issued the pilot plan for the implementation of the "academic certificate + several vocational skill level certificates" system in institution of higher learning, proposing that the 1 + X certificate system will be implemented in the first batch of pilot institution of higher learning within this year [5].

In January 2019, the State Council officially issued the implementation plan of national
occupational education reform, which caused waves in the in-service education circle and even the education sector. Some scholars exclaimed that "the spring of occupational education is coming". Occupational education researchers mainly analyzed the origin, logical characteristics and value demands of the new system from the perspective of system design [6]. From the perspective of historical evolution, the background of the introduction of the system is sorted out; from the perspective of governance, the misunderstandings and preventive measures that should be avoided in the actual operation of the pilot work are put forward. The "post-class, competition certificate" integrated education model connects the talent training needs of the four major systems of industry, education, competition, and certificate. Afterwards, relevant leaders and researchers interpreted the 1+X certificate system on different occasions [7]. Occupational education in schools should not only have the standardization and rigor of formal academic education, but also have market-oriented, service development, Promote the flexibility and pertinence of employment. Promote the integration and development of knowledge literacy and technical skills, connect the career development channels of high-skilled talents and engineering and technical talents, and accelerate the cultivation of a large number of technical skills, composite skills and knowledge skills with reasonable structure and excellent quality. As a major innovation in the occupational education personnel training system, the implementation of the 1+X certificate system has multiple meanings and values, and it is the key to the national occupational education reform in the new era. Important breakthrough [9].

2. The Significance of the Implementation of Occupational Education "1+X" Certificate System

2.1. Deepen occupational education reform and improve modern occupational education education system

Accelerating the development of modern occupational education and improving the modern occupational education system are the fundamental directions for deepening the reform of occupational education in my country [10]. From the demand side analysis, with the development of the industry, the trend of digitization, intelligence and greening is obvious. Strengthening the real economy requires a large number of skilled talents. Promoting industrial transformation and upgrading relies on knowledge integration and technological innovation. Skilled talents have increasingly become the core resources of competition. Skilled talent development has become a national strategy [11]. "I” and “X” are relatively independent, with different certification subjects, different evaluation standards and norms, and each has its own social credibility [12]. Until 2002, the former Ministry of Labor and Personnel issued the “Opinions on Further Promoting the Implementation of the Vocational Qualification Certificate System in Vocational Schools”. " proposed to "gradually realize the connection between vocational school academic certificates and professional and technical personnel qualification certificates", and clearly defined "dual certificates" as academic certificates and vocational qualification certificates from the policy level. From the perspective of current standards, there is no consistent core between various standards, and there are certain level differences in different standards. In practice, it shows that the pilot nature of the standard itself and the construction of the whole system need to be improved. It is difficult to form a qualitative vocational skill standard system in more than 1500 occupational categories, lack of a unified core and quality assurance mechanism, and do not form a unified management model. The premise of the construction of "integration of teaching and learning" in higher vocational school is the in-depth exploration of the connotation of "integration of teaching and learning" based on the combination of teaching and learning. Through the integration of the three main bodies, three educational elements and four resource elements of "post course competition certificate", we can realize the curriculum reform and cultivate high-quality technical and skilled talents to adapt to the economic and social development (see Table 1).
### Table 1 Integration subject and content of "post course competition certificate"

<table>
<thead>
<tr>
<th>Fusion subject</th>
<th>Industry</th>
<th>Educational circles</th>
<th>Certificate circle</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational elements</td>
<td>Professional standards</td>
<td>Criterion for curriculum</td>
<td>Skill level certificate standard</td>
</tr>
<tr>
<td></td>
<td>Production process</td>
<td>Teaching process</td>
<td>X certificate examination process</td>
</tr>
<tr>
<td>Resource elements</td>
<td>Enterprise master resources</td>
<td>School classroom resources</td>
<td>Industry expert resources</td>
</tr>
<tr>
<td></td>
<td>Workplace facilities</td>
<td>Simulated training site</td>
<td>Certificate recognition platform</td>
</tr>
<tr>
<td></td>
<td>Enterprise funds</td>
<td>School funds</td>
<td>Certificate recognition fee</td>
</tr>
</tbody>
</table>

#### 2.2. Optimize the structure of occupational education and improve the national occupational education system

Occupational education in my country is a typical dual structure education system, which is mainly composed of two parts: academic education and non-academic education. The sustainable development of my country in the future must overcome the "three major barriers" of changing the development mode, optimizing the economic structure, and changing the driving force of growth. The evaluation and certification of the learning outcomes of school occupational education should be an organic combination of the universality of school education and the particularity of occupational requirements of different industries and enterprises, which is the logical root of the establishment of the 1+X certificate system. Academic education is a kind of institutional education with schools as the main body and manpower planning as the basis. It is completely incorporated into the government's education management system, and the target of education is mainly young students who have not yet entered the society. As a matter of fact, vocational qualification certificate and vocational skill level certificate (namely "X" certificate) are different from academic certificates reflecting students' learning experience. They mark the level of workers' application of specific knowledge, technology and skills to meet the needs of vocational labor from their respective sides, and they are all employment access or salary certificates stipulated in Labor Law and Occupational Education Law. "Qualifications framework" refers to a series of continuous and recognized qualifications ladder formed according to the progressive forms of knowledge, skills and abilities or different levels of employment and job requirements. However, it is rare to conduct research from the perspective of learners, the directly related interest group of the 1+X certificate system. Compared with formal and standardized academic education, non-academic education is more spontaneous, random and fragmented.

#### 3. Implementation of 1+X Certificate System from the Perspective of Learners

##### 3.1. Students' confusion about the uncertainty of the new "X" certificate

Although the state has cancelled 434 inapplicable vocational qualification certificates, accounting for 75% of the total, it still retains more than 100 vocational qualification certificates for important and special posts. Therefore, at present, there is a coexistence of "double certificate" system and 1 + X certificate system. "Post" refers to the ability demand of market posts. The upgrading of industrial structure and the iteration of technological renewal will lead to the change of talent ability demand. The Institute of Vocational and technical education center of the Ministry of education publicized the first batch of five occupational education and training evaluation organizations participating in the pilot work of the 1 + X system and the vocational skill level certificates and standards developed by them, marking the beginning of the substantive operation of the 1 + X system of Occupational Education. In the field of theoretical research, it is considered that the comprehensive education of "post course competition certificate" focuses on the integration of craftsman spirit and vocational quality of higher vocational students in the new era. Through market research, clarify the latest skill standards, post demand and employment quantity of the industry,
take the real post capacity demand of the enterprise as the basic point, take the integration of enterprise resources and school resources as the carrier, and display high-end skills on the platform of mutual skill exchange to lead the teaching reform. Students are confused about how to choose between the two. Most of the analysis of the connotation and logical characteristics of 1 + X certificate system only appears in the research literature of scholars, and there is a lack of formal official definition, which leads to students not knowing the concept of 1 + X certificate system and not understanding the function of 1 + X certificate system. Whether the four batches of training evaluation organization and published standards selected by the Research Institute of Vocational and technical education center of the Ministry of education can truly reflect the employment needs of students in Regional vocational school and the standard requirements of production posts in enterprises. After completing the relevant standards, it is necessary to design the quality assurance mechanism of the certificate and evaluate and feed back the vocational skill level certificate. The specific model is shown in Figure 1. In the whole process, we need to grasp the following links.

3.2. It is difficult for students to participate in the practice of 1 + X documentary evidence connection and accommodation

The academic certificate and the vocational skill level certificate are not two parallel certificate systems, but the mutual connection and integration of the two certificates. According to its substantive content, its "knowledge" includes factual knowledge and theoretical knowledge, "skill" includes cognitive skills and practical skills; "ability" is the level of applied knowledge, skills and methods. Therefore, in line with the principle that no student should be abandoned and no one should be left behind, higher vocational school should follow the principle of benchmarking people,
highlight the development standard, make every effort to protect the dominant position of students, and respect students’ career planning willingness and development expertise, to ensure full participation, fair competition, and everyone benefit. The industrial chain, high-end industries and high-end industries are in urgent need of high-skilled talents, and the improvement of the level of skilled talents and industrial transformation and upgrading support and promote each other. The occupational education standard recognized by the school and the society is not only the national education standard for the school-age population, but also the human resource development standard for the members of the society. It serves both the school and the students, as well as the employees of the society and enterprises. The cohesion and integration of books are the core and prominent features of 1+X certificate. At the same time, it is necessary to reform the curriculum management mechanism to create a broader development space and greater freedom for students. In this sense, the 1+X certificate system is both an education system and an employment system.

4. Conclusions

In conclusion, the integrated education mode of "post course competition certificate" in higher vocational school is an important way to cultivate high-quality technical and skilled talents to meet the development needs of the industry. Its effective implementation has laid a good foundation for further promoting the connotation construction of Higher vocational school and serving the high-quality development of regional economy and society. To implement the 1 + X certificate system in China's huge education system, we need to get sufficient pilot projects and practical experience to grow on a large scale, otherwise it is easy to repeat the old path of the vocational qualification certificate system. According to the certification standards of industrial enterprises and the teaching practice of vocational school, develop vocational skill education and training standards, and guide vocational school to adjust professional curriculum and teaching content. Secondly, optimize the ecosystem of "post course competition certificate" to ensure the solid promotion of "post course competition certificate" comprehensive education. It is required to publicize, popularize and summarize the pilot work of the 1+X certificate system, and pay attention to strengthening the experimental research of the 1+X certificate system, so as to contribute to enriching and developing the theory of occupational education with Chinese characteristics. Taking the pilot of 1+X certificate system as an opportunity, we will try our best to deepen the reform of occupational education mode and teaching system, strengthen the motivation of occupational education modernization, and push the level and quality of occupational education to a new level.

References


[8] Huang yiou, Zeng Shaowei Value goal and promotion path of 1 + X certificate system under the background of documentary evidence financing [J] Education and occupation, 2021 (5): 8


