

Research on the pilot management and operation system of “1+X” certificate system under the background of “double high construction”

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Abstract: The implementation of the “1+X” certificate system is an important measure of the national vocational education reform, and also an important guarantee to promote the “double high construction”. Higher vocational colleges should comprehensively promote the pilot development of the “1+X” certificate system, establish a sound management and operation system, clarify the responsibilities of the government, schools and training evaluation organizations, jointly formulate the management and operation plan of the “1+X” certificate system, improve the supporting facilities of the school, lay a good foundation for promoting the development of the “1+X” certificate system, actively build a curriculum card financing system, and encourage teachers to actively obtain vocational skill grade certificates, We will increase the number of “double qualified” teachers, comprehensively optimize the way of school enterprise cooperation, do a good job of connecting job skills with vocational education, and promote the high-quality development of the pilot “1+X” certificate system.

Keywords: “double high construction”; Higher vocational colleges; “1+X” certificate system; Management and operation

Introduction

The core of the “double high construction” is to build high-level vocational colleges and high-level majors with Chinese characteristics, comprehensively promote the reform of modern vocational education, which is an important measure to implement the concept of morality and talents, and also lays a good foundation for the pilot development of the “1+X” certificate system. Higher vocational colleges should seize the good development opportunity, actively promote the “1+X” certificate system to achieve stable development, actively seek cooperation between the government and the pilot vocational evaluation institutions, carry out vocational education around vocational standards and vocational skill grade examination standards, and truly achieve the seamless connection of professional courses teaching, industry standards and vocational skill examination, so as to improve the pilot management and operation quality.

1. Management and Operation Status of “1+X” Certificate System Pilot in Higher Vocational Colleges

1.1 The talent training scheme does not match the “1+X” certificate system

The pilot operation and management of the “1+X” certificate system requires the joint participation of higher vocational colleges, government functional departments and vocational training departments. However, at present, higher vocational colleges are responsible for the formulation of talent plans, and government departments and vocational training institutions are not involved. Higher vocational colleges collect relevant information about the pilot management of the “1+X” certificate system from other colleges through the Internet, and formulate the pilot management and operation system of the “1+X” certificate system with reference to these data, which is divorced from the needs of the local economy, industrial institutions and talents, and it is easy to cause the talent training program to be divorced from the market demand. In addition, the orientation of talent training in some schools is not clear, and the establishment of professional courses is not reasonable, which affects the connection of talent training, evaluation standards and X certificate standards, and thus affects students’ employment.

1.2 The curriculum financing system is not perfect

In the “1+X” certificate system, “1” refers to academic certificates and “X” refers to vocational skill grade certificates, which requires higher vocational colleges to actively build a curriculum integration system to promote the connection and integration between the two, so as to promote the healthy operation of the “1+X” certificate system. However, the objectives, paths and systems of the construction of the course card financing system in some pilot higher vocational colleges are not perfect, such as the lack of overlap in the curriculum of professional courses and X certificates; Neglecting the development of teaching materials for course certificate integration and lacking substantive teaching content; The teaching content of specialized courses and the content of X certificate training and examination are lack of complementation. These factors have affected the progress and quality of the construction of the curriculum financing system in higher vocational colleges.

1.3 Imperfect system and platform construction

The pilot management and operation of the “1+X” certificate system is a “protracted war”, which requires the cooperation of the government, training evaluation organizations and vocational colleges. There are still some deficiencies in this regard in vocational colleges. For example, the top-level design of the “1+X” certificate system pilot in some higher vocational colleges is not reasonable, the cooperation

system with training evaluation organizations is not perfect, the integration path of X certificates and academic certificates is not clear, and the credit exchange certification standard is not clear, all of which affect the management and operation of the “1+X” certificate system pilot. In addition, some schools have not established a management and operation platform for the “1+X” certificate system, unable to share information with government departments and training evaluation organizations in real time, and lack standardized vocational training venues and examination venues, which has affected the construction of the “1+X” certificate system.

1.4 Lack of “double qualified” excellent teachers

“Double qualified” teachers are the guarantee for the smooth implementation of the “1+X” certificate system and the cornerstone of the smooth development of pilot schools. Many vocational colleges have a serious shortage of “double qualified” teachers, and even fewer teachers are qualified for X certificate training posts, which has caused considerable problems to the operation and management of the pilot schools of the “1+X” certificate system. For example, most of the teachers in higher vocational colleges teach directly after graduation, lacking front-line work experience and limited understanding of vocational skill grade certificates, which brings some inconvenience to the follow-up practical teaching. After teaching, some teachers focus on the evaluation of professional titles and leading teams to participate in vocational skills competitions, ignoring the examination of vocational skills grade certificates, and can not give students effective guidance on the examination of X certificates from a professional perspective.

2. Management system construction strategy of establishing “1+X” certificate system pilot in higher vocational education under the background of “double high construction”

2.1 Establish a whole process quality management system

Higher vocational colleges can integrate the marketization mechanism into the pilot management of the 1+X certificate system, build a new certification system for vocational skills, actively invite third-party training evaluation organizations to independently develop standards, organize examinations and issue certificates, and let them identify vocational skills certificates, supervise the entire vocational training process, and build a scientific whole process quality management system. The school can build the “1+X” certificate system pilot management system under the whole process monitoring, and scientifically set the pilot assessment dimensions, such as indicators to assess the pilot school’s teacher strength, professional construction level, training resources and pilot system guarantee; Divide the assessment standards of pilot majors, adjust the comprehensive quality of students and the opinions of training evaluation institutions, gradually improve the management system, and ensure that all policies are implemented in place.

2.2 Clarify the responsibilities of the government, schools and training evaluation organizations

At the initial stage of the pilot operation, the education administrative departments, higher vocational colleges and training evaluation organizations should reasonably build a management system, define the boundaries of rights, responsibilities and interests of the three parties in the pilot operation and management process, avoid duplication of work content, and focus on promoting the high-quality development of the “1+X” certificate system pilot. The education administrative department shoulders the responsibility of overall planning and supervision. Based on the policies of “double high construction”, “twenty vocational education” and “three education reform”, it formulates the selection criteria of pilot schools, the pilot management and operation mechanism of the “1+X” certificate system according to local conditions, and supervises schools and training evaluation organizations within its jurisdiction. Higher vocational colleges should shoulder the training, extension and additional functions, focus on students’ vocational skills training, extend to “double qualified” teacher training, course card integration system construction and other functions, actively cooperate with training evaluation organizations, jointly establish assessment sites, and carry out vocational skills training. The vocational training evaluation organization in China is still in the early stage of development. It is mainly responsible for standard formulation, assessment and certification. It needs to conduct an all-round research on local talent demand and vocational education, scientifically formulate vocational skill grade standards, improve the gold content of the certificate, so as to stimulate students’ enthusiasm for applying for the examination. It also needs to refine the certificate assessment process, build a standardized examination room, and lay a good foundation for the pilot operation of the “1+X” certificate system.

2.3 Improve “1+X” certificate system service institutions

First of all, educational administrative institutions at all levels should establish pilot management and operation offices at all levels, set up working groups, expert groups and coordination agencies, implement the pilot work of the “1+X” certificate system to individuals, promote the collaboration of various departments, coordinate the office work well, and help pilot schools to establish a sound “1+X” certificate system management and operation mechanism as soon as possible. For example, the education department can select excellent higher vocational colleges as pilot colleges according to the local industrial layout and the demand for professional talents, solve problems in the process of promoting the “1+X” certificate system in time, and play a leading role. Secondly, higher vocational colleges should actively build a new mode of school enterprise cooperation, give full play to the advantages of vocational education, organize high-quality resources with the help of enterprises and training evaluation, establish a joint training platform between schools and enterprises, jointly develop the assessment standards for vocational skill grade certificates, and build standardized examination venues, further improve the quality of pilot

vocational education, and improve the passing rate of students' vocational skill grade certificates. In addition, the education department should cooperate with the training and evaluation organization to accurately locate the needs of local vocational talents, develop a pilot management and operation system of the "1+X" certificate system according to local conditions, meet the needs of local vocational talents, and improve the quality of vocational talent training.

2.4 Establish standardized pilot approval and assessment process

The "1+X" certificate system is a new trend in the reform of modern vocational education in China. To ensure the smooth implementation of this system, all regions should actively establish a standardized and standardized pilot review and access mechanism, conduct a comprehensive evaluation of the applicant colleges and universities, and determine the pilot list after the approval of the expert group. First, the competent education department should integrate vocational education resources, establish pilot approval offices at all levels, assess the applicant schools based on the needs of local vocational talents and the employment situation of vocational colleges, and also conduct research on the social reputation of the pilot, ensure the first pass of pilot access, and further promote the development of the "1+X" certificate system. Second, the government should actively build a "think tank" for vocational education, invite industry experts, educational researchers and enterprise experts, and establish an expert committee. On the one hand, the expert group can conduct a comprehensive evaluation of the pilot project to provide scientific data for decision-making departments, and on the other hand, it can provide reference and suggestions for training evaluation organizations. Third, higher vocational colleges should fulfill the mission of educating people for the Party and the country, adjust the direction of major setting and course group construction around the X certificate, create high-level majors, and strive to be an excellent pilot of the "1+X" certificate system.

3. The Pilot Operation Strategy of "1+X" Certificate System in Higher Vocational Education under the Background of "Double High Construction"

3.1 Improve supporting facilities to ensure the operation of the "1+X" certificate system

Higher vocational colleges are not only the important implementers of the "1+X" certificate system, but also the direct beneficiaries of the pilot work. Therefore, they should actively improve the supporting facilities to ensure the smooth implementation of the pilot related training and examination. First of all, the school should actively understand the relevant standards of vocational skills examination and examination room standards from the training evaluation organization, carry out targeted construction of vocational training base in the school, introduce basic hardware facilities, such as numerical control mechanical equipment, computers and various experimental equipment, etc., and lay a good foundation for the follow-up vocational skills training, simulation examination and other work. In addition, the school also needs to actively improve the construction of software facilities, actively introduce virtual simulation systems, big data and cloud computing platforms in combination with the contents of different professional skills tests, and prepare for online training, practical examinations, etc. Secondly, the school should also actively improve the pilot work system, clarify the responsibilities of X certificate pilot offices at all levels, and clarify the division of teaching management, administrative management and examination management to ensure the smooth implementation of all work. For example, the school can carry out its work according to the market demand, take the major with a large demand for talents as the pilot major, provide professional examination training for students, and improve the passing rate of students' vocational skill level examination.

3.2 Seek government and enterprise support and change the concept of talent training

Higher vocational colleges should actively cooperate with the education administration department and the training evaluation organization, adjust the talent training program under multi-party cooperation, grasp the "three docking", and further improve the quality of vocational talent training. First, the university should adhere to the docking of major setting and industrial demand, actively investigate the employment situation of students in various majors, and timely adjust the professional course setting and talent training program in combination with the employment trend of local college students in recent years. For example, the talent gap of AI and new media majors has gradually increased in recent years. The school can adjust the enrollment plan and teaching plan of related majors according to this change, with the main goal of cultivating skilled professional talents. Second, the school actively invited the education department and training evaluation organization to participate in the design of talent training program, carried out teaching according to the industry standards and vocational skill level certificate standards, and focused on the cultivation of students' practical ability and craftsmanship. For example, the school can collect employment information related to major groups, do a good job of connecting teaching content and post skills, carry out teaching around the content of the X certificate examination, and further improve the post competency of vocational students.

3.3 Based on the demand of the talent market, build a credit card financing system

Higher vocational colleges should actively promote the connection and integration of academic certificates and vocational skill grade certificates, build a new curriculum integration system, promote the construction of professional curriculum groups, and improve the quality of talent training with the development goal of serving the regional economy. First of all, the school should actively cooperate with the training evaluation organization to learn about the most popular vocational skill grade certificates in recent years, and connect these

certificates with the teaching of professional courses to ensure that the teaching content of professional courses matches the development of local industries and the demand for talents, and further improve the employment rate and quality of students. Secondly, the school should actively learn about the industry standards and examination standards from enterprise experts and training evaluation organizations, and carry out professional courses teaching in combination with the examination contents of primary, intermediate and advanced vocational skill level certificates. For example, the school can invite teachers from training and evaluation institutions to give lectures, explain the gold content of various certificates and examination contents for students, truly link up the X certificate with the teaching of professional courses, and accelerate the establishment of the certification financing system in higher vocational education.

3.4 Strengthen the professional training of teachers and cultivate “double qualified” teachers

Higher vocational colleges should put the “dual qualification” teacher training on the agenda. On the one hand, they can invite the professional evaluation team to hold teacher lectures, explain the relevant policies and contents of the vocational skills grade examination in detail for teachers, stimulate their enthusiasm for work, and encourage them to actively take the relevant X certificates. On the other hand, the school can hold a simulated vocational skill grade examination, which is commented by the training evaluation, pointing out the problems existing in the teachers’ practical operation, and further improving the teachers’ practical operation and innovation ability. First, the school can set up studios of famous teachers in different majors, invite industry experts to serve as guidance, systematically carry out research on the “1+X” certificate system, formulate pilot work plans, stimulate teachers’ enthusiasm for scientific research and teaching and research, and further improve their professional quality. Second, the school can invite industry experts and teachers from training and evaluation organizations to serve as part-time teachers to set a good professional example for teachers. It is also convenient for teachers to consult front-line production experience at any time, so as to improve the practical ability of vocational teachers, encourage them to actively obtain vocational skill grade certificates, and set a good example for students.

3.5 Innovate the school enterprise cooperation mode and build the school enterprise cooperative education mode

First of all, higher vocational colleges should deepen cooperation with industries and enterprises, use advanced equipment, excellent technicians and production experience of enterprises to carry out teaching, invite enterprises to participate in the formulation of vocational talent training programs, and allow enterprises to participate in the pilot management and operation of the “1+X” certificate system. For example, the school can cooperate with enterprises to establish a high-tech, standardized and standardized training base for vocational skill grade examination, and build a standardized examination room to facilitate teachers and students of all majors to experience vocational skill grade examination, and encourage them to actively obtain professional skill grade certificates. Secondly, the school also needs to establish a new mode of school enterprise cooperation with win-win cooperation, such as inviting enterprise teachers to participate in practical training and teaching, formulating talent training plans, and managing the examination of grade examinations. The school uses enterprise funds to purchase new equipment, and invites enterprise technicians to participate in practical teaching and vocational skills training, so as to further improve the quality of talent training. The school should respect the contribution of enterprises in the management and operation of the pilot “1+X” certificate system, allow cooperative enterprises to give priority to selecting excellent students, and provide craftsmen and composite professional talents for enterprises.

4. Conclusion

Higher vocational colleges should actively apply for the pilot work of the “1+X” certificate system, establish cooperation with education departments and training evaluation institutions, actively improve the construction of teaching bases inside and outside the school, lay a good condition for the promotion of the “1+X” certificate system, timely adjust the professional curriculum group, integrate the content of vocational skill grade examination into teaching, let students get familiar with the examination content in advance, and further improve their examination pass rate, We will unswervingly follow the path of high-quality development and improve the quality of talent training.

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