

Development of “Double-Qualified” Teachers in Higher Vocational Colleges: Dilemma, Framework and Path

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ABSTRACT

In view of present situation and development dilemmas of “Double-qualified” teachers in higher vocational colleges, clarify the gap between the actual “Double-qualified” teachers and ideal ones required by the country. Based on the concept of “Double-qualified” teachers, development framework for teacher ability has been set up, including 2categories, 3dimensions and 21 indicators. In addition, the integrated training system has been proposed for teacher’s pre-employment and post-employment, which provides theoretical and practical references for individual and group development of “Double-qualified” teachers in higher vocational colleges.

Keywords: Higher vocational colleges, “Double-qualified” teachers, Ability framework, Integrated training.

1. INTRODUCTION

Vocational education, due to its unique educational function and social contribution, has ushered in unprecedented development opportunities, but also faces many challenges; the most prominent contradiction is between fast reform and development of vocational education and the backward development of “Double-qualified” teachers in vocational colleges. The implementation of major national policies and systems such as the “Double High” Plan, the Expanded Enrollment of One Million in Higher Vocational Education, the 1+X Certificate System, and the System of Integration of Production and Education have put forward new requirements and challenges for the quantity and quality of vocational education teachers. Therefore, the development of vocational education teachers, especially development of “Double-qualified” teachers in higher vocational colleges, will attract more and more attention. The research on development of “Double-qualified” teachers in higher vocational colleges has become important issue in the reform of vocational education. The “Opinions of the Central Committee of the Communist Party of China and the State Council on Comprehensively Deepening Reform

of Development of Teacher Team in New Era” illustrates to comprehensively improve teachers quality of vocational college teachers and build a team of high-quality “Double-qualified” teachers; the 2019 National Vocational Education Reform Implementation Plan (Hereinafter referred to as the “20 Vocational Education Articles”), it is clear that multiple measures must be taken to create a “Double-qualified” teacher team, and then to the “Deepening Vocational Education “Dual-professional” Teacher Team Development and Reform Implementation Plan in New Era” (hereinafter referred to as “12 Professional Teachers Articles”) is issued, The development of “Double-qualified” teacher team in vocational education has moved from a planned “blueprint” to a specific “implementation”, from a “macro” policy to a “medium-level” plan, and the goal and path of development of “Dual-qualified” teacher team in vocational education have gradually become clear; At the micro level, how does an individual teacher grow into a high-quality “Double-qualified” teacher? It is not only the goal and pursuit of faculty improvement in higher vocational colleges, but also the prerequisite and foundation for the development of modern vocational education.

2. PRESENT SITUATION AND DEVELOPMENT DILEMMA OF “DOUBLE-QUALIFIED” TEACHERS IN HIGHER VOCATIONAL COLLEGES

Since the 19th National Congress of the People's Republic of China, Vocational Education Teacher Training System has been generally established, Teacher Management System has been gradually improved, standard of “Double-qualified” teachers has become gradually clear and the quality of teachers has been significantly improved, which can provide powerful intellectual support for the reform and development of vocational education. However, there is still a certain gap compared with the overall goal of “12 Professional Teachers Articles” on cultivating high-quality “Double-qualified” teachers and specific requirements of “20 Vocational Education Articles” on forming a “Dual-qualified” teacher team. Therefore, before exploring the development path of “Double-qualified” teachers in higher vocational colleges, we should know present situation, development difficulties of the “Double-qualified” teachers in higher vocational colleges, find out the specific gap with the overall goal, analyze the crux of the problem and its deep-seated reasons.

2.1. Present Situation of “Double-qualified” Teachers in Higher Vocational Colleges

At present, China's higher vocational colleges attach great importance to and continuously increase the training of “Double-qualified” teachers. The improvement of “Double-qualified” teachers has achieved initial results [1], but compared with the requirement of vocational education to shift from scale expansion to connotative development, there are still weak links in development of “Double-qualified” teachers in higher vocational colleges. The first is insufficient quantity. Now, there are 1.332 million full-time teachers in China's vocational colleges, and the total number of “Double-qualified” teachers is 455,600, accounting for 34.20%. There is still a gap of nearly 16% from national goal of training “Double-qualified” teachers. The second is poor quality, national standards for “Double-qualified” teachers have not been established, except provincial standards including Anhui and Jiangsu, others are self-determined, sheer quantity-oriented goals has led to undeserved reputation as “Double-qualified” teachers. Third, enterprises are not involved enough in training them. The key to the cultivation of “Double-qualified” teachers is practice of temporary employment in enterprises. However, the current practice platforms and opportunities that enterprises can provide are insufficient, which is not conducive to the improvement of teachers' practical ability in higher vocational colleges [2]. Take a higher vocational college in western China as an example.

Among 571 full-time teachers, about 100 teachers go to enterprises for practice every year, and average time for practice is only 10-15 days. The fourth is the poor circulation system. Due to many factors such as academic qualifications and professional titles, the two-way flow of school-enterprise backbones has been blocked, which has led to the fact that people who want to recruit cannot be employed, but those employed are not ideal. To solve the problem of recruitment teachers from enterprises, it is urgent to establish the two-way circulation mechanism.

2.2. The Development Dilemma of “Double-qualified” Teachers in Higher Vocational Colleges

Teacher is the key elements of education, the source of education, and the first resource of vocational education. Only by constantly strengthening development of “Double-qualified” teachers can we provide a strong talent pool for facilitating the growth of vocational education students, promoting teachers' own development and enhancing the social contribution of vocational education. As far as the individual development of teachers is concerned, how to grow into a qualified “Double-qualified” teacher in the practice of education, which is often confronted with many practical contradictions and dilemmas. The first is the contradiction between “supply” and “demand” from colleges and enterprises. The integration of production and education is the direction of the development of vocational colleges, and cooperative education is an effective way for colleges and enterprises to train “Double-qualified” teachers. However, vocational college teachers are limited by their own ability to engage in production and scientific research, and their ability to serve industries and enterprises is insufficient in the process of promoting industry-education integration and school-enterprise cooperation, resulting in limited profits for enterprises and insufficient motivation to participate in teacher training. On the other hand, enterprises and companies, for the consideration of intellectual property protection on new technologies, new processes and new regulations, will hold back a few tricks when getting teacher trained on site, and the same is true even for some well-organized & cooperated training bases for “Double-qualified” teacher. The second is the identity contradiction between “educators” and “learner”. In order to meet the growing needs of students, adapt to rapid innovation of new technology in enterprises, first of all, teachers, as learners, should insist on learning for teaching. However, as “educators”, teachers are subject to heavy teaching tasks, educational practice and teaching reform, etc., so it is difficult to ensure that they can study in enterprises or training bases for at least one month every year, and improvement of practical skills for “teaching for students” is limited. Third is the

contradiction between the goal of talent training and the aim to traditional classroom in higher vocational colleges. As the main field of talent training, classroom is a core place where policies and systems of higher vocational colleges are implemented, professional development of teachers and growth of students are promoted. However, the wonderful generation of knowledge and the excellent performance of students' study skills are often not seen in the classroom of higher vocational colleges [3]. How to optimize the reform of talent training mode, set off the "classroom revolution", and train high-quality workers and technical talents need more teachers' educational wisdom and teaching ability.

3. THE ABILITY FRAMEWORK FOR "DOUBLE-QUALIFIED" TEACHER IN HIGHER VOCATIONAL COLLEGES

"Double-qualified" teachers are representatives of "Chinese characteristics" in development of teachers in vocational *education*, and also the core of vocational education teacher training and development in the past 40 years of reform and opening up. Then, as a type of education, what kind of teachers does vocational education need? The answer is definitely "Double-qualified" teacher. The formation of its concept comes from school-running practice. However, there are two different views for defining the concept in the academic field, namely "double professional title" and "double quality". Based on the concept of "20 Vocational Education Articles", this paper defines concept of "Double-qualified" teacher, namely a teacher with theoretical teaching and practical teaching ability. This means that teachers engaged in vocational education must have "dual ability". Second, "Double-qualified" teachers mean not only requirements for individual ability, but also the overall ability of the whole vocational education teachers.

Ability refers to the comprehensive individual characteristics formed by the subject mobilizing various characteristics of the individual to determine the action goals that can be accomplished by the subject, planning action strategies, regulating their own behavior, and producing effective action results based on the goals, tasks and conditions to be achieved by the object in practice.[4]Teaching ability is a kind of special ability, which is complex one with various characteristics that teachers should have in order to complete teaching tasks and achieve teaching objectives. Based on comprehensive development of teachers and promotion of the growth of students, this paper reflects on the ability of "Double-qualified" teachers in higher vocational colleges from the perspective of training objectives in view of various educational laws and regulations, policy documents, existing research results and school-running practice. It is divided into two categories: theoretical teaching ability and practical

teaching ability, three dimensions :university teachers' professional ability, the ability to meet the needs of the general teaching and the ability to highlight the vocational education features , twenty indicators: noble moral sentiment, the teaching design capability, superb technical expertise and practical operation ability etc, to build the ability framework of "Double-qualified" teachers (in figure 1), and it also proposes to focus the pre-training for" a good beginning ", to focus recruitment for" setting a strict threshold", to stress retraining for "development", to stress assessment and evaluation for "quality", whose purpose is to build an integrated training system for"Double-qualified" teachers in higher vocational colleges to cultivate high-quality laborers and technical talents with patriotic feelings and craftsmanship.

4. THE DEVELOPMENT PATH OF "DOUBLE-QUALIFIED" TEACHERS IN HIGHER VOCATIONAL COLLEGES

Although "Double-qualified" teachers have always been core and focus of the development of teacher team in higher vocational colleges, the training and development path of "Double-qualified" teachers in higher vocational colleges is not very clear. Although vocational education development goals and measures of "Double-qualified" teachers aren't defined in "20 Vocational Education Articles" and "12 Professional Teachers Articles", how do these policies promote the individual development of teachers and "Double-qualified" teacher team in higher vocational colleges ? It still needs to be studied and supplemented by detailed supporting policies and mechanism in the practice. "Double-qualified" teachers' training and development is a comprehensive and whole project, which depends on the teachers' individual teaching ability, but it isn't isolated while combination of a variety of abilities, so for the training of "Double-qualified" teachers, we should focus on pre-employment & post-employment and a variety of training ways . Based on correct & deep understanding of the policies and concept of "Double-qualified" teachers, an integrated training system should be established in view of "Double-qualified" teachers' ability model, namely, pre-employment training and post-employment evaluation, whose aims are to improve development of the "Double-qualified" teacher team and create a high-quality, professional and innovative teacher team in higher vocational colleges. [5]

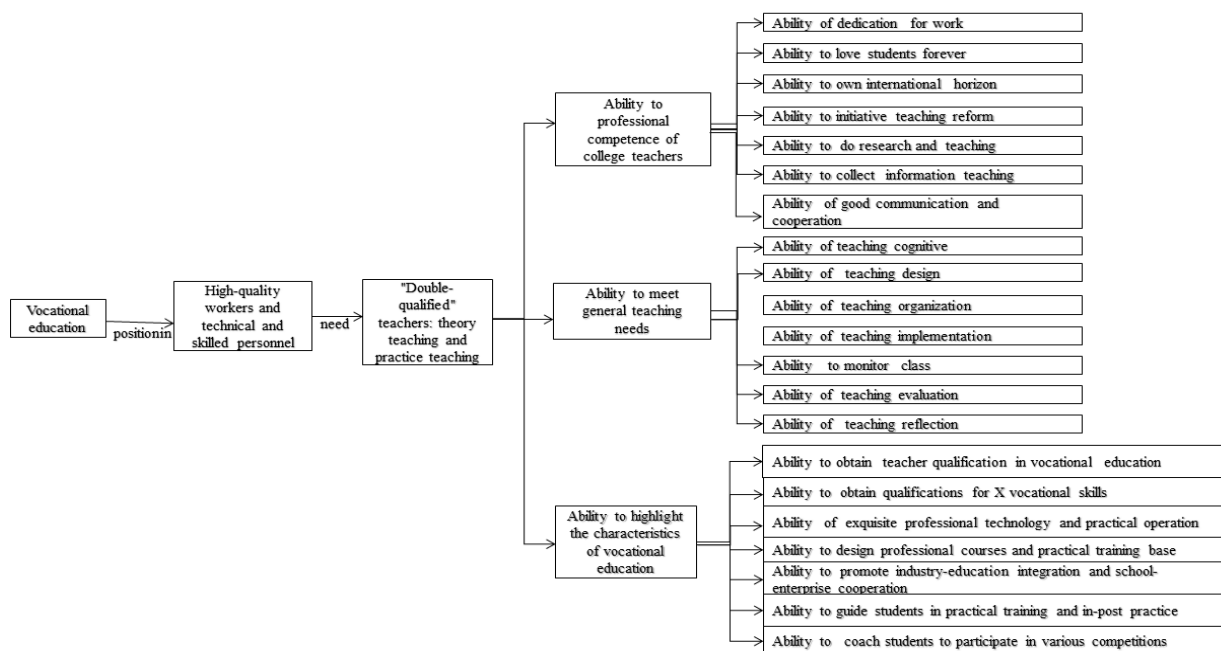


Figure 1 “Double-qualified” teachers' ability framework of higher vocational colleges

4.1. Make a good “Start” and Explore New Paths for Pre-training of Vocational Teachers

4.1.1. Improve the Teacher Training System in Vocational Education

Since the reform and opening up, China's teacher training in vocational education has undergone three stages of emergency development, infrastructure development and system establishment. At present, a training system framework covering pre-employment training and post-employment quality improvement has been generally established, so has teacher qualification system in vocational education [6]. However, the number of vocational and technical normal colleges that can adapt to the future professional development of higher vocational education teachers is very few, and the level is not high. We urgently need to open up vocational education channels, vigorously develop undergraduate and postgraduate vocational education, improve the modern vocational education system, build a training curriculum system based on competence standards, establish a vocational teacher training system and a vocational qualification certificate update system, and provide a complete training path for vocational teachers professional growth, train qualified and high-quality vocational teachers for vocational education reform and talent pool.

4.1.2. Establish an Admission System for Vocational Teachers

The outstanding characteristic of vocational education as a type of education lies in whether

vocational teachers have both theoretical teaching ability and practical teaching ability. This requires us to gradually establish a higher vocational education teacher qualification certificate system, take the “Double-qualified” ability as the guide, improve the teacher qualification certification system, strengthen improvement of vocational education teacher qualification certification institutions, and separately certify the qualifications of teachers engaged in vocational education; The vocational skill certificate is regarded as evaluation standard for the qualification certificate of vocational education teachers, strengthen the professional teaching and practical requirements of vocational education teachers, and train pre-vocational education teachers, and regard the vocational education teacher qualification certificate as a necessary condition for teachers to enter vocational colleges and universities. Let vocational teachers obtain vocational education teacher qualification certificates and multiple vocational qualification certificates before entering the job.

4.2. Control Restrictedly “Threshold” And Implement a New System for Recruitment of Vocational Teachers

4.2.1. Increase the Number of Full-time Vocational Teachers

At present, most of the teachers recruited by vocational colleges come from ordinary colleges and universities, which is seriously inconsistent with that the main source of “Double-qualified” teachers in vocational colleges should come from vocational and technical normal colleges and enterprises. There are 7 vocational and technical normal colleges in the country,

and the number of graduates cannot meet the needs of 1,423 vocational colleges and 10,200 secondary vocational colleges for “Double-qualified” teachers [7]. In order to increase the number of teachers, the government needs to make efforts to optimize the layout of normal colleges, strengthen the construction of vocational and technical normal colleges, and step up to establish a normal education system with Chinese characteristics in normal colleges as the main goal and encourage participation of high-level non-normal colleges; support applied normal universities, higher normal colleges, etc. which will be transformed into vocational and technical normal schools, to promote development of 1-2 independent technical normal colleges in each province; need to encourage comprehensive normal universities and some qualified high-level engineering universities to set up vocational and technical education majors and focus on training vocational teachers to meet general teaching needs and highlight the characteristics of vocational education.

4.2.2. Improve the Quality of Vocational Teachers

The data published in the "2018 China Higher Vocational Education Quality Annual Report" shows that among the 1,336 higher vocational colleges, at least 250 vocational schools, “Double-qualified” teacher ratio is lower than the average of 39.1% in higher vocational colleges. At least 67 vocational schools, “Double-qualified” teacher ratio is less than 20%. Therefore, broadening the entry channels for vocational teachers requires school-enterprise cooperation, opening up the circulation channels of school-enterprise talents, establishing a school-enterprise community of interests, enhancing the attractiveness of vocational education in terms of remuneration and honors, and opening vocational colleges for high-level technical talents in enterprises. Through training, companies with the ability to actively participate, and those who are willing to participate can do, and gradually realize the goal of hiring professional teachers with more than three years of work experience from enterprises ; increase the proportion of “Double-qualified” teachers , It is necessary to allow enterprises to obtain tangible talent benefits, and to increase enthusiasm of enterprises to participate in the training of “Double-qualified” teachers in higher vocational colleges.

4.3. Develop and Improve the New Mechanism of School-Enterprise Co-Education for Vocational Education Teachers

Compared with ordinary higher education, higher vocational education has distinctive features such as technology and occupation, and practicality is placed on the priority in the education process[8]. Therefore, the key to the training of “Double-qualified” teachers in

higher vocational colleges lies in the cultivation of teachers' practical teaching ability, and the key to the cultivation of teachers' practical teaching ability lies in the co-education of schools and enterprises, and form a diversified training pattern with integrating production and education.

4.3.1. Implement the Main Responsibility of Colleges and Universities, and Strengthen the In-Service Training of Teachers

The first is to build a "scaffold" for teacher growth to help teachers improve their theoretical and practical teaching capabilities. Cultivate teachers' teaching reform ability through effective teaching and research activities and encourage teachers to participate in teaching and scientific research projects; improve teachers' all-round competence in vocational education by participating in professional development, textbook & curriculum innovation, and teaching achievements; Improve teaching ability of teachers through participating in a wide range of (provincial & national) teacher teaching competitions, especially National Vocational College Skills Competition for Teachers; Enhance teachers' practical teaching ability through the teaching and practical training in the school training base, and guide students to participate in The Innovation and Entrepreneurship Competition and various competitions at all levels . The second is to improve the teacher training system and implement ability improvement plan of “Double-qualified” teacher. Teacher training is the right that teachers should enjoy, and it is an effective way for teachers to continuously obtain professional development after entering the job. Take full advantage of The Teacher Development Center, focus on the implementation of the 1+X certificate system, reform the practice-oriented modular teaching model by division of labor and cooperation among teachers etc. In addition, design all-round teacher training system with cooperation of overseas-nation -province -school joint training ", conduct teacher trainings at all level to make teachers benefit from them and increase the efficiency of training.

4.3.2. Stimulate Motivation of Enterprises to Participate and Build A Practical Platform

The first is to clarify the responsibility of enterprises to participate in the training of “Double-qualified” teachers, and form a virtuous circle of “Double-qualified” teachers originating from enterprises and feeding them back. "dual-professional" teachers have a dual mission to nurture enterprises. They should not only be in charge of cultivating millions of high-quality workers and technical talents for enterprises, but also actively participate in the integration of production and education, school-enterprise cooperation, and cooperate with enterprises to carry out technology research and

development to provide intellectual support for enterprise innovation and development [9]. The second is to change the enterprise's concept on school-enterprise integration, namely, the training of "Double-qualified" teachers is a one-way benefit to college, but build a school-enterprise community of interests. Use the combined incentive policy of "fiscal policy+ finance+ land + credit" to cultivate a group of enterprises that integrate production and education, so that enterprises can obtain tangible talents and benefits from teacher training; Colleges and enterprises jointly build high-level & national-level the "Double-qualified" teacher training base and implement one-month training in practical training base for teachers every year and a 5-year full rotation training system to continuously improve the professional skills and practical operation capabilities, the ability to participate in production education, the ability to integrate school-enterprise cooperation and to guide students in training and internships.

4.4. Activate "Ambition" and Promote Vocational Teachers Internal Power for Independent Development

4.4.1. Deepen the Reform of the Distribution System

We should break the rule of "eating from the same pot" from the perspective of distribution mechanism, implement the performance-based salary system of excellent labor and excellent remuneration, stimulate teachers' consciousness and initiative to improve their teaching ability, and solve the problem of teachers' internal motivation for development. Establish an incentive mechanism to increase income and bonus of "Double-qualified" teachers, and give preference to "Double-qualified" teachers in terms of title promotion, application of teaching achievement award, establishment of high-quality online courses and selection of famous teaching teachers.

4.4.2. Create a Teacher Honor System

"Following reputation of teachers and getting benefits of cultivating talents" is the original aspiration and mission of every vocational education person. Form a school-provincial-national honor system, and develop vocational education skills masters, great national craftsmen, excellent teachers, and teaching The selection and recognition of teacher honors such as famous teachers, model teachers, and educating role models will stimulate the sense of accomplishment, honor and happiness of teachers in higher vocational colleges, and forge teachers' craftsmanship and vocational education beliefs. Regularly carry out the selection and recognition of teacher honors such as vocational education skill masters, great national

craftsmen, outstanding teachers, model teachers, educating model to stimulate teachers' sense of accomplishment, honor and happiness in higher vocational colleges, and forge teachers' craftsmanship and spirit beliefs on vocational education.

4.4.3. Activate Growth Endogenous Power

The needs of individualized and diversified growth of students are the inexhaustible driving force for the development of teachers, as well as the value of teachers' concentration on teaching and class. Teachers should regard the help of students' growth as the driving force, self-learning, active change, and constantly improve their own humanistic literacy, moral sentiment, technical skills, etc., and stimulate their own enthusiasm for teaching research and enterprise applied scientific research.

4.5. Hold the "Quality" And Establish A New Evaluation Standard for Vocational Education Teachers

4.5.1 Establish the Standards for the Recognition of "Double-qualified" Teachers

In contrast to the standards, "Double-qualified" teachers should have the ability to reflect the professional ability of college teachers, the ability to meet general teaching needs, and the ability to highlight the characteristics of vocational education. The ability structure of all aspects, refine the identification of "Double-qualified" teachers The standard emphasizes the quantitative assessment of teachers' business experience, quality, and ability improvement effects, takes "X" as the evaluation standard for "Double-qualified" teachers, and establishes a school-based characteristic "Double-qualified" teacher certification standard [10]. It is an important guarantee for improving the ability of "Double-qualified" teachers in higher vocational colleges, and exert a basic, leading and overall effect on the development of "Double-qualified" teachers.

4.5.2. Improve "Double-qualified" Teacher Employment System

Avoid the tendency of essay-only, academic qualifications, and title, take education and teaching performance as the first standard, highlight the assessment of the practical teaching ability of "Double-qualified" teachers in higher vocational colleges, and consider "Double-qualified" ability as the basic condition for technical positions promotion. Also establish a professional title evaluation system that conforms to the characteristics of vocational education with teacher ethics and style, craftsman spirit, technical skills, and teaching quality as the main indicators.

4.5.3. Improve the Evaluation System of "Double-qualified" Teachers

The first is to change lifelong evaluation system for "Double-qualified" teacher, and according to the achievements of "Double-qualified" teachers in corporate practice and talent training, a third evaluation agency evaluates "dual-qualified" teachers every year, and for "Double-qualified" teachers whose teaching performance is poor, poor professional ability, their performance will not be appointed and their "Double-qualified" teacher qualifications and preferential treatment will be canceled. The second is to focus on the performance evaluation of "Double-qualified" teachers. They have the following characteristics, comprehensiveness, professionalism, complexity, diversity, and development in quality and ability [11]. Therefore, the performance evaluation of "Double-qualified" teachers must be put priority to details and levels, set up a diversified evaluation system from students, teachers, enterprises, and schools, and comprehensively evaluate and identify the performance of "Double-qualified" teachers to continuously improve their quality.

5. CONCLUSION

The China attaches great importance to the development of vocational education and the cultivation of vocational teachers. In the new era, higher vocational colleges should take the opportunity to put the task of cultivating people with morality in hearts, not to change their resolution of teaching and educating people, and strive to cultivate a large number of high-level "Double-qualified" teachers to promote vocational education to develop better. In practice, in view of the problems and difficulties in the development of "Double-qualified" teachers, the government should take improvement of "Double-qualified" teachers as the focus of assessing higher vocational colleges; enterprises should take training of "dual-qualified" teachers as a center of a community of shared destiny for the collaborative development of schools and enterprises; colleges and universities should treat the development of "Double-qualified" teachers as the core of improving the quality of talent training; teachers should consider improvement of "Double-qualified" ability as an important point in their career development. Focusing on government, enterprises, schools, and teachers, we will surely build a team of "double-qualified" teachers smoothly.

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