

Construction Path of "Double Qualified (DQ)" Teachers in Higher Vocational Normal Colleges under the Background of Industry Education Integration

Lian Zhai*

Sichuan Vocational and Technical College, Suining, Sichuan, China

735739828@qq.com

**Corresponding author*

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Abstract: Under the background of the integration of industry and education, vigorously cultivating applied technical talents is the fundamental task of the transformation of ordinary undergraduate colleges, and building a group of "DQ" teachers with both teaching and practical ability is the key to complete this task. Therefore, how to strengthen the construction of high-quality "DQ" teachers is a realistic topic whether ordinary undergraduate colleges can successfully realize the transformation. Based on the construction of "DQ" teachers in Higher Vocational Normal Colleges under the background of industry education integration, this paper explores the requirements of "DQ" Teachers and how to formulate a clear "DQ" teacher qualification certification system to achieve the goal of "DQ" teacher team construction. Through the form of questionnaire, this paper investigates the basic situation of the construction of "DQ" teachers in 6 ordinary undergraduate university in a province. A total of 335 questionnaires were distributed, of which 315 were valid, with an effective rate of 94.02%. Teachers were interviewed to understand the progress of the construction of local "DQ" teachers. The results show that most university are still in the exploratory stage of understanding the construction of "DQ" teachers. Most teachers are 43.31% familiar with how to build a "DQ" teaching team; 5.13% of teachers said they were "very unfamiliar", 14.41% of teachers said they were "unfamiliar", 32.94% of teachers said they were familiar with the construction of "DQ" teachers, and only 4.20% of teachers said they were familiar with the construction of "DQ" teachers. Therefore, therefore, the construction of "DQ" teachers is imperative.

1. Introduction

The "DQ" teachers in the university are excellent talents with high quality and high ability, but their social status and overall income are inconsistent with this. The salary of "DQ" teachers is

lower than that of ordinary college teachers, and their social status is not high. Only by establishing a perfect "DQ" teacher incentive system can we solve the above problems, ensure the number of excellent teachers, ensure the expansion of teachers' sources, selection and employment, and promote teachers' active self-development.

Many scholars at home and abroad have analyzed the research on the construction path of "double qualified" teachers. Natalia examined the understanding "structure" and its source of teachers' professional knowledge, which supports the current primary teacher education practice in Kazakhstan. Based on the empirical data collected in the past four years, this paper expounds how the professional knowledge and professional preparation of teachers in pre service education institutions are constructed in the teaching traditions of Kazakhstan and the Soviet Union. Teachers' professional knowledge is formed by pedagogical theory, which is mainly a didactic style, which focuses on interactive learning and teaching, reflective practice, classroom action research, and teacher cooperation as a source of teachers' professional knowledge [1]. Ahmad h research adopts the quantitative survey method to investigate the factors affecting the professional identity of English as a foreign language teacher in Saudi Arabia and Pakistan. The study has two considerations: the development mode of English teachers themselves, and the personal, professional, social and teaching factors of Constructing Teachers' professional identity. The results show that the professional identity of Pakistani English teachers is affected by many internal and external factors [2].

The training elements of industry education integration talents mainly include specialty setting, curriculum construction, teaching staff construction and talent quality evaluation. With the continuous improvement of China's career system, many occupations have relatively strict career access standards. The introduction of vocational qualification standards to link the teaching plan with vocational qualification training and appraisal plays a great role in improving the quality of talent training [3].

2. Construction and Development Strategy of "DQ" Teachers in the University

2.1. "DQ" Teachers under the Background of Industry Education Integration

Higher vocational education requires teachers to formulate reasonable "DQ" teacher qualification certification standards.

(1) Teachers' professional ability. Higher vocational colleges should fully realize that they are a school and teachers' professional ability is the core part in the process of entering the construction of "DQ" teachers. We should put the characteristics of Higher Vocational Colleges in an important position in the whole selection and employment process. The definition of "DQ" teachers should focus on the clear requirements of teachers' professional ability. At the same time, we should also design a perfect and rigorous practical skill assessment scheme to closely combine teachers' professional ability with the characteristics of higher vocational colleges, so as to effectively combine the teaching ability and practical ability of "DQ" teachers from the basic level.

(2) Teacher qualification and ability. We should make clear the standard of "DQ" teachers' qualification, and we can't continue to use the standard of teachers in university. First of all, formulate the academic standards for "DQ" teachers, and require "DQ" teachers to have a graduate degree or above. The low educational background of teachers in the university has been perplexing the development of higher vocational colleges. The improvement of teachers' educational background has improved the quality of "DQ" teachers from the side and enhanced the teaching level. They must have the ability of teacher education and teaching and practical ability at the same

time [4, 5]. Teaching practice experience can be divided into two categories for assessment, and normal graduates can conduct professional assessment. Candidates who have no teacher training experience need to be trained, and then carry out trial lectures in school for at least one year, and participate in the assessment organized by the school at the end of the semester. Those who pass the examination can stay in school to teach. As for skills and practical experience, the candidate must provide evidence that he has participated in or worked in the front line of actual production for at least one year. The certificate issued needs the official seal of the unit and the salary certificate to ensure the authenticity. Other investigations can be carried out only after the qualification and ability examination is passed, and finally has the opportunity to become a "DQ" teacher.

2.2. Formulate a Clear "DQ" Teacher Qualification Certification System

Grasp the basic value orientation of the qualification assessment standard of "DQ" teachers. While formulating the qualification system standard of "DQ" teachers, we should pay attention to the construction of the following three aspects: emphasizing the basic quality of teachers. Master the ability of managing students; Understand the characteristics of vocational education and master certain educational methods. Highlight the importance of practical work experience; Rich practical experience can not only solve the problems encountered by students in the work process in the future, but also convey the cutting-edge application dynamics of the discipline to students. Pay attention to the accumulation of professional knowledge, so as to comprehensively transmit professional information to students.

Improve the academic standard, change the current situation that college students can enter higher vocational colleges after graduation, and raise the standard to graduate students and above. Break the lifelong system of "DQ" teacher qualification. The qualification of "DQ" teachers needs to be continuously improved and reviewed. It needs to be reviewed at least once every three years, and a periodic inspection system is implemented. Those who fail to pass the review will be disqualified as "DQ" teachers, and the employer can also dismiss teachers according to regulations.

Implement the "DQ" teacher access system: clarify the relationship between the "DQ" teacher qualification system and the access system. "The 'DQ' teacher qualification system is the premise and foundation for the implementation of the 'DQ' teacher access system. The implementation of the 'DQ' teacher access system depends on the implementation of the 'DQ' teacher qualification system, and neither is indispensable [6]." The implementation of vocational evaluation can choose those who are capable and willing to teach in Higher Vocational Colleges to teach in the school, and can also reasonably allocate teacher resources. The professional evaluation of teachers is generally divided into the following contents: first, the evaluation of professional interest. Professional interest can affect teachers' working attitude and stability to work. Second, personality evaluation. Personality evaluation is mainly from the perspective of the candidate's heart to test whether the candidate has the psychological quality consistent with the "DQ" teachers in the university.

2.3. Optimize the Selection and Employment of "DQ" Teachers in the University

To broaden the source of teachers, introduce excellent teachers and broaden the source of "DQ" teachers in the university, the following improvement measures should be taken: the government should increase its support for the selection and employment of "DQ" teachers in the university. The government and education departments jointly assist in the selection and employment of teachers in the university. Broaden the source of teachers. The government's publicity is strong, which can help publicize the recruitment information of "DQ" teachers and broaden information

channels. At the same time, the government should increase the financial allocation to higher vocational colleges, so that higher vocational colleges can improve the treatment of "DQ" teachers and attract excellent talents [7]. The local government and education departments can also establish a talent development fund in conjunction with higher vocational colleges for special purpose to reward "DQ" teachers who have made outstanding contributions in higher vocational colleges.

2.4. Improve the Treatment of "DQ" Teachers and Establish an Incentive Mechanism

(1) Increase performance pay and stimulate teachers' scientific research and practical ability

The school should attach great importance to teachers' scientific research, professional technology development and curriculum reform, and timely commend teachers who have made outstanding contributions in these aspects in the form of material awards. In addition, during the practical training period of teachers to enterprises, in addition to the normal school salary, a certain amount of training subsidy should be paid, which is conducive to stimulate teachers' enthusiasm for practical training and realize the fundamental purpose of practical training [8, 9].

"DQ" teachers play the role of decision-making and management of teachers, which is an incentive strategy. It can enhance the centripetal force of team cooperation and improve the overall quality of teachers, so as to ensure the benign development of higher vocational colleges. A sound and reasonable teacher evaluation system is a periodic investigation of teachers' work, which helps teachers timely find out the deficiencies in their work and can be adjusted [10]. In order to optimize the evaluation system, we should not only meet the characteristics of teachers' evaluation in university, but also highlight the professional needs of "DQ" teachers in the university.

(2) Improve the construction of assessment system according to the characteristics of "double qualified" Teachers

While focusing on the assessment of teachers' professional teaching level, we should highlight the assessment of professional technical ability and professional knowledge structure. The specific contents should mainly include professional teaching ability, professional practical skills, practical operation proficiency, technological innovation ability, practical talent training ability, as well as the ability to implement employment counseling and industry analysis to students [11, 12].

3. Investigation and Research on the Construction of "Double Qualified" Teachers

This study investigates the basic situation of the construction of "double qualified" teachers in 6 ordinary undergraduate colleges in a province in the form of questionnaires. Interview teachers to understand the progress of the construction of local "double qualified" teachers. Based on the analysis of the questionnaire and interview results, the basic situation of the construction of "double qualified" teachers in the province is obtained, as shown in formula (1) (2).

$$s = \frac{\bar{X} - \mu}{\frac{\sigma_X}{\sqrt{m}}} \quad (1)$$

$$s = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{(m_1 - 1)k_1^2 + (m_2 - 1)k_2^2}{m_1 + m_2 - 2} \left(\frac{1}{m_1} + \frac{1}{m_2} \right)}} \quad (2)$$

Where formula (1) is a single population test, which is the average number of samples, K is the

standard deviation of samples, and M is the number of samples. Formula (2) is a two population test, and the sum is the two sample variance, m1 and m2 are the sample size.

4. Analysis of Experimental Investigation Results

Most ordinary university have not clearly defined the concept of "DQ" teachers. Most teachers have their understanding of "DQ" teachers mainly based on theoretical analysis, practical experience, peer understanding and self perception, but different factors have different influence on the evaluation criteria of "DQ" teachers. This paper investigates the influence of teachers in six universities on the theoretical analysis, practical experience, peer understanding and self intuition of the construction of "DQ" teachers. The survey results are shown in Table 1 and figure 1:

Table 1: Questionnaire on the influence degree of evaluation criteria of "DQ" Teachers

	No effect	Less impact	commonly	Greater impact	Great influence
theoretical analysis	1.88%	7.70%	18.12%	49.27%	26.99%
practical experience	2.32%	1.41%	9.73%	41.33%	45.11%
Peer understanding	1.84%	5.09%	17.62%	49.75%	25.52%
Self intuition	2.77%	6.93%	26.93%	43.31%	19.59%

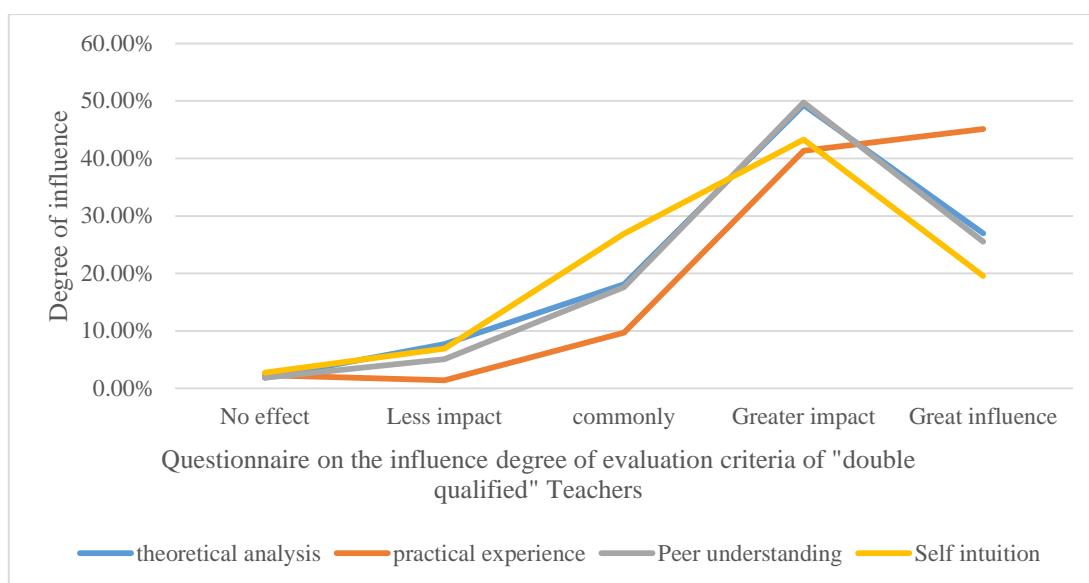


Figure 1: Questionnaire on the influence degree of evaluation criteria of "DQ" Teachers

As can be seen from the data in the above chart, the cognition of university on the construction of "DQ" teachers is still in the exploratory stage. Most teachers are generally familiar with how to build a "DQ" teaching team, which is 43.31%.

Next, 315 teachers from M University were selected to investigate their familiarity with "DQ" teachers. The data results are shown in Figure 2:

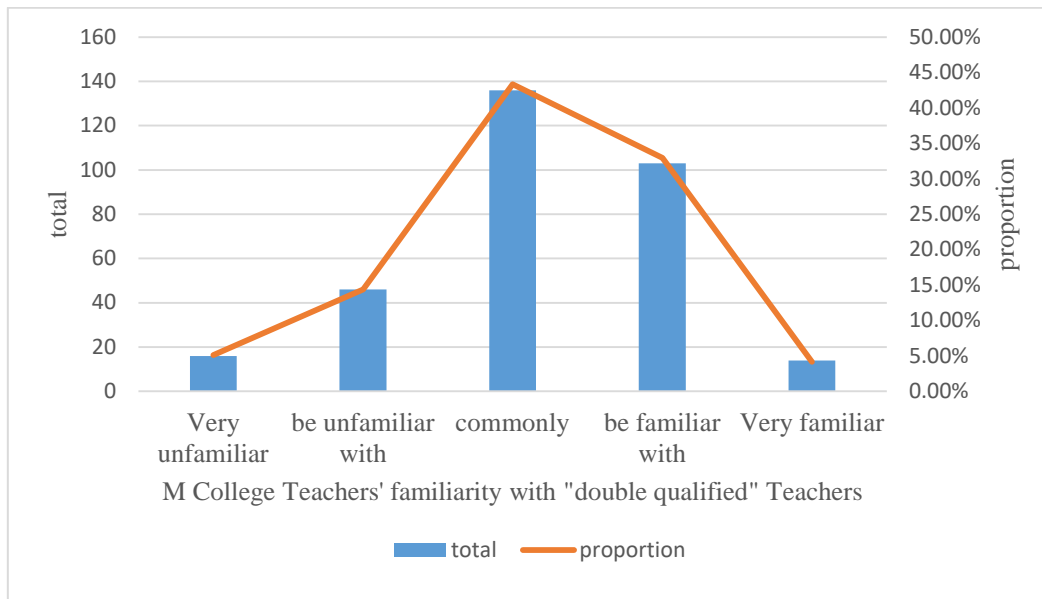


Figure 2: M College Teachers' familiarity with "DQ" Teachers

The test results showed that 5.13% of teachers said they were "very unfamiliar", 14.41% of teachers said they were "unfamiliar", 32.94% of teachers said they were familiar with the construction of "DQ" teachers, and only 4.20% of teachers said they were familiar with the construction of "DQ" teachers. Therefore, the construction of "double qualified" teachers is imperative.

5. Conclusions

Under the background of the integration of industry and education, the construction of "double qualified" teachers is a relatively important topic. While analyzing its research value, this paper also needs to analyze this research topic and the places that need to be improved in the future. Due to local constraints, based on a comprehensive survey of the samples of the questionnaire, this paper does not analyze the differences between different school grades and types, which can not be fully popularized to other parts of the country. And did not pay attention to the differences between different schools. On the one hand, the relevant research methods and questionnaire design in this paper need to be improved. The analysis of impact degree can also introduce other methods for analysis in the later stage, so as to better analyze its impact degree. On the other hand, other factors of each influencing factor need to be deeply analyzed to further understand the influence degree of each influencing factor.

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