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# Research on the Professional Development Support System of Double-Qualified Teachers in Higher Vocational Colleges in the New Era—Taking Higher Vocational Colleges in Hunan Province as Samples

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#### **Abstract**

Education is based on teachers. Through the investigation of the professional development support of double-qualified teachers in five higher vocational colleges in Hunan Province, it is found that there is a disconnection between the content of continuing education and the needs of teachers in the professional development support of double-qualified teachers in higher vocational colleges. The performance mechanism of double-qualified teachers is not perfect, the mechanism of school-enterprise cooperation to cultivate double-qualified teachers is not perfect, and the double-qualified teachers are lack of long-term effectiveness. It puts forward the construction strategy of continuing education, performance incentive, school-enterprise cooperation training and mentoring pairing support mechanism for the professional development of double-qualified teachers in higher vocational colleges in the new era.

Keywords: new era, double-qualified teachers, professional development, mechanism

#### 1. Introduction

As a type of education that directly serves the economic and social construction, vocational education also has the contradiction between high-quality vocational education needs and unbalanced and inadequate development. The key to vocational education lies in teachers. Therefore, it has become the key to solve the imbalance and full development of vocational education to strive to build a double-qualified teacher team with sufficient quantity, exquisite skills and excellent quality. Scholars have studied the mode, stage and mechanism of the professional development of double-qualified teachers in higher vocational colleges. Zhao Wenping (2012) expounded four modes of professional development of double-qualified teachers in vocational colleges. Zheng Guofu (2012) summarized the four stages of the development of double-qualified teachers. Yang Qiaoyu (2011) specifically analyzed the school-based training strategy for the professional development of double-qualified teachers. Chen Qiupeng (2012) proposed to construct the performance appraisal system of double-qualified teachers in higher vocational colleges. Although the research on the professional development of double-qualified teachers in higher vocational colleges is constantly enriched, the quality of double-qualified teachers needs to be improved and the structure needs to be improved. The reason is that although there are requirements for the construction of double-qualified teachers in schools, there is a lack of corresponding guidance on the specific content, construction path and construction support of double-qualified teachers (Xu Haifeng & Shi Weiping, 2017).

The focus of this study is: in terms of construction support, what kind of external support is needed for the professional development of double-qualified teachers in higher vocational colleges in the new era? How to establish such a support mechanism? In order to answer this series of questions, this study combs the relevant

research results of predecessors, and then compiles a questionnaire on the professional development support of double-qualified teachers in higher vocational colleges in the new era, conducts investigation and analysis, and puts forward the construction strategy of the professional development support mechanism of double-qualified teachers in higher vocational colleges.

#### 2. Methodology

#### 2.1 Research Procedure

Based on literature research and previous interviews, this study compiled a questionnaire on professional development support for double-qualified teachers in higher vocational colleges. It was carried out in the form of objective questions. According to the results of local feedback and trial tests, the questionnaire was revised and improved for many times (such as deleting the total number of questions to reduce the response time of the questionnaire, deleting similar questions that are likely to cause distress). The final questionnaire contains 23 items in five aspects.

This study selected Hunan Information Vocational and Technical College, Hunan Business Vocational and Technical College, Hunan Mechanical and Electrical Vocational and Technical College, Hunan Safety Vocational and Technical College, Hunan City Vocational and Technical College and so on five higher vocational information technology teachers to investigate, the purpose is to understand the support and problems in the process of professional development of double-qualified teachers in higher vocational colleges. Among them, Hunan Information Vocational and Technical College is a municipal public higher vocational college, Hunan Business Vocational and Technical College, Hunan Mechanical and Electrical Vocational and Technical College, Hunan Mechanical public higher vocational college, Hunan Urban Vocational College is a private higher vocational college, and strive to investigate the object has a certain representativeness and universality. The questionnaire takes the form of random sampling to select the survey sample, that is, in five schools, random sampling and anonymous survey are conducted for different positions and different types of teachers to ensure the objectivity of the sample. A total of 128 copies were distributed and 128 copies were recovered. The recovery rate was 100 %, of which 121 were valid questionnaires, and the effective rate was about 95 %.

#### 2.2 Sample Size

The basic information of the survey sample. From the gender of the respondents, 88 of the 121 teachers who participated in the questionnaire survey were women, accounting for 64.46 % of the total sample; there were 43 males, accounting for 35.54 % of the total sample.

From the age of the respondents, there were 17 people under the age of  $20 \sim 29$ , accounting for 14.05 % of the total sample; a total of 58 people aged 30-39 years old, accounting for 47.93 % of the total sample; a total of 36 people aged 40-49 years old, accounting for 29.75 % of the total sample; there were 10 people over 50 years old, accounting for 8.26 % of the total sample.

Table 1.

| age                    | number of people | percentage |  |
|------------------------|------------------|------------|--|
| 20-29 Years old        | 17               | 14.05%     |  |
| 30∼39 Years old        | 58               | 47.93%     |  |
| 40∼49 Years old        | 36               | 29.75%     |  |
| age more than 50 years | 10               | 8.26%      |  |
| total                  | 121              | 100%       |  |

From the perspective of teachers' educational level, they are mainly concentrated in the undergraduate and postgraduate levels, and the teachers with junior college and below and doctoral degrees are the least.

Table 2.

| educational background | number of people | percentage |
|------------------------|------------------|------------|
| Specialist and below   | 1                | 0.83%      |
| undergraduate          | 18               | 14.88%     |
| Master                 | 100              | 82.64%     |

| doctor | 2   | 1.65% |
|--------|-----|-------|
| total  | 121 | 100%  |

According to the existing professional titles of teachers, among the 121 teachers surveyed, there are 22 teachers with primary titles, accounting for 18.18 % of the total sample; there were 56 people with intermediate professional titles, accounting for 46.28 % of the total sample; there were 31 people with deputy senior professional titles, accounting for 25.62 % of the total sample; there are 4 people with senior titles, accounting for 3.31 % of the total sample; there were 8 people without professional titles, accounting for 6.61 % of the total number of samples.

Table 3.

| professional title | number of people | percentage |
|--------------------|------------------|------------|
| Primary            | 22               | 18.18%     |
| Intermediate       | 56               | 46.28%     |
| Vice-senior        | 31               | 25.62%     |
| Jung Senior        | 4                | 3.31%      |
| No title           | 8                | 6.61%      |
| total              | 121              | 100%       |

From the perspective of teachers' teaching years, there are 26 people engaged in teachers' work within 3 years, accounting for 21.49 % of the total sample; there are 36 people who have been teaching for 4 to 9 years, accounting for 29.75 % of the total sample. There are 14 people who have been teaching for 10 to 14 years, accounting for 12.40 % of the total sample. The number of people who have been teaching for more than 15 years is the largest, 44, accounting for 36.36 % of the total sample.

Table 4.

| term of years  | number of people | percentage |
|----------------|------------------|------------|
| Within 3 years | 26               | 21.49%     |
| 4 ~ 9 years    | 36               | 29.75%     |
| 10-14 years    | 14               | 12.40%     |
| Over 15 years  | 44               | 36.36%     |
| Total          | 121              | 100%       |

From the perspective of whether teachers are recognized as double-qualified teachers by the school, 49 teachers are recognized as double-qualified teachers by the school, accounting for 40.50 % of the total sample; there were 72 teachers who were not identified as double-qualified teachers by the school, accounting for 59.50 % of the total sample.

### 3. Results

#### 3.1 Continuing Education

The survey found that in the survey of 'Do you have additional allowances for double-qualified teachers in your school during the period of continuing education except for normal expenses (training, living expenses)' (multiple-choice questions), 68 teachers filled in 'none', accounting for 56.2 % of the total survey; 39 teachers filled in 'yes, little', accounting for 32.23 % of the total number of survey; there were 14 teachers who filled in 'yes, as in school work', accounting for 11.57 % of the total survey, and no teachers filled in 'yes, more than in school work'. In the survey of "you think there are problems in the continuing education of double-qualified teachers in higher vocational colleges," 76 teachers filled in "lack of guiding significance for teaching practice," accounting for 62.81 % of the total number of survey; a total of 73 teachers (60.33 %) filled in the questionnaire of 'courses cannot be set up according to the needs of teachers'. 71 teachers filled in the 'heavy macro theory, lack of pertinence', accounting for 58.68 % of the total number of survey; 49 teachers filled in the 'single content, no new idea' accounted for 40.5 %; there were 8 teachers who filled out 'no above problems',

accounting for 6.61 % of the total survey. In general, the content of continuing education is out of touch with the needs of teachers.

#### 3.2 Performance Appraisal

The survey found that in the survey of 'Your school in terms of performance incentives, compared with non-double-qualified teachers, double-qualified teachers should be', 3.31 % of teachers answered 'much better'; 24.79 % of the teachers answered "better"; 4.13 % of the teachers answered 'almost'; 30.58 % of the teachers answered 'almost'; 2.48 % of the teachers answered "lower"; 34.71 % of teachers answered 'unclear'. In the survey of 'You think the difficulty of performance reward for double-qualified teachers in higher vocational colleges is', 55 teachers filled in the 'performance evaluation is difficult to quantify', accounting for 45.45 % of the total survey; 45 teachers filled in the "some tasks are difficult to refine into reasonable assessment indicators," accounting for 37.19 % of the total number of survey; 21 teachers filled in the "lack of operability of the assessment content of the indicators," accounting for 17.36 % of the total number of survey. At present, the performance mechanism of double-qualified teachers is not perfect, and there is no difference in welfare treatment between double-qualified teachers and non-double-qualified teachers, which seriously dampens the enthusiasm of teachers to become double-qualified teachers.

#### 3.3 Co-Cultivation Between Colleges and Enterprises

In the survey of "What forms of school-enterprise cooperation training have you participated in" (multiple-choice questions), 36.36 % of teachers answered "exercise"; 58.68 % of the teachers answered 'guiding and managing students' training'; 16.53 % of teachers answered 'new product and technology research and development'; 47.93 % of the teachers answered 'lectures'; 36.36 % of the teachers answered 'research', 24.79 % of the teachers answered 'curriculum development'. 43.8 % of teachers answered 'field visit'. In the survey of "You think the source of the problem of school-enterprise cooperation in training double-qualified teachers in higher vocational colleges," 25 teachers answered "lack of interest mechanism," accounting for 20.66 % of the total number of respondents; 61 teachers answered 'the operating mechanism has not yet been established', accounting for 50.41 % of the total number of surveys, and 35 teachers answered 'the guarantee mechanism is not perfect', accounting for 28.93 % of the total number of surveys. The imperfect cooperative operation mechanism has become the main obstacle restricting the cooperative training of double-qualified teachers, which is not conducive to the development of school-enterprise cooperation in a deeper and broader direction.

#### 3.4 Master-Apprentice Connection

In the survey, 42.98 % of teachers chose to answer 'one teacher and one apprentice', 63.64 % of teachers answered 'one teacher and many apprentices', 14.05 % of teachers answered 'one apprentice and many teachers', 4.13 % of teachers answered 'other'. In the survey of "What are the contents of guidance" (multiple choice questions), 68 teachers answered "subject knowledge," accounting for 56.2 % of the total number of respondents. 103 teachers answered 'teaching skills', accounting for 85.12 % of the total survey; 91 teachers answered 'practical skills', accounting for 75.21 % of the total survey. 70 teachers answered 'classroom management', accounting for 57.85 % of the total survey; 64 teachers answered 'scientific research', accounting for 52.89 % of the total survey; 31 teachers answered 'life aspect', accounting for 25.62 % of the total survey. In the survey of 'what do you think is the problem' of 'mentoring pairing' of double-qualified teachers in higher vocational colleges, 47.11 % of teachers answered 'pairing objects do not match'; 71.9 % of teachers answered 'insufficient time for practical guidance'; 46.28 % of the teachers answered 'lack of training for teachers', 64.46 % of the teachers answered 'insufficient driving force for the learning of both teachers and apprentices', 51.24 % of the teachers answered 'insufficient supervision of the school's mentoring activities', 51.24 % of the teachers answered that the assessment mechanism was not perfect, and 57.85 % of the teachers answered that the incentive measures were not perfect. The double-qualified master-apprentice team lacks long-term effectiveness.

#### 4. Conclusion and Suggestion

4.1 Establish a Continuing Education Support Mechanism for Double-Qualified Teachers in Higher Vocational Colleges

Good continuing education in higher vocational colleges helps teachers update their educational concepts, timely understand and apply new professional knowledge and skills, and continuously improve teaching quality. An advanced and perfect continuing education mechanism for double-qualified teachers is an important foundation for the rapid and good development of higher vocational colleges.

Specifically, the following four aspects are needed: First, the system should clearly stipulate the rights and obligations of teachers to participate in continuing education, protect the legitimate rights and interests, and give certain subsidies to teachers during continuing education. Mobilize participation enthusiasm and initiative. Second, scientific and rational planning of continuing education content. For example, we should

comprehensively consider the continuing education work of teaching staff, sort out the learning intentions of double-qualified teachers at different development stages, and conduct classified research to effectively grasp the perfect combination of teacher needs and continuing education content. Third, to carry out continuing education work should adhere to the principle of combining a variety of training methods. Highlight the advantages of different training methods, according to the content, system and application degree of various resources, improve the enthusiasm of teachers to participate in continuing education in an all-round way, according to the arrangement of teachers' learning intention, choose the most suitable learning methods and resource types for school characteristics. The fourth is to strictly regulate the implementation, management, monitoring, assessment and feedback of teachers' continuing education, so that teachers can have rules to follow and solve problems in time when they encounter problems in training.

## 4.2 Establish a Performance Reward Support Mechanism for Double-Qualified Teachers in Higher Vocational Colleges

It's a systematic work to construct a scientific and reasonable performance support mechanism for double-qualified teachers in higher vocational colleges. First, it is necessary to formulate a performance appraisal index system for double-qualified teachers based on scientific management. Innovate the performance evaluation index system in a combination of quantitative and qualitative methods, and encourage double-qualified teachers to become the main force of the innovative talent training model. Adams' equity theory points out that whether salary can motivate teachers depends not only on the absolute value of salary, but also on the relative value of salary. When formulating the distribution system, higher vocational colleges should tilt to the group of double-qualified teachers, increase the basic salary of double-qualified teachers, and give different allowances to double-qualified teachers at different stages of development. The second is to establish an effective performance feedback communication mechanism. Without timely and specific feedback, it is impossible to correct their own behavior, or even lose the desire to continue their efforts. The leaders of the department or the head of the teaching and research section must have a feedback conversation with the teachers, so that the teachers can understand the overall situation of the assessment of all teachers, their own assessment and their position in all teachers, recognize the assessment results, recognize their own shortcomings, improve their working methods and attitudes, and improve their working ability. At the same time, teachers can also put forward the difficulties encountered in completing the performance goals to request the support of their superiors.

## 4.3 Establish a School-Enterprise Cooperation Training Mechanism for Double-Qualified Teachers in Higher Vocational Colleges

In order to truly achieve school-enterprise cooperation to cultivate double-qualified teachers, the key is to achieve the coordination of the interests of all parties. First, the establishment of specialized organizations. According to the industry classification, a teacher training steering committee participated by the government, industry enterprises and higher vocational colleges is established to make it an organization for the training of double-qualified teachers. The teacher training committee plays the functions of personnel training, scientific research and development, and social services. Secondly, establish a training funding mechanism. The school-enterprise cooperation training of double-qualified teachers involves multiple interests, so the sources of funding for teacher training should be diversified. The government sets up special funds for teacher training in the education budget, and cannot be diverted for other purposes; teachers participate in the scientific research and development of enterprises, enterprises should bear the corresponding cost for teacher training; as a school employee, the school should provide some training fees; the improvement of teachers' quality is also the need to meet their own development, and they should also bear certain training costs. Finally, establish a collaborative management mechanism. In order to truly achieve the cooperation between schools and enterprises to cultivate double-qualified teachers, the key is to realize the coordination of the interests of all parties, rationally allocate the rights and obligations of all parties in the new mechanism, formulate a collaborative management system and sign a training contract in the form of a contract, and clarify and standardize the responsibilities and obligations, interests and authorities that the government, enterprises, schools and teachers should bear in the process of school-enterprise cooperation.

#### 4.4 Establish a Mentoring Support Mechanism for Double-Oualified Teachers in Higher Vocational Colleges

One is to set up special funds for mentoring. Higher vocational colleges should set up special funds for mentoring pairing, which are specially used for mentoring pairing management expenses and mentoring allowance expenses. The allowance is divided into two parts: basic allowance and reward allowance. Under the condition that both teachers and apprentices fulfill their respective responsibilities and obligations, the school regularly issues a fixed amount of basic allowance to the master in the form of work allowance, and regularly allocates a fixed amount of basic allowance to the apprentice in the form of training funds for the purchase of books and materials, publication of papers, publication of monographs, participation in academic exchanges and

related teaching and research training activities, which must be reimbursed by invoice. The reward allowance is used to reward both teachers and apprentices with outstanding achievements.

The second is to establish a mentoring assessment incentive mechanism. In order to ensure that both teachers and apprentices participate in the work of teacher-apprentice pairing with a positive attitude, the process and results of the work of teacher-apprentice pairing are bundled, and a community of interests between teachers and apprentices is established to make both teachers and apprentices aware of their common responsibilities. In the target assessment, in strict accordance with the master-apprentice pairing target task assessment. Material aspects: if the target is just completed, the master and apprentice can receive a fixed amount of basic allowance; if the target is exceeded, on the basis of the basic allowance, not only the apprentice is given a reward allowance, but also the master is given a corresponding amount of reward allowance; if the target is not achieved, no allowance is paid. Spiritual aspects: award honorary titles to excellent masters and apprentices. These honorary titles and other comprehensive honorary titles have the same role in professional title evaluation and job promotion.

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#### References

- Chen Qiupeng, (2012). Research on the performance appraisal of 'double-qualified' teachers in higher vocational colleges. *Journal of National College of Education Administration*.
- Xu Haifeng, Shi Weiping, (2017). The dilemma and countermeasures of improving the professional practice ability of higher vocational teachers. *Vocational education forum*.
- Yang Qiaoyu, (2011). School-based training strategy for the professional development of double-qualified teachers. *Journal of Northwest Adult Education*.
- Zhao Wenping, (2012). On the four modes of professional development of "double-qualified" teachers in vocational colleges. *Journal of Inner Mongolia University of Finance and Economics*.
- Zheng Guofu, (2012). The professional development stage and growth strategy of double-qualified teachers. *Human resources development in China.*

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