

# Research on the Predicament and Countermeasures of Professional Teachers' Competency Improvement in Higher Vocational Colleges

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**Keywords:** Higher Vocational Colleges; Competence; Professional Teachers; Dilemma; Countermeasure Research

**Abstract:** This article takes the status quo of professional teachers' competence in higher vocational colleges as the research object, and uses the "Professional Teacher Competency Questionnaire in Higher Vocational Colleges" compiled in the previous period as a research tool to investigate the status quo of professional teachers' competency improvement in higher vocational colleges. It is found that the competence of professional teachers in higher vocational colleges is at a general level; there is no significant difference in the competence of professional teachers in higher vocational colleges of different genders; there are obvious differences in the competence of professional teachers in higher vocational colleges with different educational backgrounds, titles and professional types. The problem of professional teachers' competence in higher vocational colleges is mainly reflected in: the overall level of competence needs to be improved, and the development of various aspects of competence is uneven. After analysis, it is believed that it is mainly caused by imperfect promotion environment, insufficient training links, and insufficient personal initiative. Therefore, on this basis, targeted suggestions to improve the competence of professional teachers in higher vocational colleges are put forward.

## 1. Introduction.

Vocational colleges are shouldering the important mission of cultivating a large number of high-quality laborers and technical talents. They attach great importance to the development of vocational colleges in our country from the national level and the level of economic and social development needs. To run higher vocational colleges with Chinese characteristics, the key lies in the professional teachers of higher vocational colleges[1]. At the same time, from the research and application of competency, it can be found that competency characteristics can play an exemplary standard or guiding role in the identification, training and development of teachers. Therefore, this article uses competency theory as the research foundation to understand higher vocational education. Under the current situation of the competence of professional teachers of colleges and universities, the problem is found, and effective development methods are proposed in the follow-up construction of colleges and universities, so that professional teachers of higher vocational colleges can meet the competency requirements of higher vocational education personnel training.

## 2. Research objects and methods

This article takes as the research object the status quo of improving the competence of on-the-job professional teachers in Sichuan higher vocational colleges.

Use the self-compiled "Professional Teacher Competency Questionnaire in Higher Vocational Colleges". The questionnaire contains "good personality" (tolerant personality, cheerful personality, respect and understanding of others, enthusiasm for others, selfless dedication, patience, love, and fairness to students), "management ability" (organization and coordination, overall planning, Basic ability in flexibility and stress tolerance), "teaching ability" (teaching ability of professional knowledge and skills and influence, teaching language expression and technology application ability), "research quality" (information acquisition, academic exchange, subject research, practice Ability in operation and logical analysis), "development motivation" (love and dedication, positive

enterprising spirit, persistent work attitude, diligent work spirit), "self-concept" (self-confidence, self-reflection, self Evaluation) Six factors, a total of 31 questions, using Likert 5-point scoring, with good reliability and validity.

A questionnaire survey was conducted by selecting professional teachers on the job in Sichuan. Random sampling was adopted. A total of 241 questionnaires were issued and 241 were returned, of which 241 were valid questionnaires. Use SPSS22.0 for data processing. Use logical methods such as induction and deduction to analyze the problems presented by the current situation and explore the causes of the problems.

The article mainly analyzes the status quo and predicament of professional teachers' competence in higher vocational colleges from the aspects of gender, educational background, professional title, and professional category of the survey objects.

### 3. Research results and analysis

#### 3.1 The overall level of professional competence of professional teachers in higher vocational colleges

A descriptive analysis of the professional competence and sub-dimensions of professional teachers in higher vocational colleges is carried out. The results are shown in Table 1.

Table 1 Descriptive statistical results of total scores and sub-dimensions

variable	Minimum	Maximum	Average	Standard Deviation
Good personality	1.13	7.00	5.113	1.0267
Management ability	1.20	7.00	5.393	1.193
teaching ability	1.00	7.00	4.610	1.187
Scientific research quality	1.20	7.00	4.951	1.082
Development motivation	1.00	6.50	4.069	1.180
Self-concept	1.00	7.00	4.332	1.209
Total score	34.00	206.00	149.524	28.501

It can be seen from Table 1 that the competence of professional teachers in higher vocational colleges is at an average level. From the average point of view, each sub-dimension is greater than 4. According to the scale of the scale, this is the "in-between" level, which indicates that the current high vocational teachers' work competence is still lacking. The score distribution in the above table does not rule out that the design of the scoring range is too narrow, or that the scores of the questionnaires during mutual evaluation and self-evaluation may be higher than actual. On the whole, the management ability, good personality, teaching ability and scientific research quality of professional teachers in higher vocational colleges are all at a generally high level. Among them, the scores of development motivation and self-concept are slightly lower than the scores of other sub-dimensions. This shows that the personal characteristics of professional teachers in higher vocational colleges in terms of career initiative, self-reflection assessment, and work diligence are slightly lower than other characteristics. The reason for this situation may be due to the nature of the teacher's work. Because these characteristics are not directly related to the teaching work, the teachers' attention is not enough; on the contrary, the teachers attach great importance to it, which is reflected in the corresponding scale, and the scores are often higher.

#### 3.2 The Competence Status of Professional Teachers of Different Genders in Higher Vocational Colleges

Using gender as an independent variable, an independent sample t test was carried out on the competence of professional teachers in higher vocational colleges and its sub-dimensions. The results are shown in Table 2.

Table 2 Gender Differences in Competency of Professional Teachers in Higher Vocational Colleges (M±SD)

variable	Male	Female	<i>p</i>
Good personality	4.24±0.78	4.40±1.00	0.161
Management ability	4.47±1.00	4.57±1.32	0.375
teaching ability	4.66±1.00	4.81±1.35	0.221
Scientific research quality	4.11±0.98	4.52±1.17	0.863
Development motivation	3.34±1.04	3.19±1.01	0.421
Self-concept	3.52±1.13	3.64±1.15	0.672
Total score	157.42±23.74	126.43±29.98	0.101

Note: \**P*<0.05; \*\**P*<0.01; \*\*\**P*<0.001

It can be seen from Table 2 that there is no significant difference in the competence of professional teachers in higher vocational colleges of different genders (*p*>0.05), indicating that the competence of professional teachers in higher vocational colleges of different genders tends to be generally and specific in terms of types. Unanimous.

Professional teachers in higher vocational colleges are more prominent in teaching ability, but compared with the overall requirements of professional teachers in higher vocational colleges, they are relatively backward in terms of development motivation, mainly due to the personal development planning of professional teachers in higher vocational colleges Lack of clear guidance, ignoring personal progress and development.

### 3.3 Status Quo of Competency of Professional Teachers in Higher Vocational Colleges with Different Educational Background

Taking academic qualifications as an independent variable, a one-way analysis of variance was carried out on the competence of professional teachers in higher vocational colleges and its sub-dimensions. The results are shown in Table 3.

Table 3 Differences in the competence of professional teachers in higher vocational colleges (M±SD)

variable	PhD	Master	Undergraduate	<i>p</i>
Good personality	5.25±0.90	5.1±0.90	4.97±1.27	0.141
Management ability	5.12±0.90	5.44±1.22	5.1±1.44	0.072
teaching ability	4.71±1.03	4.59±1.10	4.38±1.46	0.036*
Scientific research quality	5.77±0.89	5.04±1.01	4.77±1.27	0.021*
Development motivation	4.1±1.08	4.08±0.97	4.23±1.43	0.061*
Self-concept	4.47±1.18	4.12±0.91	4.08±1.18	0.006**
Total score	154.48±23.28	152.99±24.30	148.75±24.14	0.324

Note: \**P*<0.05; \*\**P*<0.01; \*\*\**P*<0.001

It can be seen from Table 3 that in terms of academic qualifications, professional teachers of higher vocational colleges with a doctoral degree have higher scores in various dimensions of competence characteristics, and are more prominent in terms of scientific research quality. Professional teachers of higher vocational colleges with a master's degree have higher competencies. The score is at an intermediate level, while teachers with a bachelor's degree are at a general level in the scores of each dimension of competency characteristics. In terms of self-concept, there are very significant differences between professional teachers in higher vocational colleges with different educational backgrounds (*p*<0.01), and there are significant differences in scientific research quality and development motivation (*p*<0.05).

### 3.4 The Competence Status of Professional Teachers of Different Professional Titles in Higher Vocational Colleges

Taking job title as an independent variable, a one-way analysis of variance was performed on the

competence of professional teachers in higher vocational colleges and its sub-dimensions. The results are shown in Table 4.

Table 4 Differences in professional titles of professional teachers' competence in higher vocational colleges (M±SD)

variable	Professor	Associate Professor	Lecturer	<i>p</i>
Good personality	4.62±0.78	4.27±0.89	3.96±0.91	0.029*
Management ability	4.56±0.87	4.40±1.10	3.66±0.96	0.137
teaching ability	4.61±1.03	4.41±1.02	3.91±1.22	0.023*
Scientific research quality	4.89±0.76	4.47±0.81	4.03±0.83	0.034*
Development motivation	4.81±0.98	4.53±0.79	4.21±0.67	0.134
Self-concept	4.59±0.58	4.34±0.90	4.02±0.76	0.042*
Total score	152.67±21.54	146.3±23.57	144.6±23.98	0.062

Note: \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$

It can be seen from Table 4 that the professional teachers of higher vocational colleges with the title of professor have a relatively high level in all dimensions of competency, and the scores of the professional teachers of higher vocational colleges with the title of associate professor in all dimensions are above the average level, in order to develop the level of motivation. The highest, the competency level of professional teachers in higher vocational colleges with the title of lecturer is close to the general level, and the level of competence in terms of development motivation is relatively high. Low, lacking in teaching. In terms of good personality, teaching ability, scientific research quality, and self-concept, there are obvious differences between professional teachers of higher vocational colleges with different professional titles ( $p < 0.05$ ).

### 3.5 The Competence Status of Professional Teachers in Different Professional Categories of Higher Vocational Colleges

With the professional category as the independent variable, an independent sample t test was performed on the competence of professional teachers in higher vocational colleges and its sub-dimensions. The results are shown in Table 5.

Table 5 Differences in professional categories of professional teachers' competence in higher vocational colleges (M±SD)

variable	Social Science	Technology Application	<i>p</i>
Good personality	5.03±1.01	5.17±0.95	0.243
Management ability	5.24±1.20	5.49±1.07	0.175
teaching ability	4.45±1.22	4.87±1.04	0.041*
Scientific research quality	4.66±1.13	5.01±1.01	0.003**
Development motivation	3.89±1.04	4.23±1.32	0.317
Self-concept	4.23±1.19	4.44±1.17	0.481
Total score	144.58±29.89	153.78±27.64	0.031*

Note: \* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$

It can be seen from Table 5 that in terms of professional categories, the competence of professional teachers in technical application colleges is higher than that of professional teachers in social sciences colleges, especially in the three aspects of teaching ability, scientific research quality and competence. There are significant differences ( $p < 0.05$ ).

## 4. Discussion

### 4.1 The Predicament Existing in the Competence of Professional Teachers in Higher Vocational Colleges

The overall level of competence needs to be improved. Through the investigation and research on the competence of professional teachers in higher vocational colleges, we can find that the average score of the six sub-dimensions of good personality, management ability, teaching ability, scientific research quality, development motivation, and self-concept is between 4.069 and 5.393. On the whole, the competence level of professional teachers in higher vocational colleges is average, at an "average" level, which is higher than the rating four in the scale, that is, the management ability, good personality and teaching ability of professional teachers in higher vocational colleges. , The quality of scientific research is at a generally high level. This shows that there is still a lot of room for improvement in the competence of professional teachers in higher vocational colleges.

Unbalanced development in all aspects of competency In this survey and research, the competence of professional teachers in higher vocational colleges has shown a phenomenon of unbalanced development in all aspects. The professional teachers of the higher vocational colleges surveyed scored the highest in the two sub-dimensions of good personality ((5.113) and management ability (5. 393), and scores in the two sub-dimensions of scientific research quality (4. 951) and teaching ability (4. 610) In the third and fourth places, the scores of self-concept (4. 322) and development motivation (4. 069) are in the second two places.

"Good personality" represents the beneficial teaching aspects of the professional teachers' personality traits in higher vocational colleges, namely, tolerant personality, respect and understanding of others, selfless dedication, and patience with students. "Management ability" includes the teaching management ability of professional teachers in higher vocational colleges. Both scores are higher, which shows that professional teachers in higher vocational colleges have better self-evaluation on personality characteristics and teaching ability and are more satisfied. "Development motivation" mainly includes professional teachers' dedication, professionalism, positive enterprising spirit, persistent work attitude, and "self-concept" represents teachers' self-cognition. The low scores of both indicate that professional teachers in higher vocational colleges have certain problems with their work enthusiasm and self-cognition, lack of professionalism, insufficient work attitude, and low self-confidence. Teaching ability and scientific research quality are in the middle. They have not reached a satisfactory level, and there is still a lot of room for improvement. Generally speaking, the competency development of professional teachers in higher vocational colleges is not balanced, and there are ladder-type differences in all aspects.

#### **4.2 The Reasons for the Competence of Professional Teachers in Higher Vocational Colleges**

Improving environment is not perfect. Generally speaking, the main reason for the lack of competence of professional teachers in higher vocational colleges is the lack of a complete system environment. As a kind of professional competence, its production and development depend on the support, stimulation and cultivation of the surrounding environment, rather than the professional psychological quality produced by individual teachers spontaneously[2].

The training session is not sufficient. Judging from the current situation, there are still many problems in professional teacher training in higher vocational colleges. The main manifestations are: training at the academic level has not been smoothed; skill training is difficult to match; training content is out of touch with teaching practice; teacher training only focuses on the pursuit of quantity. Pay attention to quality and efficiency, focus only on business training but not on overall quality improvement, only focus on expanding the scale and not optimizing the structure.

Personal initiative is not enough. In this research survey, it can be found that in actual work, due to insufficient personal knowledge or unclear personal career planning, or job burnout in personal work but not eliminated in time, etc., it improves personal competence. Insufficient initiative, accustomed to step by step, following the trend, ignoring the improvement of one's own theoretical and practical ability, leading to stagnant development of personal competence.

### **5. Countermeasure**

Create a good environment for enhancing the competence of professional teachers in higher vocational colleges. Higher vocational colleges should create a campus culture with their own

characteristics, and give sufficient respect to the ideas, beliefs and pursuits of professional teachers in higher vocational colleges[3]. Create a relaxed, cohesive and affinity campus culture and academic atmosphere suitable for the survival and growth of talents, equal participation by all staff, and enhance the sense of self-realization of professional teachers in higher vocational colleges.

Improve the training link based on the competency model. Training should be designed and implemented according to the actual situation of professional teachers in higher vocational colleges and the gap between competency models, and the enthusiasm and initiative of teachers to participate in training should be improved[4]. When professional teachers in higher vocational colleges have a clearer understanding of their current status and the conditions for success through the competency model, they can make better decisions in training and learning, passively learning from the past, Blind learning is transformed into independent learning and selective learning. At the same time, a bottom-up teacher training plan is developed to allow teachers to participate in the design and formulation of training plans and training projects, so as to increase the enthusiasm and initiative of teachers to participate in training[5]. The training plan formulated in this way truly reflects the respect for teachers' professional development, and only then will teachers take the initiative to regard participating in professional training as their basic tasks and responsibilities.

Improve the incentive mechanism for professional teachers in higher vocational colleges to enhance their competence. Encouragement is to inspire people's motivation, through excitation, make people always maintain a state of excitement. Hope, as a kind of spiritual force, is an important reason for people to produce such a state of excitement. Therefore, motivation is the key to improving the competence of professional teachers in higher vocational colleges. Schools can open up various emotional communication channels, actively listen to teachers' aspirations, meet teachers' psychological needs, solve teachers' various difficulties in time, and encourage teachers to find spiritually[6]. "Sense of belonging". At the same time, external incentives such as salary and bonus should also be considered to meet their basic life needs, and more importantly, they should continue to meet the needs of outstanding teachers to realize their own work value, stimulate their unlimited work motivation, and use teachers to realize their own self-realization. The need to strengthen their motivation for action in daily work, so that teachers continue to obtain self-fulfillment satisfaction in their work.

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## **References**

- [1] Wang Feng; Wu Jiawen. Investigation and analysis of the competence status of college tennis teachers in Fujian Province. *Journal of Foshan University of Science and Technology (Natural Science Edition)*, 2019, 37(05): 73-76.
- [2] Zheng Jie; Chen Ying. The predicament and improvement path of the competence development of young teachers in my country's colleges and universities. *Modern Education Management*, 2013(06):82-86.
- [3] Bian Dandan. Study on the improvement of the competency of "dual-qualified" teachers in higher vocational education from the perspective of the integration of production and education. *Journal of Taiyuan Urban Vocational and Technical College*, 2019(11):52-54.
- [4] Yang Pinzhi. Investigation and Analysis of Professional Teachers' Competency Upgraded to Higher Vocational Colleges and Research on Improvement Strategies. Sichuan Normal University, 2018.
- [5] Cui Yuchen; Zhao Ziyue; Gu Wentai; Zhou Mingjie. Analysis of the status quo and

countermeasures of university teachers' competence: based on a survey of five universities in my country. Jimei University Journal (Educational Science Edition), 2019, 20(02):12 -18.

[6] Hu Na. Investigation and Countermeasure Analysis of the Status Quo of Teachers' Competency in Rural Primary and Secondary Schools. Southwest University, 2010.