

A STUDY ON INSTRUCTORS' PERCEPTION OF PROFESSIONAL QUALITY AT ANYANG VOCATIONAL AND TECHNICAL COLLEGE IN HENAN PROVINCE, CHINA

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Abstract: This study aimed to understand the instructors' perception of professional quality differences in different demographic backgrounds at Anyang Vocational and Technical College in Henan Province. The questionnaires were processed using SPSS 28.0, and the data were analyzed using descriptive statistics, independent t-test analysis, and one-way ANOVA analysis. A questionnaire survey was conducted using convenient sampling. There were a total of 865 instructors at Anyang Vocational and Technical College in Henan Province. According to the Morgan table, the number of sampled instructors was 267. The research results are as follows: The overall level of instructors' professional qualities was high. There were significant differences in instructors' professional qualities under demographic backgrounds (gender, age, professional title, educational background, and teaching years), but not significantly in terms of disciplines. Among them, female instructors were higher than male instructors. The instructors' professional qualities of 31-40 and 41-50 years old were significantly higher than those of 30 years old and under. Lecturers, associate professors and professors had significantly higher than teaching assistants. The instructors' professional quality with a master's degree or above is significantly higher than a bachelor's degree or below. Instructors with 5-10 years were higher than other teaching years. Finally, based on the research results, suggestions such as constructing a stepped training system adapted to the career development stages, implementing the double spiral improvement plan of educational backgrounds and academic achievements, and establishing a gender equality and intergenerational coordinated development mechanism are proposed to improve the professional quality level of instructors comprehensively.

Keywords: College Instructors, Professional Quality, Knowledge and Skills, Anyang Vocational and Technical College in Henan Province

Introduction

With the deepening of educational reform, the demand for professionalization of instructors was becoming increasingly urgent. It was an important theoretical basis for instructors' education. Saxena & Bendale (2014) believed that the teaching ability, professional quality and practical experience of instructors were the core of instructors' education. Governments and educational institutions of all countries were actively exploring effective ways to enhance the instructors' professional qualities in order to promote the overall improvement of educational quality. Foreign scholar Nasser et al. (2024) emphasized that the cultivation of instructors' professional qualities required a combination of theory and practice. They believed that theoretical knowledge was the foundation of an instructor's professional quality, but practical experience was equally important.

With the continuous adjustment of the economic structure and the accelerated advancement of industrial upgrading, Xiao & Chen (2014) said that vocational education was playing an increasingly important role in cultivating highly skilled talents. The increasing demand of enterprises for highly skilled talents required vocational education to keep up with industrial development trends and constantly update teaching content and methods. In this context of globalization, in order to enhance the international competitiveness of China's vocational education, it was necessary to cultivate skilled talents with high quality (Lu, 2015; Cunningham et al., 2015). Therefore, in order to ensure the steady improvement of the teaching quality of vocational education, more stringent and comprehensive requirements have been put forward for the comprehensive quality of higher vocational instructors. First of all, the instructors' professional quality in higher vocational colleges was directly related to the teaching quality and the cultivation of students' abilities.

Research Objectives

(1) To determine the overview of the demographic backgrounds of instructors at Anyang Vocational and Technical College in Henan Province.

(2) To understand the current situation of the instructors' perception of professional quality of Anyang Vocational and Technical College in Henan Province.

(3) To analyze the differences in the instructors' perception of professional quality levels at Anyang Vocational and Technical College in Henan Province under different demographic backgrounds.

Literature Review

Ability Development Theory

The ability development theory was originally proposed by the Field of Study of American psychologists and was built upon in-depth research into human learning and development processes

(Iryna, 2017). The theory emphasized that individuals could gradually develop and improve their professional qualities by participating in and completing a series of typical work tasks. The theory of instructors' quality structure focused on the composition and elements of instructors' professional qualities. This theory held that the instructors' professional quality was a complex system, including multiple aspects such as moral character and ideology, professional knowledge quality, educational and teaching ability quality, and physical and mental quality (Xin & Kang, 2018). The theory of instructors' quality structure also emphasized the interaction and interdependence among these qualities. Together, they constitute a complete system of instructors' professional qualities, providing solid support for instructor's educational and teaching work.

Research on the Connotation of Instructors' Professional Qualities

Regarding the research on instructors' professional qualities, Zhu (2016) proposed that the connotation of instructors' professional qualities included four aspects: First, instructors' professional qualities were mainly based on the unique responses of the special profession of instructors; Second, the manifestation of instructors' professional qualities was based on instructors teaching activities. Thirdly, the instructors' professional quality was comprehensive, and various factors were interrelated (Wang, 2001); Fourth, the instructors' professional quality was dynamic quality and not static (Li & Tao, 2023). It could be said that the instructors' professional quality had a significant impact on students' academic performance and even their physical and mental development (Liu, 2023). This study suggested that professional quality was the collective term for the comprehensive qualities that individuals need in today's social environment, including knowledge and skills, experience cognition, moral character and ideology, interpersonal communication, and physical and mental health. Its core content included both implicit qualities and explicit abilities..

Research on the Measurement of Instructors' Professional Qualities

Chen (2018) pointed out that the comprehensive quality of instructors included qualities at both professional and personality levels. The survey showed that personality quality encompasses many aspects such as expression ability, communication skills, dedication to work, teamwork, character cultivation, and entrepreneurial spirit. Zhu & Xin (2021) pointed out that the core competencies of instructors include the following aspects: communication, collaboration, problem-solving, teaching information processing, teaching ability, and other professional qualities.

Zhao & Zhang (2016) analyzed the indicators of MBA professional quality using grounded interviews and concluded that professional quality included the following two aspects: explicit competence and implicit competence. Cognitive experience, skills and knowledge, and interpersonal communication were the components of explicit qualities, while physical and mental quality and moral character and ideology were the components of implicit qualities. The actual impact of explicit qualities

was usually less than that of implicit qualities.

Research on Strategies for Enhancing Instructors' Professional Qualities

Regarding the goal of talent cultivation, Xu (2019) explained that professional quality was a comprehensive ability that required individuals not only to adapt to the constantly evolving external environment but also to absorb new knowledge and learn new skills while maintaining their level. To enhance an individual's professional quality, it was necessary to cultivate more and better technical and skilled talents, and the key guarantee in practice was the establishment of training bases. Kong (2016) conducted research based on the MBA training model that took professional quality as the guiding direction, proposed basic strategies for enhancing the skills generally required by the industry, the skills specific to the designated position, and the core competitiveness, and evaluated individuals' professional quality at different levels from a fresh perspective through the fuzzy evaluation analysis method. Zhang & Xu (2023) studied the current situation and formation factors of professional quality cultivation in the applied talent model, where applied talents specifically refer to those with excellent practical ability, basic ability and comprehensive quality. Zhao & Zhang (2016) pointed out that the focus of MBA education lies in cultivating students' implicit qualities and explicit abilities in two aspects. Among them, the implicit qualities include physical and mental quality and ideological character, while the explicit abilities include cognitive experience, interpersonal communication, and skills and knowledge. Ma & Zhang (2017) suggested that effective methods such as project-based teaching could be used to make full use of the dual roles of instructors and students and improve professional quality.

Research on Instructors' Professional Qualities under Different Demographic Backgrounds

On this basis, from the perspective of instructors' professional qualities, Zhu & Xin (2021) elaborated in detail on the focus and group characteristics of professional qualities of different types of instructors. They pointed out that instructors of different specialties and genders show significant differences in professional quality, further demonstrating the complexity and diversity of professional quality and its influencing factors. Meanwhile, the research by Jing & Lei (2021), and Sheng (2022), which also focused on the multiple factors influencing the professional quality of student affairs workers, provided a useful addition to this field. Their findings showed individual characteristics such as gender, educational background, and degree type. All of these had varying degrees of influence on the professional quality of student affairs workers. This finding not only enriched the understanding of the factors influencing professional quality but also provided an important reference for subsequent research. In addition, to sum up, these studies collectively reveal the complexity and diversity of professional quality and its influencing factors, providing valuable insights for a deeper understanding and improvement of professional quality.

Research on Instructors' Professional Qualities

Xiao (2014) pointed out that the job contents and status of different positions vary significantly, and the professional level and comprehensive quality of instructors have an important influence on their career development. This view laid the theoretical foundation for the subsequent research. Furthermore, through an in-depth exploration of the existing problems of the team, Wang (2019) revealed the deficiencies of the team in terms of professional development ideas, career development plans and promotion channels, etc. These problems had had a significant restrictive effect on the instructors' professional quality. On this basis, Zhou (2019) conducted a comprehensive analysis from multiple dimensions, such as the professional quality, job content, role positioning, and career development of instructors, providing a richer perspective for understanding professional qualities.

Methodology

In this study, the questionnaire used in this research was in the form of an electronic survey questionnaire, targeting a total of 865 instructors from Anyang Vocational and Technical College in Henan Province. According to the Morgan table, the number of people to be sampled was 267 to ensure the scientific nature of the sampling data. Therefore, to ensure that the sample size met the requirements of the Morgan table, a total of 275 questionnaires were distributed in this study. After screening for invalid questionnaires, 267 valid questionnaires were retained, and the effective return rate reached 97.10%. They were classified by gender, age, professional title, educational background, teaching years, and discipline.

The questionnaire on instructors' professional quality in this study mainly adopted the research results of Zhao & Zhang (2016). This questionnaire mainly referred to the research results of McClelland(1973). On this basis, combined with the background of China's educational development, it was finally compiled into a professional quality measurement questionnaire, consisting of 40 questions, including 5 dimensions: Moral character and ideology, physical and mental quality, experience cognition, knowledge and skills, and interpersonal communication. Among them, the implicit qualities include moral character and ideology and physical and mental quality; Overt qualities include experience cognition, knowledge and skills, and interpersonal communication. The questionnaire part of this study mainly consists of two parts: The first part was the basic information of individuals, mainly including the gender, age, professional title, educational background, teaching years and discipline of college instructors. The second part was the dimensions in the instructors' professional quality model and the corresponding questions. The reliability of the professional quality scale was tested in this study. The results showed that the Cronbach's α coefficient of the total scale was 0.958, and the Cronbach's α coefficients of each subdimension were in the range of 0.734-0.949, all greater than the 0.70 baseline. The internal consistency of the measurement scale developed in this study was good, and its reliability was confirmed. The validity of the questionnaire was tested through factor

analysis in SPSS, and the results showed that the KMO value of the scale was 0.888. Bartlett's sphericity test $p < .001$ indicated a high level of validity coefficient values, confirming the suitability of the data for factor analysis. Subsequently, common factors were extracted, which accounted for 61.781% of the total variance, indicating good scale validity.

Results

Demographic Analysis of the Respondents

This study took the instructors of Anyang Vocational and Technical College in Henan Province as the research objects and analyzed demographic backgrounds on 267 valid data.

The specific sample sizes of different demographic backgrounds for the research subjects in this study were as follows: In terms of gender, there were 129 male instructors, accounting for 48.3% of the total sample size, and 138 female instructors, accounting for 51.7% of the total sample size. In terms of age, there were 83 instructors 30 years and under, accounting for 31.1% of the total sample size; 110 instructors 31-40 years old, accounting for 41.2% of the total sample size; 65 instructors 41-50 years old, accounting for 24.3% of the total sample size; and 9 instructors over 51 years old, accounting for 3.4% of the total sample size. In terms of professional title, there were 54 teaching assistants, accounting for 20.2% of the total sample; 135 lecturers, accounting for 50.6% of the total sample; 63 associate professors, accounting for 23.6% of the total sample; and 15 professors, accounting for 5.6% of the total sample; In terms of educational background, 143 instructors had a master's degree or above, accounting for 53.6% of the total, and 124 instructors had a bachelor's degree or below, accounting for 46.4% of the total. In terms of teaching years, 118 instructors with less than 5 teaching years accounted for 44.2% of the total, 77 instructors with 5-10 teaching years accounted for 28.8% of the total, and 72 instructors with 10 teaching years or more accounted for 27.0% of the total; In terms of disciplines, there were 69 instructors of art, accounting for 25.8% of the total sample size; 65 instructors of aviation and mechanical engineering, accounting for 24.3% of the total sample size; 69 instructors of architecture and metallurgy, accounting for 25.8% of the total sample size; and 64 instructors of economics and management, accounting for 24.1% of the total sample size.

Descriptive Statistics on the Levels of Instructors' Professional Quality at Anyang Vocational and Technical College in Henan Province

This study adopted descriptive statistical analysis to analyze the overall level of instructors' professional quality at Anyang Vocational and Technical College in Henan Province. As shown in Table 1, the overall mean of instructors' professional quality was 3.698, and the mean of each sub-dimension was in the range of 3.196 to 4.160. Overall, the instructors' professional quality was high at Anyang Vocational and Technical College in Henan Province

Table 1: Descriptive Statistical of Instructors' Professional Quality (N=267)

Dimensions	M	SD	Interpretation
Moral character and ideology	3.75	0.707	High
Physical and mental quality	4.16	0.619	High
Experience cognition	3.52	0.737	High
Knowledge and skills	3.20	0.691	Moderate
Interpersonal communication	3.55	0.984	High
Overall professional quality	3.70	0.636	High

Differences Analysis on the Levels of Instructors' Professional Quality at Anyang Vocational and Technical College under Demographic Backgrounds

(1) Comparison of Differences in Instructors' Professional Quality in Terms of Genders

In this study, the independent sample t-test was used to compare the gender differences in instructors' professional quality at Anyang Vocational and Technical College, Henan Province. Among them, moral character and ideology ($p < .01$), physical and mental quality ($p < .01$), experience cognition ($p < .001$), and interpersonal communication ($p < .05$) showed significant gender differences. In contrast, knowledge and skills did not show significant gender differences ($p > .05$). Instructors' professional qualities were significantly different in terms of gender ($t = -3.071$, $p < .01$), with female instructors having a significantly higher mean than male instructors.

Table 2: Differences in Instructors' Professional Quality in Terms of Genders

Dimensions	Gender	n	M	SD	t	p
Moral character and ideology	Male	129	3.63	0.644	-2.887	.004
	Female	138	3.87	0.744		
Physical and mental quality	Male	129	4.04	0.636	-3.116	.002
	Female	138	4.27	0.584		
Experience cognition	Male	129	3.36	0.752	-3.527	.000
	Female	138	3.67	0.692		
Knowledge and skills	Male	129	3.17	0.631	-.537	.591
	Female	138	3.22	0.744		
Interpersonal communication	Male	129	3.41	1.058	-2.287	.023
	Female	138	3.68	0.892		
Overall professional quality	Male	129	3.58	0.646	-3.071	.002
	Female	138	3.81	0.608		

(2) Comparison of Differences in Instructors' Professional Quality in Terms of Teaching Years

This study adopted the one-way ANOVA analysis to compare the differences in the instructors' professional quality at Anyang Vocational and Technical College in terms of teaching years. Among them, moral character and ideology ($p < .001$), physical and mental quality ($p < .01$), experience cognition ($p < .01$), knowledge and skills ($p < .05$), and interpersonal communication ($p < .05$), all reached significant levels in terms of teaching years. The overall instructors' professional quality showed significant differences in terms of teaching years ($F=6.505$, $p < .01$). The comparison result of the LSD presented that instructors with 5-10 years was significantly higher than other teaching years.

Table 3: Differences in the Instructors' Professional Quality in Terms of Teaching Years

Dimensions	Teaching years	n	M	SD	F	p	LSD
Moral character and ideology	A. Less than 5 years	118	3.62	0.646	8.594	.000	B>AC
	B.5-10 years	77	4.02	0.727			
	C.10 years or more	72	3.68	0.710			
Physical and mental quality	A. Less than 5 years	118	4.16	0.579	5.543	.004	B>C
	B.5-10 years	77	4.32	0.653			
	C.10 years or more	72	3.99	0.609			
Experience and cognition	A. Less than 5 years	118	3.41	0.628	6.459	.002	B>AC
	B.5-10 years	77	3.77	0.851			
	C.10 years or more	72	3.43	0.718			
Knowledge and skills	A. Less than 5 years	118	3.25	0.606	3.490	.032	C>AB
	B.5-10 years	77	3.28	0.818			
	C.10 years or more	72	3.01	0.649			
Interpersonal communication	A. Less than 5 years	118	3.50	0.791	3.809	.023	B>AC
	B.5-10 years	77	3.79	1.049			
	C.10 years or more	72	3.37	1.147			
Overall professional quality	A. Less than 5 years	118	3.65	0.500	6.505	.002	B>AC
	B.5-10 years	77	3.90	0.722			
	C.10 years or more	72	3.55	0.690			

Discussion

To Discuss Overall Level of Instructors' Professional Quality at Anyang Vocational and Technical College, Henan Province

The results of this study showed that, the overall mean of instructors' professional quality at Anyang Vocational and Technical College in Henan Province was high. This conclusion was consistent

with the research results of Wang (2019). This study suggested that this conclusion was not accidental but the result of a combination of multiple factors. On the one hand, the college might had relatively systematic and effective policies and measures in the aspect of instructors' training and development. These policies and measures provide good institutional guarantees and resource support for the improvement of instructors' professional qualities, enabling instructors to achieve relatively comprehensive development in multiple dimensions. On the other hand, instructors themselves also possess a high sense of self-improvement and ability. They could actively respond to the policy requirements of the college, take the initiative to participate in various training and learning activities, and continuously enhance their professional qualities and comprehensive abilities (Wang, 2023). In addition, external factors such as the teaching environment and cultural atmosphere of the college also had a positive impact on the formation and development of instructors' professional qualities, providing instructors with a positive, mutual learning and common progress working platform.

Discussion on the Differences in Instructors' Professional Quality at Anyang Vocational and Technical College in Henan Province in Terms of Gender

The professional qualities of female instructors were significantly higher than those of male instructors. This conclusion was consistent with the research results of Sheng (2022). First, from a sociocultural perspective, traditional gender role concepts have long influenced people's occupational perceptions and behavioral patterns. Secondly, in the field of educational practice, the gender differences in the dimension of experience cognition were significant, mainly due to the differences in the way instructors accumulate professional experience and cognitive patterns. Female instructors tend to accumulate teaching experience through meticulous observation, emotional resonance and other methods, and pay attention to the details and emotional communication in the teaching process. This experience accumulation mode enables them to more keenly capture students' needs and flexibly adjust teaching strategies when facing teaching problems (Jing & Lei, 2021). Male instructors might focus more on macroscopic thinking and rational analysis, and relatively lack attention to details and emotions in the accumulation of teaching experience. This difference in cognitive patterns enables female instructors to perform better in the dimension of experience cognition. Furthermore, instructors of different genders adopt different coping strategies and reflection methods when facing teaching challenges, further exacerbating the gender differences in the dimension of experience cognition (Sheng, 2022).

Discussion on the Differences in Instructors' Professional Quality at Anyang Vocational and Technical College in Henan Province in Terms of Age

First of all, as instructors grow older, they accumulate rich practical experience in their educational and teaching positions. Instructors aged 31 to 40 and 41 to 50, after years of teaching practice and having faced various teaching situations and student problems, were more adept at handling teaching affairs. In terms of moral character and ideology, they had a deeper understanding of the

educational mission and could practice the norms of instructor ethics with a more mature attitude (Su, 2018). Secondly, instructors of different age groups were at different stages of career development and faced different career development goals. Instructors 31-40 years old and 41-50 years old had passed the professional adaptation period and entered a stable development stage. They pay more attention to professional achievements and professional growth and, therefore, would actively improve their qualities to meet their teaching needs (Li, 2019). However, instructors aged 30 and under had relatively single social roles, light family responsibilities, and relatively insufficient development motivation in all aspects of professional qualities. As a result, they generally show significant age differences (Zhu & Xin, 2021).

Discussion on the Differences in Instructors' Professional Quality at Anyang Vocational and Technical College in Henan Province in Terms of Professional Titles

First of all, the professional title promotion system had a clear guiding role in the instructors' professional quality. During the process of professional title evaluation, moral character and ideology was one of the important consideration indicators. Instructors with senior professional titles such as lecturers, associate professors, and professors would pay more attention to their moral cultivation and professional quality to meet the promotion requirements. Secondly, the differences in the dimension of experience cognition mainly stem from the rich teaching and research experience and profound academic accumulation of instructors with senior professional titles. During the scientific research process, instructors constantly explore and innovate, accumulating rich academic experience. These experiences give feedback to teachers, enabling them to have a deeper and more comprehensive understanding of the teaching experience (Wang, 2019). In contrast, teaching assistants and lecturers had relatively less teaching and research experience and were relatively weaker in the dimension of experience cognition.

Discussion on the Differences in Instructors' Professional Quality at Anyang Vocational and Technical College, Henan Province in Terms of Educational Backgrounds

First of all, instructors with a master's degree or above had a significant advantage in knowledge reserves. Their systematic and in-depth professional learning experiences enable them to master more cutting-edge and extensive educational and theoretical knowledge. In the dimension of experience cognition, highly educated instructors, with their solid theoretical foundation, could more acutely perceive the essential laws behind teaching phenomena, quickly summarize teaching experience, and effectively transform theoretical knowledge into teaching practice strategies (Su, 2018). Secondly, master's degree and above education focused on cultivating students' academic thinking and critical thinking abilities, and this process plays an important role in enhancing students' comprehensive qualities. In academic exchanges and cooperation, highly educated instructors need to communicate and collaborate with scholars and peers from different backgrounds. It exercised interpersonal communication, taught them how to express their viewpoints clearly, listened to others' opinions, and

effectively solved problems in cooperation (Jing & Lei, 2021).

Discussion on the Differences in Instructors' Professional Quality at Anyang Vocational and Technical College, Henan Province in Terms of Teaching Years

First of all, the career development of instructors usually goes through the adaptation period, the stable development period, and the maturity period. Instructors with less than five teaching years were in the period of professional adaptation. Experience cognition and interpersonal communication have also become richer and more proficient due to long-term practice, thus performing well in most dimensions (Li & Tao, 2023). Secondly, instructors with different teaching years were at different stages of career development and had different career goals and focuses. Instructors with less than five years of teaching experience mainly focus on how to stand firm on the podium, devoting more energy to improving teaching skills and learning teaching methods while paying relatively less attention to other dimensions of professional qualities. Instructors with more than 10 teaching years might focus more on academic research, professional title promotion, or the accumulation of teaching achievements, and to a certain extent, neglect the continuous cultivation of moral character and ideology, the maintenance of physical and mental quality, and the expansion of interpersonal communication (Wang, 2016).

Discussion on the Differences in Instructors' Professional Quality at Anyang Vocational and Technical College, Henan Province in Terms of Disciplines

First, the meta-occupational attributes of professional quality determine its cross-disciplinary consistency. This meta-occupational attribute leads to a high degree of isomorphism among instructors of different disciplines in the professional role layer of professional quality. The disciplinary differences were only reflected in the disciplinary knowledge layer rather than the professional quality layer (Zhou & He, 2022). Secondly, the standardized shaping effect of the instructor's education system. At present, both instructor education and continuing education adopt the curriculum system of "platform + module". Among them, professional quality courses (such as educational principles and educational psychology) were open to all instructors as general education platforms. At the same time, subject teaching methods only exist as supplementary modules (Ge & Feng, 2020).

Conclusion

Conclusions 1: The overall level of instructors' professional quality was high at Anyang Vocational and Technical College in Henan Province.

Conclusions 2: There were significantly different demographic backgrounds in instructors' professional quality at Anyang Vocational and Technical College in Henan Province under different demographic backgrounds (gender, age, professional title, educational background, and teaching years). Still, there was no significant difference in terms of disciplines.

(1) There was a significant difference in the instructors' perception of professional quality

under different genders at Anyang Vocational and Technical College in Henan Province. The professional quality of female instructors was significantly higher than that of male instructors.

(2) There was a significant difference in the instructors' perception of professional quality under different ages. Instructors 31-40 years old and 41-50 years old, were significantly higher than those of instructors 30 years old and under.

(3) There was a significant difference in the instructors' perception of professional quality under different professional titles. Lecturers, associate professors and professors were significantly higher than those of teaching assistants.

(4) There was a significant difference in the instructors' perception of professional quality under different educational backgrounds. The instructors with a master's degree or above were significantly higher than those of instructors with a bachelor's degree or below.

(5) There was a significant difference in the instructors' perception of professional quality under different teaching years. The instructors with 5-10 teaching years were significantly higher than those of instructors with other teaching years.

(6) There was no significant difference in the instructors' perception of professional quality under different disciplines.

References

- Chen, L. C. (2018). Research on the Implementation path for Enhancing the Professional Quality and Ability of Counselors in Higher Vocational Colleges. *Knowledge Library*, 4(6), 228.
- Cunningham, A. E., Etter, K., Platas, L., Wheeler, S., & Campbell, K. (2015). Professional development in emergent literacy: a design experiment of instructor study groups. *Early Childhood Research Quarterly*, 31(2), 62-77.
- Ge, Z. R., & Feng, R. Y. (2020). Exploration of the Design of the "Professional Quality" course in Higher Vocational Education Based on the Quality Iceberg Model. *Reading Digest (Chinese)*, 20(9), 1-5.
- Jing, Y. C., & Lei, W. P. (2021). Research on the Professional quality and Influencing factors of Counselors in Higher Vocational Colleges. *Higher Education Exploration*, 21(1), 44-45.
- Kong, F. J. (2016). *A study on U School's MBA training model oriented towards professional quality*. Unpublished Research from the University of International Business and Economics.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.
- Li, M., & Tao, L. (2023). Research on the Structural Model and Enhancement Path of Professional Quality of College Counselors in the New Era. *Jiangsu Higher Education*, 27(12), 110-115.
- Liu, M. (2023). The cultivation of students' Professional Quality and professional quality in Higher Vocational Chinese teaching. *Jiaying Literature*, 38(15), 28-31.

- Lu, J. Q. (2022). The on-the-job training of new teachers in vocational colleges and the cultivation of "dual-qualified" quality teachers and "dual-qualified" structured teams - the training mechanism and path of "dual-qualified" teacher teams from the perspective of epic. *Research on Vocational Education*, 11(2), 7–9.
- Ma, T. H., & Zhang, G. R. (2017). Reform and Practice of the practical Teaching system integrating Professional quality and vocational skills. *Inner Mongolia Education*, 28(11), 41-42.
- Nasser, S. C., Kanbar, R., Btaiche, I. F., Mansour, H., Elkhoury, R., & Aoun, C., et al. (2024). Entrustable professional activities-based objective structured clinical examinations in a pharmacy curriculum. *BMC Medical Education*, 24(1), 123-125.
- Saxena, P., & Bendale, S. (2014). Management education(MBA) challenges a study of managerial competency needs & how well MBAs differentiate. *Procedia Economics and Finance*, (11),642-653.
- Sheng, L. F. (2022). A Study on the Information Literacy of Teachers in Secondary Vocational Schools in the Era of Education Informatization 2.0: A Case Study of Secondary Vocational Schools in Z Suburban County, Henan Province. *Master's thesis, Henan Institute of Science and Technology*.
- Su, Y. X. (2018). On the Professional qualities that teachers should possess in the 21st century. *Intelligence*, 26(18), 16.
- Wang, B. (2001). A Study on the main factors of Teacher Quality structure. *Education Theory and Practice*, 13(4), 43–44.
- Wang, H. T. (2019). Research on Professionalization of Teachers in Private Colleges and Universities. *Master's thesis, Wuhan University*.
- Wang, Q. (2023). Research on Teaching Strategies of Chinese in Secondary Vocational Schools from the Perspective of enhancing Professional Quality and professional quality. *Wen Yuan*, 24(3), 46–48.
- Xiao, Y. Q. (2014). Effective ways to enhance the professional quality of college teachers. *Times Education*, 4(23), 136–137.
- Xin, Z., & Kang, Y. X. (2018). Analysis of the status quo of full-time master of forestry education in China——taking Northwest A&F University as an example. *Journal of Higher Education*, 26(2), 35-39.
- Xu, J. X. (2019). Research on the Improvement of Professional Quality of English Teachers in Higher Vocational Colleges from the Perspective of Professional Quality. *Campus English*, 33(26), 78.
- Zhang, Y., & Xu, T. (2023). Discussion on the Competence and Professional Quality of Teaching Secretaries in Higher Vocational Colleges in the New Era. *Office Business*, (9), 92–94.
- Zhao, W. H., & Zhang, Y. D. (2016). Composition and Measurement of professional quality: A case Study of MBA. *Modern Management Science*, 28(7), 115-117.
- Zhou, C., & He, L. F. (2022). How to Enhance Professional Quality Cultivation for College Teachers

in the Era of Internet Big Data. *Science and Technology Horizons*, 19(6), 3–17.

Zhou, T. Y. (2019). A study on the Practical Value and Problems of Part-time Administration by Graduate Students in Colleges and Universities. *Research on Creative Education*, 7(6), 741-746.

Zhu, J. L. (2016). Construction and Application of Professional Quality Model for Teachers in Higher Vocational Colleges. *Master's Thesis, East China Normal University*.

Zhu, Z. F., & Xin, T. (2021). Construction of a Progressive Curriculum System Integrating Professional Quality. *Western Quality Education*, 7(16), 4–6.