

Instructional Leadership Model of Dual-Qualified Nursing Professional Teacher in New Era of Higher Vocational Colleges Under Henan Province

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Abstracts

The study is a mixed methods research of quantitative research and qualitative research.

The objectives of this research were: (1) to examine the components of instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province; and (2) to propose the instructional leadership model of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province; and (3) to develop the managerial guidelines for improving the instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province. Population was the full-time dual-qualified nursing professional teachers inside the 10 higher vocational medical colleges under Henan province, totaling 567 people. The sample size was 226 people when determined by the Krejcie and Morgan table, and on this basis, increase the sample size by 30%, obtained by stratified proportional random sampling method, totaling 294. The instruments used for data collection were table matrix, semi-structured interview form, the questionnaire and focus group discussion content analysis form.

The research findings revealed that: (1) the components of instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province included MCD (Moral and Consciousness Dimension), TD (Trait Dimension), FD (Function Dimension) and DSBD (Development Support Behaviour Dimension); (2) the instructional leadership model of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province was composed of the four components, 23 KIF in total; and (3) the managerial guidelines for improving the instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province is 14 key guidelines.

Keywords: Instructional Leadership Model; Dual-qualified Nursing Professional Teacher; New Era; Higher Vocational Colleges; Henan Province.

Introduction

The world is currently in an important stage of development, change and adjustment. A new round of technological and industrial revolution is on the rise, socialism with Chinese characteristics has entered a new era, and ushered in a new stage of comprehensively building a modern socialist country. However, this new positioning and mission poses new challenges to the construction of educational teams. Although the vocational education teacher training and management system has improved in recent years, and the quality and ability of teachers

have also improved, compared with the needs of vocational education in the new era, there are still deficiencies. The single source of teachers, poor flow, structural problems between institutions and management systems, and the lack of "dual-qualified" teachers have restricted the development of vocational education (Ministry of Education of the People's Republic of China, 2018).

On September 10, 2018, the National Education Work Conference put forward the goal of "comprehensively improving the quality of teachers", emphasizing the construction of vocational school teachers, especially the construction of high-quality "double-qualified" teachers. The Ministry of Education also issued a document emphasizing the establishment of national standards for vocational education to improve the teaching management and practical capabilities of higher vocational colleges. In 2021, China held the first national vocational education conference, and the newly revised "Vocational Education Law" in 2022 clarified the status of vocational education. Facing the requirements of the new era, it is an urgent task to promote the construction of the teaching team, improve the teaching and practical ability of teachers, and build a high-quality "double-qualified" teaching team.

In Henan Province, the 2021 Party Congress emphasized starting with high-quality teachers, strengthening the construction of "double-qualified" education teams, and providing support for teachers' comprehensive skills. In recent years, research on teacher leadership in colleges and universities has received attention, but it is still in its infancy. Teacher leadership is positively correlated with teacher self-efficacy and student performance. However, many teachers do not have a clear understanding of their leadership level, which affects the teaching effect (ZHAO,Q., 2016: 67-71). The research on teachers' teaching leadership will help to improve teachers' teaching level and effect, and promote the reform and development of colleges and universities. Through systematic research, the teaching efficiency of colleges and universities can be improved to adapt to the reform of higher education in the new era. This study explores the connotation of the teaching leadership of dual-qualified teachers in nursing majors in Henan higher vocational colleges, builds a corresponding model, and provides theoretical support for the training and development of college teachers, which has important practical significance.

Research Objectives

1. To examine the components of instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province.
2. To propose the instructional leadership model of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province.
3. To develop the managerial guidelines for improving the instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province.

Literature Review

From research title "Instructional Leadership Model of Dual-qualified Nursing Professional Teacher of Higher Vocational Colleges in New Era Under Henan Province", the researcher searched the literature published in various major databases such as CNKI, ProQuest, PubMed, and so on, within the last 10 years, and conducted "title or keyword" search

with the "instructional leadership model" and "teacher in college and university" and "nursing", the specific values are shown in the figure 1.

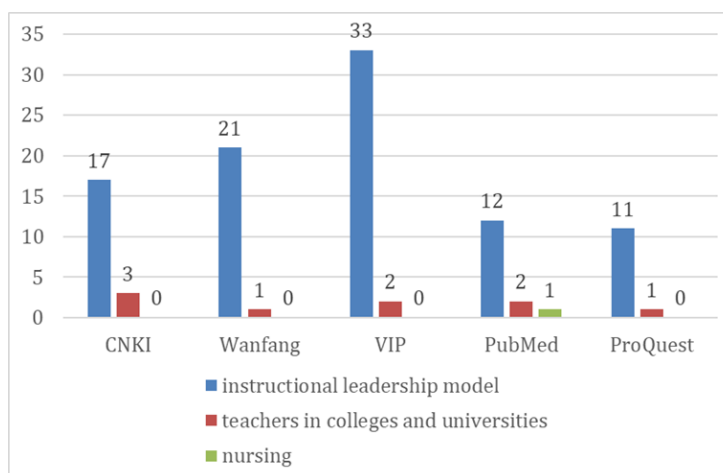


Figure 1 Documents in major databases within the last 10 years

Relevant studies at home and abroad show that teacher Instructional leadership is an important part of teacher leadership, and the improvement of teacher Instructional leadership can improve students' performance and school performance. Some countries have issued teacher leadership framework and established teacher leadership training model. Scholars based on the distributed leadership theory, Instructional leadership theory, college student and teacher professional development theory, work analysis system theory, transformational leadership theory, charismatic leadership theory, ethical leadership theory and other new leadership theory in the field of education development and application, The connotation and concept of teacher instructional leadership, the composition and model construction of Instructional leadership are examined from various angles, and the empirical research is carried out. Researchers adopt different research methods, including qualitative research based on grounded theory, qualitative research on data through interviews and text analysis; There are also exploratory factor analysis, correlation analysis, confirmatory factor analysis, reliability and validity test based on questionnaire survey, etc., to study the promotion strategies of Instructional leadership and put forward suggestions and guidance. However, the research on Instructional leadership of teachers in vocational nursing colleges has been rarely reported.

Research Methodology

1. Population and sample

Step 1: Literature research and In-depth Interviews with 9 key informants: the key informants were nursing instructional experts with university teacher qualification certificate, Professor or Associate Professor of Nursing, and more than 10 years of instructional experience in nursing, including Dean or Associate Dean, Director of different Nursing Department and dual-qualified nursing professional teachers of higher vocational colleges under Henan province by purposive sampling method.

Step 2: Data collection with questionnaires. Population were 576 full-time dual-qualified nursing professional teachers in higher vocational medical colleges in Henan province. The sample was 294 full-time dual-qualified nursing professional teachers of higher vocational colleges under Henan province, with stratified random sampling method. The researcher determined sample size with Krejcie and Morgan's table (1970), and on this basis, increase the sample size by 30%, obtained by stratified sampling method.

Step 3: Focus Group Discussion with 12 Key informants: the key informants were dual-qualified nursing education instructional specialist, professor or associate professor of nursing, with more than 5 years of nursing instructional administrative management experience, including Dean or Associate Dean, Head of different Nursing Department of higher vocational colleges under Henan province obtained by purposive sampling method.

2. Research instruments

Step 1: Examining the components of instructional leadership of Dual-qualified Nursing Professional Teacher in Henan higher vocational colleges

This phase the tools used to collect data are table matrix and the Semi-Structured Interview Form.

Step 2: Proposing the instructional leadership model of Dual-qualified Nursing Professional Teacher in Henan higher vocational colleges

This phase the tools used to collect data are the questionnaire.

The questionnaire were developed by the researcher, which consists of three parts. Part I: Demographic variables, general information (7 items); Part II: Variables on Instructional leadership of dual-qualified nursing specialty teachers in higher vocational colleges in the new era (five-point subscale); Part III: Recommendations and Additional Comments. The questionnaire were sent by email and researcher to collect data from the sample.

Step 3: Developing the managerial guidelines for improving instructional leadership of dual-qualified nursing professional teachers in Henan higher vocational colleges.

Content Analysis Form were used to collect data from the 12 key informants.

3. Data collection

Step 1: Collect data from selected document (books, articles, and related research) and 9 key informants of the experts interview. The researcher contacted key informants by email, WeChat or telephone and sent semi-structured interview questionnaires.

Step 2: This part of the questionnaire can be distributed on-site or collected through a network link. About 294 questionnaires were completed within about 3 weeks.

Step 3: Focus group discussions can be conducted in the form of Tencent video conferencing, with researchers leading participants to conduct open-ended discussions.

4. Data analysis

Step 1: Data from the document and the Semi-Structured Interview of the 9 key informants was analysed by content analysis.

Step 2: Analysis data with software SPSS and MPLUS by Confirmatory Factor Analysis method. Descriptive statistics, frequency, percentage, mean and variance were used to analyze demographic variables. Confirmatory factor analysis (CFA) is used to analyze the results of objective 2;

Step 3: Conduct content analysis on the results of focus group discussions to obtain the results of objective 3.

Research Framework

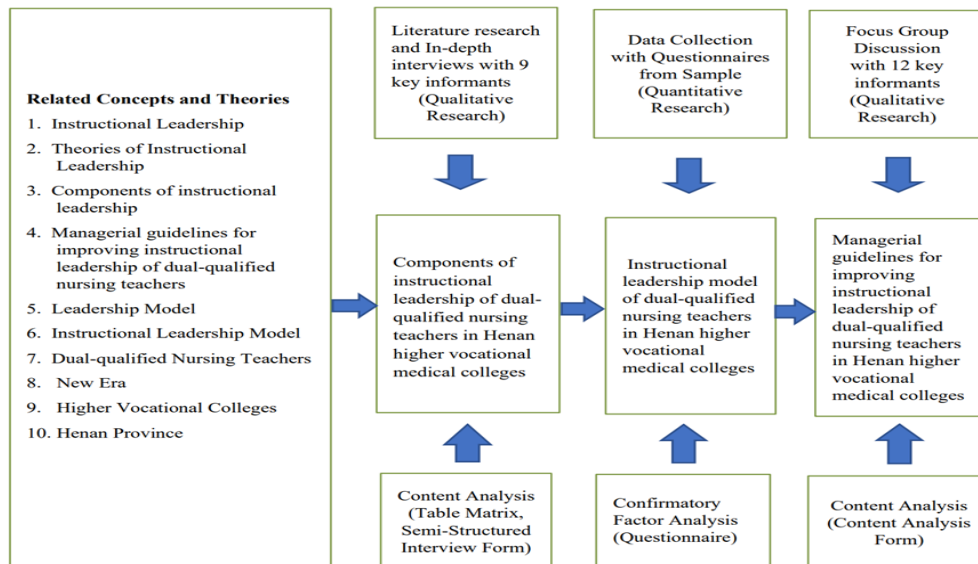


Figure 2 The Research Framework

The research framework is shown in the figure above. The mixed method research design is based on a convergent design of the two methodologies as above.

Results

1. Section 1: Result of Data Analysis for examining the components of instructional leadership of dual-qualified nursing professional teachers in Henan higher vocational colleges

There were four components and 23 key variables of the instructional leadership of dual-qualified nursing professional teachers in Henan higher vocational colleges, which consisted of 1) KIF-A: MCD (Moral and Consciousness Dimension); 2) KIF-B: TD (Trait Dimension); 3) KIF-C: FD (Function Dimension); 4) KIF-D: DSBD (Development Support Behaviour Dimension).

(1) The specific results are shown in Figure 3.

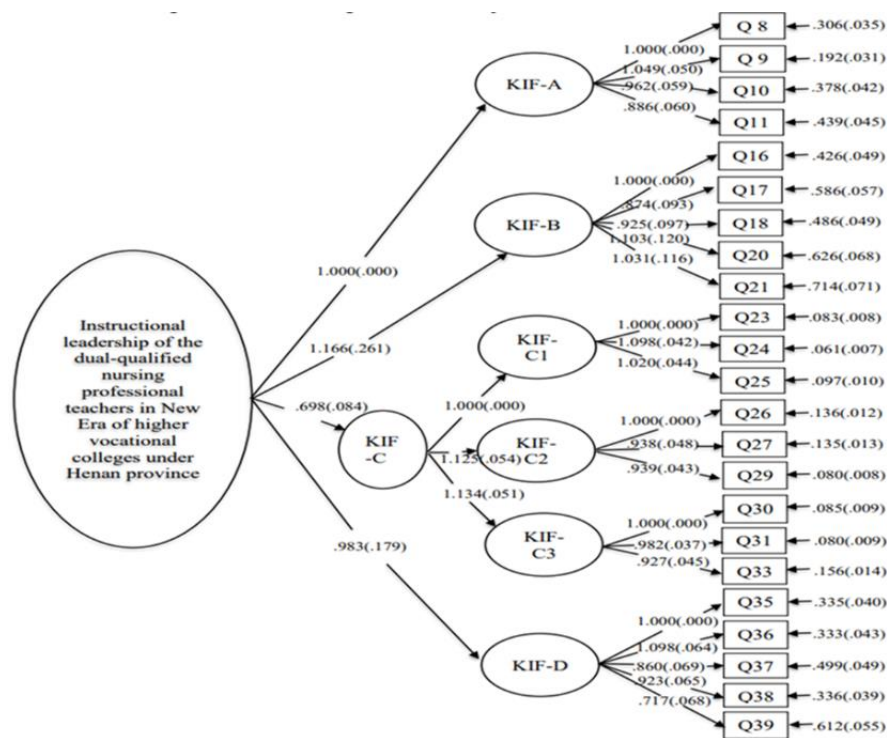


Figure 3 CFA measurement model analysis, unstandardized estimates

The confirmatory factor analysis is carried out by using MPLUS software. The researcher defined the observed variables with Factors Loading greater than 0.70 and selected the best variables in order. So, there are 23 sub-variables in total.

(2) The result of data analysis of the 23 key variables of the instructional leadership of dual-qualified nursing professional teachers in Henan higher vocational colleges was shown in Table 1.

Table 1 Results of analysis about key variables of influencing factors

KIF		\bar{x}	S.D.	CV	$ Sk < 1$	$ Ku < 3$	Level
KIF-A	A1	3.629	1.065	0.294	-0.222	-0.854	High
	A2	3.500	1.051	0.301	-0.071	-0.852	High
	A3	3.255	1.071	0.329	0.216	-0.995	Medium
	A4	3.112	1.044	0.335	0.281	-0.728	Medium
KIF-B	B1	2.997	0.933	0.311	0.083	-0.256	Medium
	B2	2.980	0.952	0.319	0.286	-0.03	Medium
	B3	2.916	0.931	0.331	0.297	-0.42	Medium
	B4	2.993	1.080	0.361	0.257	-0.705	Medium
KIF-C	B5	3.143	1.090	0.347	0.255	-0.916	Medium
	C1	4.524	0.949	0.143	-0.784	0.899	High
	C2	4.524	0.985	0.151	-0.843	0.726	High
	C3	4.520	0.970	0.148	-0.808	0.775	High
	C4	4.466	0.923	0.207	-0.835	0.441	High
	C5	4.486	0.990	0.221	-0.713	0.436	High
	C6	4.534	0.948	0.209	-0.748	0.496	High
	C7	4.490	1.009	0.225	-0.763	1.341	High
	C8	4.500	0.995	0.221	-0.706	0.141	High
KIF-D	C9	4.412	0.918	0.208	-0.910	-0.094	High
	D1	2.984	1.025	0.343	0.531	-0.263	Medium
	D2	2.980	1.093	0.366	0.440	-0.471	Medium
	D3	2.888	1.014	0.351	0.677	-0.095	Medium
	D4	2.912	0.973	0.334	0.778	0.215	Medium
	D5	2.918	0.991	0.340	0.589	0.099	Medium

From the Table 1, Component KIF-A was described by 4 key variables, the \bar{x} (Average) was between 3.112-3.629; Component KIF-B was described by 5 key variables, the \bar{x} (Average) was between 2.916-3.143; Component KIF-C was described by 9 key variables, the \bar{x} (Average) was between 4.412-4.534; Component KIF-D was described by 5 key variables, the \bar{x} (Average) was between 2.888-2.984. And the level of few of the 23 key variables are medium, most are high.

As shown in the table, the absolute value of Skewness of each item is less than 1 and the absolute value of Kurtosis is less than 3. Moreover, combined with the normality test histogram of each item, we can think that the data of each item conforms to the normal distribution.

(3)Result of the CFA: Factor Loading Coefficient, CR, AVE

Table 2 Results of the confirmatory factor analysis

Path			Factor Loading λ	S.E.	C.R.	P	CR(>.7)	AVE(>.5)
A1	<---	KIF-A	.858	.020	42.203	***	.933	.776
A2	<---	KIF-A	.897	.017	54.426	***		
A3	<---	KIF-A	.857	.024	33.530	***		
A4	<---	KIF-A	.810	.029	26.915	***		
B1	<---	KIF-B	.779	.039	18.108	***	.858	.547
B2	<---	KIF-B	.726	.046	13.092	***		
B3	<---	KIF-B	.716	.041	16.025	***		
B4	<---	KIF-B	.728	.042	16.287	***		
B5	<---	KIF-B	.710	.044	14.248	***		
C1	<---	KIF-C	.892	.014	62.388	***	.973	.801
C2	<---	KIF-C	.927	.010	92.447	***		
C3	<---	KIF-C	.890	.015	56.681	***		
C4	<---	KIF-C	.881	.015	56.231	***		
C5	<---	KIF-C	.874	.017	49.589	***		
C6	<---	KIF-C	.910	.012	74.398	***		
C7	<---	KIF-C	.905	.012	73.188	***		
C8	<---	KIF-C	.907	.012	74.289	***		
C9	<---	KIF-C	.862	.012	45.140	***		
D1	<---	KIF-D	.807	.025	33.109	***	.908	.664
D2	<---	KIF-D	.806	.023	36.653	***		
D3	<---	KIF-D	.777	.034	21.084	***		
D4	<---	KIF-D	.869	.028	28.993	***		
D5	<---	KIF-D	.717	.041	15.013	***		

The combination reliability of each variable (CR) was more than 0.7. It showed that the combination reliability of the scale was ideal. The corresponding AVE values of each factor are greater than 0.5, and the factor loading coefficient values are all more than 0.7, it shows that there is a good corresponding relationship between the factors and the measurement items, and the discriminant validity is good.

2. Section 2: Result of Data Analysis for proposing the instructional leadership model of dual-qualified nursing professional teacher in Henan higher vocational colleges

Model validation of four components were founded and model fit with empirical data for all indicators.

(1) Fitting Index of Confirmatory Factor Analysis Model was shown in Table 3.

Table 3 Fitting index of confirmatory factor analysis model

	Numerical value	Excellent fitting index	Effective Fitting index	Fit or not
Chi-square	495.960			
df	223			
χ^2/df	2.22	<3	<5	Fit
P-value	.000	>0.05		
CFI	0.948	>0.9	>0.8	Fit
TLI	0.941	>0.9	>0.8	Fit
RMSEA	0.065	<0.05	<0.08	Fit
SRMR	0.043	<0.05	<0.08	Fit

These fitting indexes are in accordance with the reference standard of fitting index, which indicates that the fitting degree of the model is good.

(2) Discriminant Validity Analysis

Table 4 Pearson Correlation and AVE square root value

	AVE	KIF-A	KIF-B	KIF-C	KIF-D
KIF-A	0.776	0.88			
KIF-B	0.547	0.40	0.74		
KIF-C	0.801	0.08	0.03	0.89	
KIF-D	0.664	0.26	0.38	0.06	0.81

According to Table 4, KIF-A (0.88), KIF-B (0.74), KIF-C (0.89) and KIF-D (0.81), the arithmetic square root of AVE is greater than its correlation coefficient, indicating that the discriminant validity is good. There is distinguishability between factors.

Table 5 Pearson correlation Matrix

	A1	A2	A3	A4	B1	B2	B3	B4	B5	C1	C2	C3	C4	C5	C6	C7	C8	C9	D1	D2	D3	D4	D5
A1	1																						
A2	0.815	1																					
A3	0.649	0.729	1																				
A4	0.621	0.662	0.744	1																			
B1	0.26	0.238	0.209	0.27	1																		
B2	0.207	0.182	0.215	0.252	0.557	1																	
B3	0.275	0.305	0.3	0.33	0.471	0.415	1																
B4	0.294	0.322	0.297	0.282	0.416	0.345	0.453	1															
B5	0.26	0.219	0.235	0.214	0.437	0.315	0.366	0.549	1														
C1	0.035	0.043	0.102	0.12	0.054	-0.027	0.098	0.029	-0.058	1													
C2	0.014	0.031	0.055	0.089	0.078	0.016	0.066	0.033	-0.027	0.832	1												
C3	0.018	0.049	0.033	0.077	0.057	-0.023	0.061	0.014	-0.069	0.808	0.818	1											
C4	0.057	0.076	0.062	0.093	0.068	0.006	0.087	0.043	-0.015	0.766	0.843	0.809	1										
C5	0.06	0.056	0.099	0.147	0.034	0.048	0.06	-0.018	-0.052	0.718	0.745	0.765	0.735	1									
C6	0.021	0.061	0.123	0.143	0.031	0.009	0.061	-0.005	-0.031	0.801	0.806	0.749	0.749	0.783	1								
C7	0.011	0.048	0.096	0.124	0.054	0.045	0.08	0.036	-0.02	0.768	0.826	0.74	0.758	0.76	0.854	1							
C8	0.007	0.042	0.076	0.111	0.092	0.028	0.074	0.073	-0.005	0.772	0.825	0.737	0.764	0.78	0.837	0.851	1						
C9	0.008	0.049	0.067	0.07	0.048	0.015	0.067	0.017	-0.04	0.737	0.768	0.745	0.694	0.772	0.75	0.735	0.749	1					
D1	0.136	0.211	0.26	0.308	0.274	0.189	0.272	0.306	0.236	0.086	0.081	0.042	0.048	0.04	0.014	0.068	0.089	0.024	1				
D2	0.173	0.211	0.283	0.343	0.324	0.205	0.331	0.281	0.294	0.083	0.051	0.065	0.064	0.076	0.035	0.062	0.058	0.051	0.76	1			
D3	0.108	0.1	0.163	0.17	0.24	0.161	0.252	0.253	0.248	0.038	0.012	0	0.011	-0.015	-0.028	0.001	0.046	-0.038	0.554	0.555	1		
D4	0.131	0.139	0.22	0.27	0.22	0.127	0.182	0.243	0.186	0.047	-0.002	0.016	0.052	0.016	-0.003	0.043	0.058	0.006	0.607	0.654	0.691	1	
D5	0.067	0.137	0.169	0.169	0.164	0.118	0.198	0.223	0.096	0.093	0.063	0.118	0.075	0.076	0.087	0.086	0.082	0.074	0.491	0.477	0.43	0.575	1

The correlation was significant at a confidence (double test) of 0.01. According to the correlation analysis between the items, the associations between the 23 variables were significant except for a few items. Most of the variables showed moderate intensity correlation (taking 0.2-0.4 as the criterion), while a small number of variables showed strong and weak correlation.

(3) Model Evaluation

Table 6 Model Evaluation Form

Factor	Average Variance Extraction (AVE) value(>0.5)	Combination Reliability (CR) value(>0.7)
A	0.776	0.933
B	0.547	0.858
C	0.801	0.973
D	0.664	0.908

The above table shows the results of the model AVE and CR indexes. As shown in the figure, the AVE and CR values of Factor A, Factor B, Factor C and Factor D are all higher than the critical value, indicating that the internal consistency and reliability of the measurement model are good, and the model has strong explanatory ability.

(4) The instructional leadership model of the dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province

According to the above analysis, the model of instructional leadership of dual-qualified nursing professional teacher in New Era of higher vocational colleges under Henan province is as below.

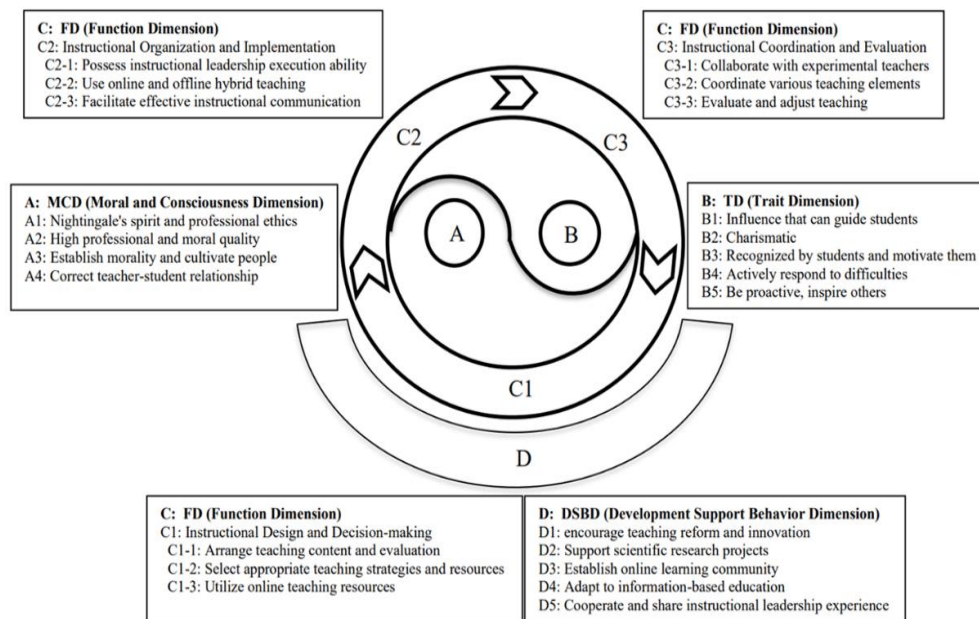


Figure 4 Model of instructional leadership of the dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province

3. Section 3: Result of Data Analysis for developing the managerial guidelines for improving the instructional leadership of dual-qualified nursing professional teachers in Henan higher vocational colleges

There were total 14 key managerial guidelines of the instructional leadership of dual-qualified nursing professional teachers in Henan higher vocational colleges.

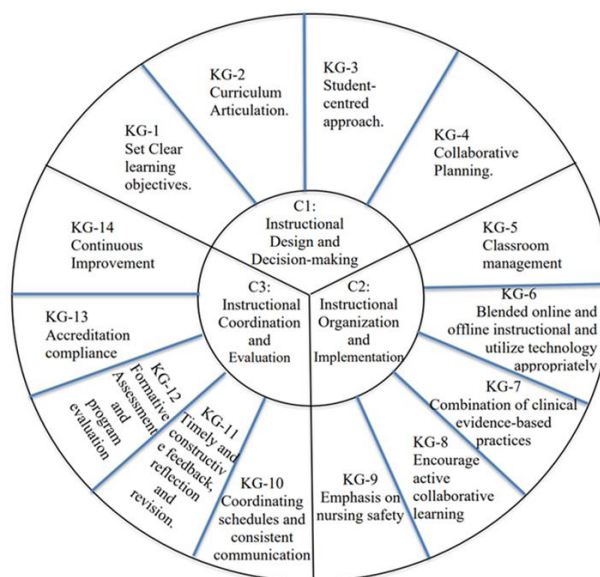


Figure 5 key managerial guidelines

The researchers selected the Component C: Function dimension of instructional leadership (FD) which can be improved as a relatively part of the model, component C1 (Instructional Design and Decision-making), component C2(Instructional Organization and Implementation), and component C3 (Instructional Coordination and Evaluation) respectively to discuss the guidelines, the result was shown as above.

Conclusion

From the perspective of research objectives, the main findings are as follows: -

(1) There were four components and 23 key variables of the instructional leadership of dual-qualified nursing professional teacher in New Era of higher vocational colleges under Henan province, which consisted of 1) A: MCD (Moral and Consciousness Dimension); 2) B: TD (Trait Dimension); 3) C: FD (Function Dimension); 4) D: DSBD (Development Support Behaviour Dimension).

(2) Model validation of four components were founded and model fit with empirical data for all indicators. The fitting index of confirmatory factor analysis model are as follows: Chi-square = 495.960, df = 223, Chi-square degree of freedom ratio (χ^2/df) = $2.22 < 3$, indicates that excellent fitting; root mean square of approximate error (RMSEA) = $0.065 < 0.08$, indicates that effective fitting; comparative fitting index (CFI) = $0.948 > 0.9$, indicates that excellent fitting; Tucker-Lewis index (TLI) = $0.941 > 0.9$, indicates that excellent fitting; And the standardized root mean square residual (SRMR) = 0.043 , which also indicates that excellent fitting. These fitting indexes are all in accordance with the reference standard of fitting index, which indicates that the model fits well.

(3) There were total 14 key managerial guidelines of the instructional leadership of dual-qualified nursing professional teacher in New Era of higher vocational colleges under Henan province.

Discussion

Based on the research objectives, the discussion was presented as follows:

1. Section 1 Discussion of the components of instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province;

There were four components of the instructional leadership model of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province which consisted of component A (Moral and Consciousness Dimension, MCD), component B (Trait Dimension, TD), component C (Function Dimension, FD) and component D (Development Support Behaviour Dimension, DSBD). The major findings were revealed as such because traits, values and moral consciousness, functions skills and development behaviour are the key factors that determine the instructional leadership performance of dual-qualified nursing professional teachers in higher vocational colleges. These four components form the instructional leadership structure of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province from the inside out.

(1)Component A: Moral and Consciousness Dimension, MCD

Moral awareness and ethical considerations are fundamental aspects of leadership in any field, including education. Instructional leadership by teachers involves directing and influencing student learning and development, and ethical considerations play a vital role in making decisions that affect students, colleagues and the wider school community. The average

variance extraction AVE value is 0.776, combination reliability CR value is 0.933. The results of this study are consistent with the research of Zhao, Q. (2016) which was found that the value of instructional leadership is the wind vane for college teachers to lead and influence students' learning and development and the reform and development of colleges and universities. instructional in colleges and universities should be student-oriented, promote students' learning and development, implement instructional with an innovative and open attitude, and have a positive impact on professional disciplines and society. It will naturally form a leading and leading role in teaching work and students. To a certain extent, values affect or even determine the instructional and student views of college teachers, and dominate the instructional activities and teacher-student relationship of college teachers, including caring for students and respecting students, and so on. Also, the findings were in the same direction with researcher He, M.X. (2021), it was found that the instructional leadership index system of college teachers under the blended instructional mode is divided into five tree nodes, and there are 15 sub-nodes which mentioned value leading power, personality model power, and so on. However, the research of Hallinger, P., et al. (2017), it was found that differences have also emerged in two structural areas, namely building solidarity and managing external relations. The findings also reveal other unique practices of Vietnam's teaching leaders, which the authors suggest may be related to the society's educational system, political and socio-cultural context, which was different.

(2)Component B: Trait Dimension, TD

Teacher personal leadership traits are considered to be an important part of the instructional leadership of dual-qualified nursing professional teachers for the following reasons. Teachers' good personal characteristics directly affect the relationship between teachers and students, and play a decisive role in the influence of teachers' instructional leadership. The characteristics of individual leadership affect the teacher-student relationship, affect the professional development of students, shape the overall learning environment, and are an important part of the instructional leadership of dual-qualified nursing professional teachers. These characteristics not only enhance the effectiveness of dual-qualified nursing professional teachers instructional leadership, but also help develop skilled and compassionate nursing professionals who can lead and excel in the field of nursing. The average variance extraction AVE value is 0.547, combination reliability CR value is 0.858. The results of this study are consistent with the research of He, M. X. (2021) which was found that the instructional leadership index system of college teachers is divided into five tree nodes which conclude learning motivation, instructional influence and instructional appeal. Also, the findings were in the same direction with Li, X.P. (2013) and Wu, X.Y. (2019). Moreover, from the research of Qi, X. (2015) it was found that instructional leadership of teachers is composed of teacher charisma and instructional influence, corresponding to the research of Zhao, Q. (2016) and Ning, L.X. (2019).

(3)Component C: Function Dimension, FD

Component C is important. Every dual-qualified nursing teacher can improve their instructional leadership by optimizing their instructional leadership function. Dual-qualified nursing professional teachers instructional leadership is not only reflected in the instructional process, but also beyond the limitations of classroom instructional, reflected in the teacher's influence on colleagues in nursing instructional, promoting and supporting, and promoting instructional reform. Therefore, the functional dimensions of dual-qualified nursing professional teachers instructional leadership include: C1- Instructional Design and Decision-

making, C2- Instructional Organization and C3- Implementation, and Instructional Coordination and Evaluation. The average variance extraction AVE value of component C is 0.801, combination reliability CR value is 0.973. The results of this study are consistent with the research of Wu, X.Y. (2019) which was found that teachers' instructional leadership can fully stimulate students' interest in learning, guide students to learn independently, and thus produce educational efficiency. It consists of vision creation, instructional decision making, instructional execution, communication motivation, instructional interpersonal motivation, result driving force and so on. Also, the findings were in the same direction with Qi, X. (2015) and Ning, L.X. (2019). Moreover, from the research of He, M. X. (2021) it was found that the instructional leadership index system of university teachers is divided into instructional foresight, instructional control, instructional decision-making, instructional influence, instructional appeal, creativity of common vision, creativity of instructional goal, instructional design planning, pre-class planning, classroom control, after-class reflection, instructional environment improvement, instructional resource development and so on, corresponding to the research of Zhao, Q. (2016), Qian, H., Walker, A. and Li, X. (2017), Huang, L.L. and Wu, ZH.K. (2020). However, the research of Zhao, Q. (2016), it was found that the instructional leadership model of university teachers, which are divided into three dimensions: instructional leadership skills, characteristics of instructional leadership and values of instructional leadership. This researcher proposed four dimensions of instructional leadership of dual-qualified nursing professional teachers after reading a lot of relevant literature and analysing the results of expert interviews. Let's move on to the fourth dimension, which was different.

(4)Component D: Development Support Behaviour Dimension, DSBD

The development supporting behaviour of instructional leadership development of dual-qualified nursing teacher focuses on improving the quality of nursing education and adapting to the needs of the times. Through instructional reform, clinical practice, scientific research participation, information education and cooperation and exchange among teachers, more excellent nursing professionals can be cultivated, nursing service quality can be improved and social development can be adapted. The average variance extraction AVE value of component C is 0.664, combination reliability CR value is 0.908. The results of this study are consistent with the research of Qian, H., Walker, A. and Li, X. (2017), which was found that the model of instructional leadership in our country includes six main dimensions: determining the purpose and direction, evaluating and supervising, cultivating the positive cooperative relationship among teachers, coordinating curriculum, promoting professional development, improving teachers' ability, and promoting external communication to support learning. Also, the findings were in the same direction with He, M. X. (2021), Huang, L.L. and Wu, ZH.K. (2020). Moreover, from the research of Zhang, M.M. (2016), it was found that we should give play to the leading role of excellent teachers, carry out research on instructional leadership of college teachers, sum up experience, and lead the development with scientific research; guide teachers to use advanced leadership theory to improve their instructional leadership corresponding to the research of Teske, K. (2014), Rao, AI. J., et, al. (2019). However, the research of Hoeun, C. B., Asavisanu, P., & Merritt, M. (2020), it was found that results-oriented education in private higher education institutions in Cambodia has developed a instructional leadership model. These four dimensions include professional development, supervised curriculum development and teaching, and supportive and collaborative environments, which are closely related to all stages of results-oriented education, which was different.

2. Discussion of the model of instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province;

The major findings were revealed as such because from the discussion in 5.2.1, we have learned that there are four components of instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province, which constitute the model as four dimensions. The main finding is that all four dimensions are important to the instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province. The discussion of the model of instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province is as follows:

First of all, in the result of CFA of the model, the CR values of component A (0.933), component B (0.858), component C (0.973) and component D (0.908) are all higher than the critical value 0.7, Composite Reliability (CR) is a measure of the internal consistency of a measurement tool that is calculated based on the correlation of the metrics in the measurement tool. When the CR is greater than 0.7, the internal consistency of the measuring tool is good. The AVE values of component A (0.776), component B (0.547), component C (0.801), and component D (0.664) are all higher than the critical value 0.5. AVE is greater than 0.5, the reliability of the measurement tool is good. Average common factor variance extraction (AVE) is an index to measure the reliability of the measurement tool. When AVE is greater than 0.5, the reliability of the measurement tool is good. Because AVE and CR are important indicators used to evaluate the fit and reliability of the measurement model, indicating that the internal consistency and reliability of the measurement model are good, and the model has strong explanatory ability.

Second, component A moral consciousness, values and leadership characteristics are the core and key factors that determine the behaviour of the instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province, and they are at the centre of the model. Dual-qualified nursing professional teachers instructional leadership characteristics, values and moral consciousness play a decisive role in the results of the whole instructional leadership behaviour. They are relatively stable and not easy to change and develop. The improvement of component B instructional leadership characteristics requires dual-qualified nursing professional teachers' own understanding and thinking, which cannot be obtained through learning (Zhao, Q., 2016).

Thirdly, component C instructional leadership functions including (1) Instructional Planning and Instructional Decision-making (2) Instructional Organization and Implementation, and (3) Instructional Coordination and Evaluation, these skills and component D developmental support behaviours are the easiest parts to learn and develop.

Therefore, this researcher constructs the model by placing Component A and Component B, which are not easily learned and stable, in the inner core of the model, while Component C, which is unstable but easy to learn, and Component D, which is a supporting system and promoting factor, in the outer layer and the bottom respectively. These four components form the instructional leadership model structure of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province from the inside out. This research finding was in accordance with the research of (Zhao, Q., 2016) which was found that the 28 leadership elements are divided into three dimensions: instructional leadership skills, instructional leadership characteristics and instructional leadership values. This paper establishes a instructional leadership model of university teachers by empirical

method, which contains 28 leadership elements, including instructional leadership skills, instructional leadership characteristics and instructional leadership values. The characteristics of instructional leadership include 13 sub-dimensions: responsibility, fairness and integrity, active learning, professional research interest, teaching achievement desire, teaching influence, teaching cohesion, confidence, perseverance, diligence, concentration, self-control, teaching determination; Instructional leadership skills are divided into 10 sub-dimensions: teaching resource management, teaching work planning, flexibility, understanding of majors, understanding of curriculum objectives, professional knowledge and skills, comprehensive generalization ability, teaching design strategy, communication ability, teaching cooperation ability; Instructional leadership values are divided into five dimensions: caring for students, respecting students, logical generalization ability, critical thinking, and teaching innovation. Zhao, Q. (2016) transcend the limitations of classroom teaching, and to divide the structure of teacher instructional leadership from a more macro perspective. Also, the findings were in the same direction with Hallinger, P., et al. (2017), Huang, L.L., and Wu, ZH.K. (2020). Moreover, from the research of Zhang, Y.Q. (2018), it was found that most teachers limit instructional leadership to teachers' leadership of students in the classroom, or connect instructional leadership with administrative positions, titles, etc., and believe that instructional leadership is unique to some people with leadership abilities. However, the broader instructional leadership under the distributed leadership theory has not been recognized. College teachers have not realized that instructional leadership is a kind of professional role of teachers, and every teacher can cultivate instructional leadership ability and become a teaching leader. Instructional leadership is not only reflected in the teaching process, but also transcends the limitations of classroom teaching. Teachers' promotion and support of colleagues in teaching and teachers' promotion of teaching reform are the manifestations of teachers' instructional leadership. corresponding to the research of He, M. X. (2021). However, the research of Rao, AI. J., et, al. (2019), it was found that teachers need to change the traditional classroom teaching methods, adhere to the learner-centered, implement moral education training in the whole process of classroom teaching, and use educational big data to visualize the learning process of students, which was different.

3. Discussion of the managerial guidelines of instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province;

In this research step 3, with the help of 12 experts, in the process of discussing and giving the managerial guidelines of instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province, they said that the model has high credibility and good evaluation effect from the perspective of professional field or from the analysis of sample data. This result is consistent with the survey results of the model and the interview results. The experts put forward the managerial guidelines of instructional leadership of dual-qualified nursing professional teachers in New Era of higher vocational colleges under Henan province, with a total of 14 key managerial guidelines.

This research finding was in accordance with the research of Zheng, Y.L. and L, L.Y. (2016) which was found that the self-promotion of teachers' instructional leadership should pay attention to the development of instructional leadership at the level of consciousness. At the planning level, we should objectively evaluate our own leadership ability and formulate development plans. In practice, we should pay attention to the cultivation of leadership quality

and skills. Also, the findings were in the same direction with Zhang, Y.Q. (2018) and Huang L.L. and Wu, ZH.K. (2020). Moreover, from the research of Qi, X. (2015), it was found that the instructional leadership ability of university teachers can be greatly improved through the following three aspects. First, strengthen the self-cognition of instructional leadership; Second, actively study and master the relevant theoretical knowledge; Third, strengthen professional ethics corresponding to the research of Ning, L.X. (2019). However, the research of Rao, AI. J., et, al. (2019), it was found that (1) attach importance to the training of instructional leadership of college teachers; (2) Improve the informatization teaching ability of college teachers; (3) Strengthen the research on the instructional leadership of college teachers; (4) Establish a "data-driven" moral awareness which was different.

Recommendation

Recommendation for Policies Formulation

In order to better enhance the instructional leadership of dual-qualified nursing professional teachers in higher vocational colleges under Henan province, the following policy recommendations are put forward for the development of dual-qualified nursing professional teachers' instructional leadership in higher vocational colleges from the aspects of training, incentive and evaluation:

1. Develop a professional training plan: Provide professional training for dual-qualified nursing professional teachers, including teaching methods, nursing skills, professional quality and other aspects of training, to help them improve their professional level and teaching ability.
2. Establish a mentor system: Establish a mentor system for dual-qualified nursing professional teachers. Senior teachers with rich teaching experience and instructional leadership serve as mentors to guide and mentor the growth of new teachers.
3. Establish a teaching evaluation system: Emphasize the construction of professional ethics of dual-qualified nursing professional teachers, advocate the fine tradition of teachers' dedication, love for students and rigorous study, and establish a scientific and effective teaching evaluation system. The teaching performance of dual-qualified nursing professional teachers is evaluated and fed back regularly to provide them with opportunities for growth and improvement.

From the perspective of distributed leadership theory, this paper reforms the concept of teacher leadership, and vigorously supports and helps the dual professional nursing teachers in Henan provincial vocational colleges to cultivate their instructional leadership ability, and stimulates the instructional leadership potential of each teacher.

Recommendation for Practical Application

We need to consider how to help dual-qualified nursing professional teachers in higher vocational colleges to effectively develop instructional leadership in teaching practice, and put forward practical application suggestions as follows:

1. Building a teaching team of dual-qualified nursing professional teachers: Encourage dual-qualified nursing professional teachers to form a teaching team to participate in curriculum design, teaching reform and teaching evaluation, form a joint force, and promote the collective improvement of instructional leadership. Organize regular teaching discussion activities, so that teachers can share their instructional leadership experience, and jointly solve the problems in the process of instructional leadership with the help of collective wisdom, and promote the common improvement of instructional leadership level. Strengthen exchanges and cooperation, promote cooperation between vocational colleges and related medical institutions,

and provide a broader communication platform for dual-qualified nursing professional teachers to expand their vision.

2. Set up a teaching guidance mechanism to provide guidance and consultation services for dual-qualified nursing professional teachers on a regular or irregular basis to help them solve the problems and difficulties encountered in the process of playing instructional leadership.

3. Keep pace with the times, lifelong learning: Advocate the concept of continuous learning for dual-qualified nursing professional teachers, encourage them to participate in educational training, academic conferences, etc., and constantly improve their instructional leadership and professional level.

These practical application suggestions aim to help dual-qualified nursing professional teachers in higher vocational colleges gradually develop instructional leadership in practical teaching, improve teaching quality and student satisfaction, so as to better serve the development of nursing profession.

Recommendation for Further Research

The suggestions for further research on the development of instructional leadership of dual-qualified nursing professional teachers in higher vocational colleges are as follows:

1. Study on the relationship between instructional leadership and education policy: Study the interaction between instructional leadership and nursing education policy. And discusses the guiding effect of policy on instructional leadership and the promoting effect of instructional leadership on policy implementation.

2. Research on the difference of instructional leadership in different educational backgrounds: Comparing the difference of instructional leadership of dual-qualified nursing professional teachers in vocational colleges and undergraduate colleges. To explore the influence of educational background on the development of instructional leadership, and provide guidance for the training of teachers at different levels of colleges and universities.

3. Research on the impact of career development on instructional leadership: To track the career development track of dual-qualified nursing professional teachers in vocational colleges and explore the impact of career development on instructional leadership. Understand the instructional leadership needs and changes of teachers at different stages of their careers and provide targeted training and support.

These further research suggestions are helpful for a more comprehensive and in-depth understanding of the development and influencing factors of dual-qualified nursing professional teachers' instructional leadership in higher vocational colleges, and provide scientific basis for formulating more effective teacher training plans and teaching improvement strategies.

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