

Construction of Ideological and Political Evaluation System for College Chinese Courses in Vocational Colleges Based on the Theoretical Framework of CIPP Evaluation Model

-- Taking Guangzhou Nanyang Polytechnic College as an Example

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Abstract: The core of ideological and political evaluation in vocational colleges is actually to evaluate the implementation of the task of "cultivating morality and cultivating talents". Traditional evaluation methods are mainly based on subjective judgment and empirical evaluation, while quantitative evaluation methods based on objective data are rarely adopted in practice. Based on the theoretical framework of the CIPP evaluation model, a questionnaire for the ideological and political evaluation of college Chinese courses was designed around four key factors: curriculum teaching background, curriculum teaching investment, curriculum teaching process, and curriculum teaching effectiveness. 550 questionnaires were distributed to students participating in this course teaching, of which 520 were valid questionnaires. After conducting reliability and validity analysis on the survey data using SPSS software, and using EFA and CFA analysis methods to jointly verify, quantitative analysis was used to evaluate the ideological and political quality of college Chinese courses. A college Chinese course ideological and political quality evaluation system was constructed with four key elements as the core, namely teaching background, teaching investment, teaching process, and teaching effectiveness.

Keywords: CIPP evaluation mode, College Chinese, Curriculum ideological and political evaluation system.

1. Introduction

[1] As an important position in higher education, vocational colleges should shoulder the responsibility of cultivating high-level composite high-end technical and skilled talents for the country and society. In the context of the new era, in order to achieve high-quality development of China's economy and society, comprehensively build a socialist modernized power, and move towards the second centenary goal, it is necessary for high-level, high-quality, and responsible young people to overcome difficulties and move forward courageously. With the expansion of enrollment scale in vocational colleges, vocational students, as an important talent team to achieve development strategic goals, should strengthen their ideological and political education and guidance [2] So far, the educational concept of ideological and political education in courses has been deeply implemented and implemented in vocational colleges. As an indispensable course in vocational colleges, college Chinese language courses also have unique advantages in terms of ideological and political education. In order to better understand the development of ideological and political education in vocational colleges, the CIPP evaluation model theory is used as the framework, and the college Chinese language courses at Guangzhou Nanyang Vocational College of Technology are taken as an example to construct

an ideological and political system for college Chinese language courses.

CIPP evaluation model was proposed by American scholar Daniel Leroy Staufelbim on the basis of his reflection on Taylor's behavior goal model in 1967. This model consists of four evaluation activities: background evaluation, input evaluation, process evaluation and result evaluation.

2. Selection and Testing of Indicators

2.1. Research on basic information of interviewees

2.2. Data collection and processing

This study distributed a total of 550 questionnaires through a questionnaire survey, of which 520 were effectively collected. The effective rate of questionnaire collection was 93.63%, indicating a high effective rate of questionnaire collection. For the theoretical framework based on the CIPP evaluation model constructed in this study, it is proposed to use EFA and CFA analysis methods to jointly verify the ideological and political evaluation system of college Chinese courses in vocational colleges.

2.3. Reliability analysis

Frequency analysis results				
name	option	Frequency	Percentage (%)	Accumulated percentage (%)
college	Liberal Arts	one hundred and seventy-four	thirty-three point four six two	thirty-three point four six two
	science	one hundred and seventy-two	thirty-three point zero seven seven	sixty-six point five three eight
	engineering course	one hundred and seventy-four	thirty-three point four six two	one hundred
	school leader	seventeen	three point two six nine	three point two six nine
	Leaders of secondary colleges	twenty-three	four point four two three	seven point six nine two
	Academic Affairs Office Staff	twenty-nine	five point five seven seven	thirteen point two six nine
	instructional supervision	thirty-six	six point nine two three	twenty point one nine two
post	College Chinese language teacher (full-time/part-time)	eighty-three	fifteen point nine six two	thirty-six point one five four
	Professional course teacher	one hundred and one	nineteen point four two three	fifty-five point five seven seven
	Student Office Staff	seventy-nine	fifteen point one nine two	seventy point seven six nine
	Teachers of public basic courses other than university Chinese language teachers other	eighty-nine	seventeen point one one five	eighty-seven point eight eight five
	Under 30 years old	sixty-three	twelve point one one five	one hundred
	30-40 years old	fifty-five	ten point five seven seven	ten point five seven seven
	40-50 years old	one hundred and thirty-six	twenty-six point one five four	thirty-six point seven three one
Age	50-60 years old	one hundred and forty-one	twenty-seven point one one five	sixty-three point eight four six
	Over 60 years old	one hundred and fifty-three	twenty-nine point four two three	ninety-three point two six nine
	specialty undergraduate	thirty-five	six point seven three one	one hundred
	Master's degree students	seventy-eight	fifteen point nine six two	thirty point nine six two
	Doctoral students	eighty-three	thirty-three point eight four six	sixty-four point eight zero eight
	PhD or above	one hundred and seventy-six	twenty-eight point zero seven seven	ninety-two point eight eight five
	Male	thirty-seven	seven point one one five	one hundred
Gender	female sex	two hundred and forty-three	forty-six point seven three one	forty-six point seven three one
	total	two hundred and seventy-seven	fifty-three point two six nine	one hundred
	total	five hundred and twenty	one hundred	one hundred

2.4. Exploratory factor analysis preliminary test

By importing questionnaire data into the SPSS 27.0 language environment, exploratory factor analysis is performed. The application of exploratory factor analysis requires reference to KMO and Bartlett's spherical test levels, with at least 0.6 and preferably 0.8. Bartlett's spherical test

requires a sufficient p-value (sig) <0.05 . The KMO level of the questionnaire data in this study is 0.820, and the Bartlett's spherical test is significant. This research scale is suitable for using exploratory factor analysis to verify the effectiveness of the ideological and political evaluation system of college Chinese courses in vocational colleges under the theoretical framework of CIPP evaluation model.

Cronbach reliability analysis

	name	Correction Item Total Correlation (CITC)	Item deleted α Coefficient	Cronbach α Coefficient
Course teaching background	Implementation of the Basic Task of "Cultivating Virtue and Cultivating Talents" in College Chinese Curriculum	zero point seven eight	zero point nine one	zero point nine two three
	College Chinese language courses help cultivate students' correct outlook on life, the world, and values	zero point eight three four	zero point eight nine nine	
	College Chinese courses help students deepen their professional ideals and ethics	zero point seven six seven	zero point nine one two	
	College Chinese courses help students strengthen their ideals and beliefs, cultivate patriotism, and enhance their cultural literacy	zero point seven zero seven	zero point nine two five	
	The Practice of Socialist Core Values in College Chinese Curriculum	zero point nine two six	zero point eight eight two	
	Research on the Participation of School Teachers in Curriculum Ideological and Political Issues	zero point five four two	zero point eight seven nine	
	The collective lesson preparation of the Chinese language teaching and research department in universities	zero point five seven seven	zero point eight seven four	
	College Chinese course teachers often reflect on and timely improve the teaching content and methods of ideological and political education in the course	zero point six three three	zero point eight seven	
Course teaching investment	The cost of ideological and political training provided by the school to teachers	zero point seven zero one	zero point eight six five	zero point eight eight three
	The school provides ideological and political training opportunities for teachers	zero point six nine three	zero point eight six six	
	The situation of college Chinese course teachers mastering the integration of ideological and political education into teaching skills	zero point six two one	zero point eight seven one	
	The teaching of college Chinese courses has distinct characteristics of the times	zero point six five nine	zero point eight six seven	
	The situation of the integration of ideological and political education into the curriculum of university Chinese language course teachers' "moistening things silently"	zero point six four	zero point eight six nine	
	The integration of the first and second classrooms in the ideological and political aspects of college Chinese courses	zero point six five seven	zero point eight six eight	
	The situation of college Chinese course teachers mastering the integration of ideological and political education into teaching skills	zero point nine four two	zero point nine eight	
	The teaching of college Chinese courses has distinct characteristics of the times	zero point nine four five	zero point nine eight	
Course teaching process	The situation of the integration of ideological and political education into the curriculum of university Chinese language course teachers' "moistening things silently"	zero point nine three nine	zero point nine eight	zero point nine eight three
	The integration of the first and second classrooms in the ideological and political aspects of college Chinese courses	zero point eight eight nine	zero point nine eight two	
	The school considers teachers' participation in curriculum ideological and political education as an assessment, evaluation, and employment of positions	zero point eight three one	zero point nine eight four	
	College Chinese course teachers understand the connotation, policies, and related documents of ideological and political education in the course	zero point eight six one	zero point nine eight three	
	The integration of college Chinese courses with majors	zero point nine six	zero point nine seven nine	
	Integration of College Chinese Textbooks into Curriculum Ideological and Political Points	zero point nine seven six	zero point nine seven nine	
	The implementation of ideological and political education in college Chinese language courses in classroom teaching	zero point nine six three	zero point nine seven nine	
	Students are willing to receive and participate in discussions on ideological and political courses in college Chinese classrooms	zero point seven nine seven	zero point nine two seven	
Course teaching effectiveness	Students can maintain a good mindset when designing ideological and political issues in college Chinese courses	zero point seven nine six	zero point nine two seven	zero point nine three seven
	The degree to which ideological and political education in college Chinese courses has a positive impact on students	zero point seven zero two	zero point nine four	
	The degree to which the ideological and political methods of college Chinese courses are worth promoting	zero point nine two four	zero point nine one two	
	The ideological and political goals of college Chinese curriculum are based on the actual situation of vocational colleges	zero point seven four one	zero point nine three four	
	Situation of Ideological and Political Special Training on Courses Conducted by Schools	zero point nine six four	zero point nine zero nine	

KMO and Bartlett's test

KMO value	zero point eight two
Approximate Chi Square	twenty-two thousand one hundred and ninety-five point five five
Bartlett sphericity test	df three hundred and seventy-eight
P-value	0

Variance Interpretation Rate Table

Factor Number	Characteristic root	Characteristic root		Interpretation rate of variance before rotation			Interpretation rate of variance after rotation		
		Variance Interpretation Rate%	Accumulated%	Characteristic root	Variance Interpretation Rate%	Accumulated%	Characteristic root	Variance Interpretation Rate%	Accumulated%
one	ten point zero one seven	thirty-five point seven seven six	thirty-five point seven seven six	ten point zero one seven	thirty-five point seven seven six	thirty-five point seven seven six	seven point nine three	twenty-eight point three two one	twenty-eight point three two one
two	five point three zero six	eighteen point nine five one	fifty-four point seven two seven	five point three zero six	eighteen point nine five one	fifty-four point seven two seven	five point seven seven eight	twenty point six three six	forty-eight point nine five seven
three	four point zero one	fourteen point three two three	sixty-nine point zero five	four point zero one	fourteen point three two three	sixty-nine point zero five	four point seven zero one	sixteen point seven nine	sixty-five point seven four seven
four	two point nine eight one	ten point six four seven	seventy-nine point six nine seven	two point nine eight one	ten point six four seven	seventy-nine point six nine seven	three point nine zero six	thirteen point nine five	seventy-nine point six nine seven
five	zero point nine four seven	three point three eight two	eighty-three point zero seven nine	-	-	-	-	-	-
six	zero point six two four	two point two two eight	eighty-five point three zero six	-	-	-	-	-	-
seven	zero point five five nine	one point nine nine five	eighty-seven point three zero one	-	-	-	-	-	-
eight	zero point four five eight	one point six three five	eighty-eight point nine three six	-	-	-	-	-	-
nine	zero point four three two	one point five four three	ninety point four seven nine	-	-	-	-	-	-
ten	zero point four	one point four three	ninety-one point nine zero nine	-	-	-	-	-	-
eleven	zero point three six three	one point two nine six	ninety-three point two zero five	-	-	-	-	-	-
twelve	zero point three two seven	one point one six seven	ninety-four point three seven one	-	-	-	-	-	-
thirteen	zero point two eight	zero point nine nine nine	ninety-five point three seven one	-	-	-	-	-	-
fourteen	zero point two seven two	zero point nine seven three	ninety-six point three four four	-	-	-	-	-	-
fifteen	zero point two three three	zero point eight three two	ninety-seven point one seven five	-	-	-	-	-	-
sixteen	zero point one eight six	zero point six six three	ninety-seven point eight three nine	-	-	-	-	-	-
seventeen	zero point one one five	zero point four one two	ninety-eight point two five one	-	-	-	-	-	-
eighteen	zero point zero nine seven	zero point three four five	ninety-eight point five nine six	-	-	-	-	-	-
nineteen	zero point zero seven one	zero point two five three	ninety-eight point eight four nine	-	-	-	-	-	-
twenty	zero point zero five seven	zero point two zero five	ninety-nine point zero five four	-	-	-	-	-	-
twenty-one	zero point zero four eight	zero point one seven one	ninety-nine point two two five	-	-	-	-	-	-
twenty-two	zero point zero four six	zero point one six five	ninety-nine point three eight nine	-	-	-	-	-	-
twenty-three	zero point zero four four	zero point one five seven	ninety-nine point five four seven	-	-	-	-	-	-
twenty-four	zero point zero four one	zero point one four seven	ninety-nine point six nine four	-	-	-	-	-	-
twenty-five	zero point zero three six	zero point one two nine	ninety-nine point eight two three	-	-	-	-	-	-
twenty-six	zero point zero two seven	zero point zero nine eight	ninety-nine point nine two one	-	-	-	-	-	-
twenty-seven	zero point zero one six	zero point zero five eight	ninety-nine point nine seven eight	-	-	-	-	-	-
twenty-eight	zero point zero zero six	zero point zero two two	one hundred	-	-	-	-	-	-

Perform factor analysis on questionnaire data using the oblique intersection maximum variance method, and sort the load sizes of the measurement items included in the extracted factors, while hiding load values below 0.4. The rotated component matrix of the initial scale data is shown in the table below. From the table, it can be seen that "Factor 1" has the highest variance interpretation rate, followed by "Factor 2" and "Factor 3", while "Factor 4" has a low variance interpretation rate. By observing the rotational factor loads of

all observation items within each factor, it is generally believed that the maximum load corresponding to the measurement items of each factor after rotation should be greater than 0.6, and the second load should be less than 0.3. If the load of the variable does not meet this standard, it should be removed. Based on this, the above items in the questionnaire meet the extraction criteria for factor loading, and further factor analysis can be considered.

Table of factor load factors after rotation

name	Factor load coefficient				Commonality (common factor variance)
	Factor 1	Factor 2	Factor 3	Factor 4	
The situation of college Chinese course teachers mastering the integration of ideological and political education into teaching skills	zero point nine four five				zero point nine one five
The teaching of college Chinese courses has distinct characteristics of the times	zero point nine four one				zero point nine one nine
The situation of the integration of ideological and political education into the curriculum of university Chinese language course teachers' "moistening things silently"	zero point nine four two				zero point nine one two
The integration of the first and second classrooms in the ideological and political aspects of college Chinese courses	zero point eight eight five				zero point eight three six
The school considers teachers' participation in curriculum ideological and political education as an assessment, evaluation, and employment of positions	zero point eight four				zero point seven five
College Chinese course teachers understand the connotation, policies, and related documents of ideological and political education in the course	zero point eight six eight				zero point seven nine seven
The integration of college Chinese courses with majors	zero point nine six one				zero point nine four three
Integration of College Chinese Textbooks into Curriculum Ideological and Political Points	zero point nine six eight				zero point nine six six
The implementation of ideological and political education in college Chinese language courses in classroom teaching	zero point nine five one				zero point nine three nine
The construction of high-quality courses in college Chinese language courses		zero point seven five three			zero point six zero four
Construction of Ideological and Political Video Database for College Chinese Curriculum in Schools		zero point seven nine eight			zero point six six eight
University Chinese language teachers use modern information technology to showcase the ideological and political aspects of university Chinese language		zero point seven three two			zero point five four two
Research on the Participation of School Teachers in Curriculum Ideological and Political Issues		zero point seven zero nine			zero point five five seven
The collective lesson preparation of the Chinese language teaching and research department in universities		zero point eight three two			zero point seven two nine
College Chinese course teachers often reflect on and timely improve the teaching content and methods of ideological and political education in the course		zero point nine three eight			zero point eight nine eight
The cost of ideological and political training provided by the school to teachers		zero point nine two five			zero point eight eight nine
The school provides ideological and political training opportunities for teachers		zero point nine four			zero point nine one one
Students are willing to receive and participate in discussions on ideological and political courses in college Chinese classrooms			zero point eight five six		zero point seven five six
Students can maintain a good mindset when designing ideological and political issues in college Chinese courses			zero point eight five three		zero point seven five five
The degree to which ideological and political education in college Chinese courses has a positive impact on students			zero point seven six nine		zero point six two
The degree to which the ideological and political methods of college Chinese courses are worth promoting			zero point nine four five		zero point nine one five
The ideological and political goals of college Chinese curriculum are based on the actual situation of vocational colleges			zero point eight		zero point six seven
Situation of Ideological and Political Special Training on Courses Conducted by Schools			zero point nine six five		zero point nine five eight
Implementation of the Basic Task of "Cultivating Virtue and Cultivating Talents" in College Chinese Curriculum				zero point eight four five	zero point seven five one
College Chinese language courses help cultivate students' correct outlook on life, the world, and values				zero point eight eight	zero point eight one three
College Chinese courses help students deepen their professional ideals and ethics				zero point eight four five	zero point seven three four
College Chinese courses help students strengthen their ideals and beliefs, cultivate patriotism, and enhance their cultural literacy				zero point seven eight two	zero point six four six
The Practice of Socialist Core Values in College Chinese Curriculum				zero point nine three two	zero point nine one nine

3. Difference Analysis

3.1. Comparative Analysis on the Differences of Interviewed Teacher Groups in Different Colleges

This study uses one-way ANOVA statistical research

methods to explore the differences in perception of educational background, teaching investment, teaching process, and teaching effectiveness among the surveyed groups of liberal arts, science, and engineering colleges. Through mean result analysis, it is found that there is no 0.05 level perception research difference among the surveyed teacher groups of different colleges in terms of educational

background, teaching investment, teaching process, and teaching effectiveness. Further combining the analysis of mean results, it can be seen that the evaluation level of the current teaching process in science and engineering is higher

than that in liberal arts colleges. The evaluation level of teaching effectiveness in humanities is higher than that in science and engineering.

Analysis of variance results

	College (mean ± standard deviation)			F	p
	Liberal Arts (n=174)	Science (n=172)	Engineering (n=174)		
Teaching background	3.056±1.123	3.167±1.139	3.070±1.142	zero point four nine two	zero point six one two
Teaching investment	3.147±0.929	3.112±1.011	2.988±0.958	one point three zero six	zero point two seven two
teaching process	2.723±1.088	2.969±1.139	2.901±1.135	two point two one seven	zero point one one
Teaching effectiveness	3.310±1.023	3.326±1.112	3.180±1.106	zero point nine five	zero point three eight eight

* p<0.05 ** p<0.01 *** p<0.001

3.2. Comparative Analysis on the Differences of Interviewed Teacher Groups in Different Positions

This study uses a one-way ANOVA statistical research method to explore the differences in perception of educational

background, teaching investment, teaching process, and teaching effectiveness among different job interview groups. Through mean result analysis, it can be seen that there is no 0.05 level perception research difference among different job interview teacher groups regarding the educational background, teaching investment, teaching process, and teaching effectiveness of the college.

Analysis of variance results (regular format)

Analysis item	term	sample size	average value	standard deviation	F	p
Teaching background	school leader	seventeen	three point zero eight two	one point two two one	one point zero nine	zero point three six nine
	Leaders of secondary colleges	twenty-three	two point nine two two	one point one two eight		
	Academic Affairs Office Staff	twenty-nine	two point eight four eight	one point one nine four		
	instructional supervision	thirty-six	two point eight three three	one point one three four		
	College Chinese language teacher (full-time/part-time)	eighty-three	three point two three four	one point one zero six		
	Professional course teacher	one hundred and one	two point nine five six	one point one one three		
	Student Office Staff	seventy-nine	three point one seven seven	one point one zero one		
	Teachers of public basic courses other than university Chinese language teachers	eighty-nine	three point two zero four	one point one six seven		
	other	sixty-three	three point two two nine	one point one three eight		
	total	five hundred and twenty	three point zero nine eight	one point one three three		
Teaching investment	school leader	seventeen	three point two zero eight	zero point eight nine four	one point zero two two	zero point four one eight
	Leaders of secondary colleges	twenty-three	three point three seven seven	one point zero two nine		
	Academic Affairs Office Staff	twenty-nine	two point seven seven four	zero point nine one seven		
	instructional supervision	thirty-six	two point nine seven eight	one point zero zero two		

	College Chinese language teacher (full-time/part-time)	eighty-three	three point zero four	one point zero one eight		
	Professional course teacher	one hundred and one	three point one	zero point nine zero one		
	Student Office Staff	seventy-nine	three point zero seven three	zero point eight nine one		
	Teachers of public basic courses other than university Chinese language teachers	eighty-nine	three point zero three one	one point zero nine one		
	other	sixty-three	three point two five two	zero point nine zero two		
	total	five hundred and twenty	three point zero eight two	zero point nine six seven		
	school leader	seventeen	two point nine two eight	one point one nine five		
	Leaders of secondary colleges	twenty-three	two point five eight four	zero point nine four five		
	Academic Affairs Office Staff	twenty-nine	two point two five two	one point zero four		
	instructional supervision	thirty-six	two point seven five nine	one point one two four		
	College Chinese language teacher (full-time/part-time)	eighty-three	two point nine nine seven	one point zero five four	two point five four two	
teaching process	Professional course teacher	one hundred and one	three point zero five one	one point zero eight eight		0.010*
	Student Office Staff	seventy-nine	two point seven nine	one point one seven four		
	Teachers of public basic courses other than university Chinese language teachers	eighty-nine	two point seven zero nine	one point one zero one		
	other	sixty-three	three point one two seven	one point one nine nine		
	total	five hundred and twenty	two point eight six four	one point one two three		
	school leader	seventeen	three point four two two	one point zero two five		
	Leaders of secondary colleges	twenty-three	three point four five seven	one point zero three eight		
	Academic Affairs Office Staff	twenty-nine	three point zero four six	one point one four eight		
	instructional supervision	thirty-six	three point two two two	one point zero five one		
	College Chinese language teacher (full-time/part-time)	eighty-three	three point two zero three	one point zero four five	zero point four nine eight	zero point eight five eight
Teaching effectiveness	Professional course teacher	one hundred and one	three point three six	one point zero nine three		
	Student Office Staff	seventy-nine	three point two three four	one point zero nine six		
	Teachers of public basic courses other than university Chinese language teachers	eighty-nine	three point three three six	one point one four one		
	other	sixty-three	three point two zero three	one point zero four nine		
	total	five hundred and twenty	three point two seven two	one point zero eight one		
* p<0.05 ** p<0.01 *** p<0.001						

3.3. Comparative analysis of differences in teacher groups interviewed at different ages

This study uses the statistical research method of one-way ANOVA to explore the differences in perception of education background, teaching investment, teaching process, and teaching effectiveness among liberal arts and different age groups. Through mean result analysis, it can be seen that there is a 0.05 level perception research difference in education

background and teaching process among different age groups of interviewed teachers. Further combining the analysis of mean results, it can be seen that the perception level of teaching background in the 40-50 age group (3.072 ± 1.080) and the 50-60 age group (3.305 ± 1.090) is relatively higher than that of teachers under the age of 30 and teachers in the 30-40 age group. The evaluation level of teaching effectiveness by the age group of 50 to 60 and the age group over 60 is relatively higher than that of the age group under 30 and the age group between 30 and 40.

Analysis of variance results							
	Age (mean \pm standard deviation)					F	p
	Under 30 years old (n=55)	30-40 years old (n=136)	40-50 years old (n=141)	50-60 years old (n=153)	Over 60 years old (n=35)		
Teaching background	2.800 \pm 1.137	2.969 \pm 1.178	3.072 \pm 1.080	3.305 \pm 1.090	3.263 \pm 1.222	two point nine zero six	0.021*
Teaching investment	2.819 \pm 0.996	2.969 \pm 0.955	3.160 \pm 0.898	3.177 \pm 1.037	3.206 \pm 0.847	two point two five	zero point zero six three
teaching process	2.513 \pm 0.928	2.718 \pm 1.041	2.870 \pm 1.191	3.027 \pm 1.147	3.244 \pm 1.146	three point eight one two	0.005**
Teaching effectiveness	3.018 \pm 1.102	3.135 \pm 1.162	3.403 \pm 1.002	3.323 \pm 1.070	3.448 \pm 0.995	two point one six two	zero point zero seven two
* p<0.05 ** p<0.01 *** p<0.001							

3.4. Comparative analysis of differences in teacher groups interviewed with different educational backgrounds

This study uses the statistical research method of one-way ANOVA to explore the differences in perception of education background, teaching investment, teaching process, and teaching effectiveness among liberal arts and different education level respondents. Through mean result analysis, it

can be seen that there is a 0.05 level perception research difference in education background and teaching process among different education level respondents. Furthermore, based on the analysis of mean results, it can be seen that the perception level of teaching background among doctoral students and those with doctoral degrees or above is relatively higher than that of other educated interviewed teachers. In addition, the evaluation of current teaching effectiveness among doctoral students, doctoral students, and above is relatively good.

Analysis of variance results							
	Education background (mean \pm standard deviation)					F	p
	Junior College (n=78)	Undergraduate (n=83)	Master's degree (n=176)	Doctoral students (n=146)	PhD or above (n=37)		
Teaching background	2.785 \pm 1.064	3.075 \pm 1.171	3.095 \pm 1.147	3.215 \pm 1.126	3.357 \pm 1.062	two point three nine seven	0.049*
Teaching investment	2.961 \pm 0.874	3.037 \pm 1.051	3.062 \pm 0.938	3.137 \pm 0.958	3.317 \pm 1.120	one point zero three two	zero point three nine
teaching process	2.726 \pm 1.235	2.879 \pm 0.747	2.862 \pm 1.193	2.879 \pm 1.166	3.075 \pm 1.081	zero point six two six	zero point six four four
Teaching effectiveness	2.919 \pm 1.091	3.192 \pm 1.092	3.342 \pm 1.108	3.385 \pm 1.028	3.414 \pm 0.984	two point nine eight four	0.019*
* p<0.05 ** p<0.01 *** p<0.001							

3.5. Comparative analysis of differences in teacher groups interviewed by different genders

This study uses the statistical research method of one-way ANOVA to explore the differences in perception of education background, teaching investment, teaching process, and teaching effectiveness among liberal arts and gender interviewees. Through mean result analysis, it can be seen that

there is a 0.05 level perception research difference between gender interviewees in education background, teaching investment, teaching process, and teaching effectiveness. Further combining the analysis of mean results, it can be seen that the gender groups of doctoral students and above have a relatively higher perception level of teaching background compared to other gender interviewed teachers. In addition, the evaluation of current teaching effectiveness among doctoral students, doctoral students, and above is relatively good.

T-test analysis results

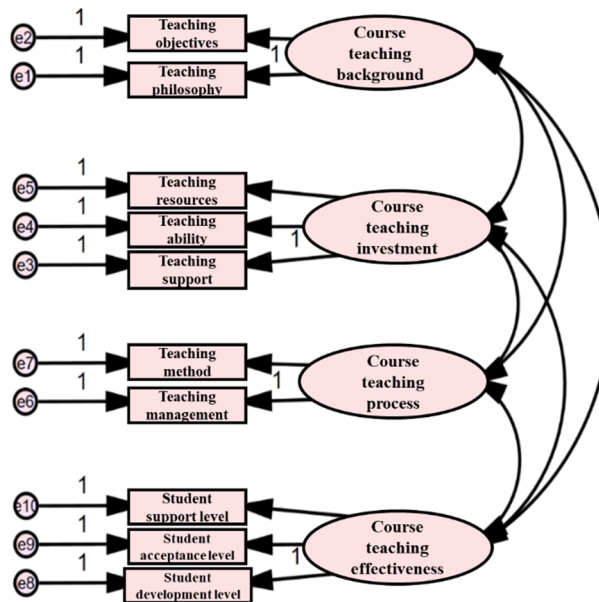
	Gender (mean ± standard deviation)		t	p
	Male (n=243)	Female (n=277)		
Teaching background	2.665±1.076	3.477±1.045	-8.723	0.000***
Teaching investment	2.896±0.928	3.246±0.973	-4.186	0.000***
teaching process	2.527±0.836	3.159±1.254	-6.833	0.000***
Teaching effectiveness	3.056±1.084	3.461±1.044	-4.331	0.000***

* p<0.05 ** p<0.01 *** p<0.001

4. Construction of the Ideological and Political Evaluation System for College Chinese Courses in Vocational Colleges under the Theoretical Framework of CIPP Evaluation Model

Exploratory factor analysis has demonstrated that the scale

structure has a good structure. To further demonstrate the structural level of the scale, a confirmatory analysis will be conducted on the scale data using AMOS25.0. The explanatory diagram of the observation table in the AMOS software environment is shown below, which includes a total of 4 potential variables and 10 measurement variables. The algorithm executed by AMOS is maximum likelihood estimation, and the load level of the measurement variables included in each potential variable and the correlation level between the potential variables are referred to as follows:



The structural validity of the scale is analyzed by testing its convergence validity (measured by AVE) and discriminant validity. The validation standard for convergence validity AVE is the recommended standardized factor load value of 0.6, which is taken as the square to approach the AVE value of 0.5. The standardized factor load in the factors of

curriculum teaching background, curriculum teaching investment, curriculum teaching process, and curriculum teaching effectiveness in this study is greater than 0.6, and the AVE levels are 0.899, 0.914, 0.972, and 0.858, respectively. The convergence validity of each factor is within the threshold requirements.

Measurement indicators	Std. Factor Loading	Standardized factor load squared question reliability (SMC)	CR	AVE
Teaching philosophy	zero point nine eight seven	zero point nine seven four	zero point nine four seven	zero point eight nine nine
Teaching objectives	zero point nine zero eight	zero point eight two four	zero point nine seven zero	zero point nine one four
Teaching support	zero point nine five five	zero point nine one two	zero point nine eight six	zero point nine seven two
Teaching ability	zero point nine seven three	zero point nine four seven	zero point nine four eight	zero point eight five eight
Teaching resources	zero point nine four	zero point eight eight four	zero point nine four eight	zero point eight five eight
Teaching management	zero point nine eight four	zero point nine six eight	zero point nine four eight	zero point eight five eight
teaching method	zero point nine eight eight	zero point nine seven six	zero point nine four eight	zero point eight five eight
Student Development Level	zero point nine zero three	zero point eight one five	zero point nine four eight	zero point eight five eight
Student acceptance level	zero point nine zero eight	zero point eight two four	zero point nine four eight	zero point eight five eight
Student Support Level	zero point nine six six	zero point nine three three	zero point nine four eight	zero point eight five eight

Differential validity is used to measure the degree to which latent variables differ from other variables. AVE is greater than the square of the correlation coefficient between constructs, indicating good discriminative validity. From the table below, it can be seen that there is a significant correlation ($P<0.05$) between the curriculum teaching background, curriculum teaching investment, curriculum teaching process, and curriculum teaching effectiveness. In addition, the absolute values of the correlation coefficients are

all less than 0.6 and are all less than the square root of the corresponding AVE. This indicates that each latent variable has a certain correlation and a certain degree of differentiation between them. This indicates that the discriminant validity of the scale data is ideal. At the same time, it further verifies the good structural validity of the ideological and political evaluation system model for college Chinese courses in vocational colleges in this study, supporting the results of exploratory factor analysis.

Discriminant validity						
	average value	standard deviation	Teaching background	Teaching investment	teaching process	Teaching effectiveness
Teaching background	three point zero nine eight	one point one three three	zero point nine four eight			
Teaching investment	three point zero eight two	zero point nine six seven	0.206***	zero point nine five six		
teaching process	two point eight six four	one point one two three	0.312***	0.229***	zero point nine eight five	
Teaching effectiveness	three point two seven two	one point zero eight one	0.500***	0.296***	0.265***	zero point nine two six

* $p<0.05$ ** $p<0.01$ *** $p<0.001$

(2) Punish complex models, that is, the fitting index should be adjusted according to the number of model parameters, and punish models with multiple parameters; (3) Sensitivity to false models, i.e. if the fitted model is not true (with too many or too few parameters), the fitting index can reflect poor fitting. Based on this, the indices used in this article are TLI, CMIN/DF, GFI, IFI, TLI, CFI, RMSEA, SRMR, PNFI, and PCFI. The corresponding evaluation values of the indicators

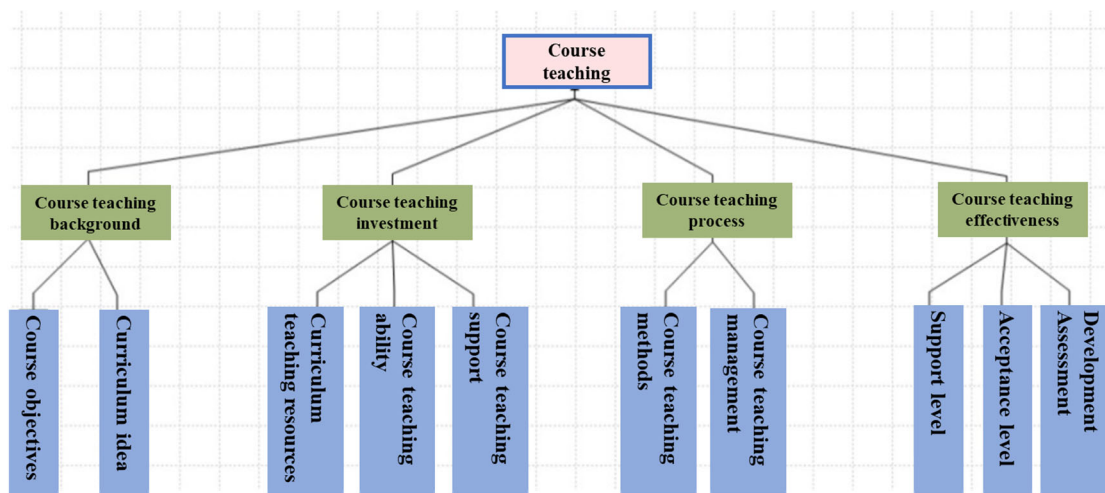
and the actual fitting results of the model are shown below. It can be seen that the absolute fitting indicators in the structural equation model of leisure agriculture tourism satisfaction constructed in this article all meet the standards. The fitting effect of the model of the ideological and political evaluation system for vocational college Chinese courses constructed in this study is good.

Table Fit Results				
	Index Name	evaluation criterion	Fitting results	result
Absolute fitting index	CMIN/DF		sixty-six point nine four six	/
	DF		twenty-nine	/
	CMIN/DF	Between 1-3 (or 1-5)	two point three zero eight	Very ideal
	RMR	<0.08	zero point zero four three	Very ideal
	GFI	>0.9 or 0.85	zero point nine seven five	Relatively ideal
	AGFI	>0.9 or 0.85	zero point nine five three	Relatively ideal
	RMSEA	<0.08	zero point zero five zero	Very ideal
Relative fitting index	IFI	>0.9 or 0.85	zero point nine nine four	Very ideal
	TLI	>0.9 or 0.85	zero point nine nine zero	Very ideal
	CFI	>0.9 or 0.85	zero point nine nine four	Very ideal
	NFI	>0.9 or 0.85	zero point nine eight nine	Very ideal
	PNFI	0.5~0.9	zero point six three seven	Very ideal
Simplicity Fit	PCFI	0.5~0.9	zero point six four zero	Very ideal

	Path relationship		Non standardized regression coefficient	Standardized regression coefficient	S.E.	C.R.	P	Label
Teaching philosophy	<---	Course teaching background	one	zero point nine eight seven				establish
Teaching objectives	<---	Course teaching background	two point six four three	zero point nine zero eight	zero point one five five	seventeen point zero one two	***	establish
Teaching support	<---	Course teaching investment	one	zero point nine five five				establish
Teaching ability	<---	Course teaching investment	one point zero two four	zero point nine seven three	zero point zero one nine	fifty-four point six eight	***	establish
Teaching resources	<---	Course teaching investment	one point zero zero six	zero point nine four	zero point zero two two	forty-six point two eight five	***	establish
Teaching management	<---	Course teaching process	one	zero point nine eight four				establish
teaching method	<---	Course teaching process	one point zero two four	zero point nine eight eight	zero point zero two eight	thirty-six point six eight eight	***	establish
Student Development Level	<---	Course teaching effectiveness	one	zero point nine zero three				establish
Student acceptance level	<---	Course teaching effectiveness	one point zero four two	zero point nine zero eight	zero point zero three one	thirty-three point two six five	***	establish
Teaching Support 1_A	<---	Course teaching effectiveness	one point zero eight five	zero point nine six six	zero point zero two eight	thirty-eight point zero nine nine	***	establish

Therefore, a theoretical framework based on the CIPP evaluation model has been developed for the construction of

the ideological and political evaluation system for college Chinese courses in vocational colleges, as follows:



In order to construct a theoretical framework of CIPP evaluation model for the ideological and political evaluation system of college Chinese courses in vocational colleges, the model is constructed based on the principle of Analytic Hierarchy Process. The Analytic Hierarchy Process mainly relies on layers. Based on empirical research, the model variables were used as evaluation indicators, and the standardized load factor of the model was used as a weight coefficient and percentified to construct a theoretical framework for ideological and political evaluation of college Chinese courses in vocational colleges based on the CIPP

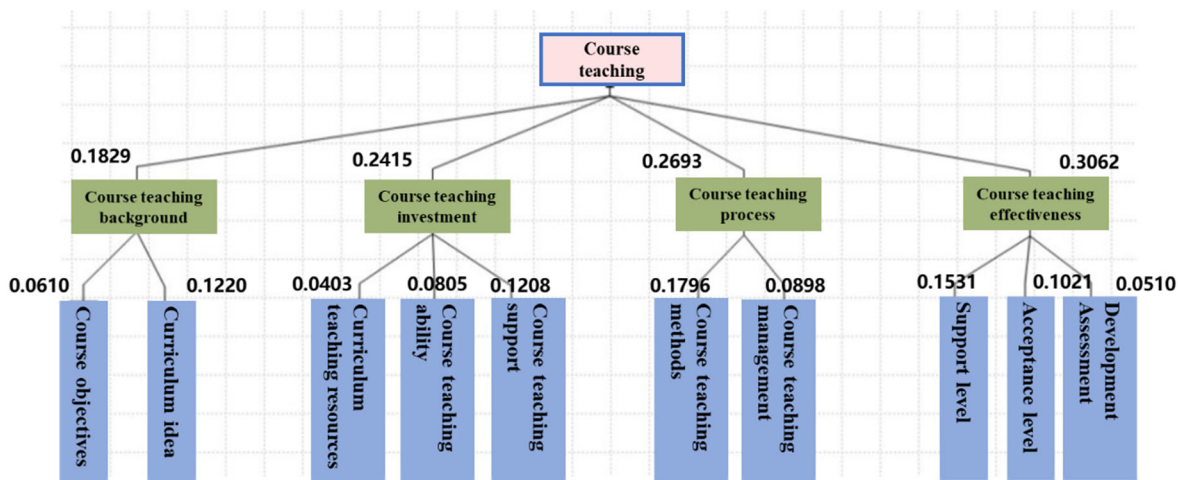
evaluation model. The target layer, i.e. the overall evaluation index, is the ideological and political evaluation system for college Chinese courses in vocational colleges; The criterion layer is the first level indicator layer, which includes the background of course teaching, course teaching investment, course teaching process, and course teaching effectiveness, with weights of 18.29%, 24.15%, 26.93%, and 30.62% respectively; The scheme layer is the second level indicator layer, which includes detailed indicators under each first level indicator. Among them, the indicator with the highest comprehensive weight is the development evaluation. The

comprehensive weight coefficient of this system can be used to quantitatively evaluate the ideological and political quality of college Chinese courses in vocational colleges; At the same

time, various factors that affect the ideological and political quality of college Chinese courses in vocational colleges can also be measured.

Ranking weights of elements in the solution layer for decision objectives

alternative	weight	Weight sorting
Course teaching methods	zero point one seven nine six	one
Support level	zero point one five three one	two
Curriculum Philosophy	zero point one two two	three
Course teaching support	zero point one two zero eight	four
Acceptance level	zero point one zero two one	five
Course teaching management	zero point zero eight nine eight	six
Course teaching ability	zero point zero eight zero five	seven
Course objectives	zero point zero six one	eight
Development assessment	zero point zero five one	nine
Curriculum teaching resources	zero point zero four zero three	ten



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results of the Innovation Team for Ideological and Political Education in Chinese Language Courses at Guangzhou Nanyang Vocational College of Technology (Project No. NY-20220Q-KCTD006).

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