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Teaching Models and Practical Strategies for Cultivating Talents for International Communication of Chinese Culture in the Internet Era

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SUMMARY: *Against the backdrop of the Internet era, international cultural communication plays a vital role in strengthening national cultural soft power, and the key to such communication lies in the competence of international cultural communication talents. This paper uses structural equation modeling and exploratory factor analysis to explore the influencing factors of the cultivation of Chinese cultural international communication talents, and then uses a system dynamics model to analyze the operation mechanism of the cultivation of cultural international communication talents. On this basis, a teaching mode for the cultivation of cultural communication ability of international communication talents is proposed and applied to teaching practice. The study shows that the synergy mechanism between discipline and specialty exerts a significantly positive effect on talent cultivation performance, while the intensity of industry-university cooperation research has a significant inverted U-shaped moderating effect between the two. Government guidance, rational allocation of elements and multi-channel fund-raising are the main motivating factors driving the integration of industry and academia in cultivating international communication talents for Chinese culture. In addition, the integration of international communication talents cultivation pathway into the teaching mode can more effectively improve students' learning motivation, and the experimental group using this teaching mode effectively improved their intercultural communication skills compared with the control group using the conventional mode ($p < 0.05$).*

KEYWORDS: *structural equation modeling; exploratory factor analysis; system dynamics; talent cultivation; cultural international communication*

1 Introduction

Under the dual drive of globalization and the development of the Internet, the media, as the core carrier of China's cultural international communication, and the current situation of its talent cultivation carriers both reflect accumulated achievements from the past as well as new-era challenges [1]. From the height of the strategy of cultural power, although the cultivation system of Chinese cultural international communication talents has taken shape, there are still a series of urgent issues that need to be addressed [2]. At present, the cultivation of Chinese culture and international communication talents often lacks a clear orientation in terms of goal positioning. On the one hand, the cultivation of "international vision" still remains on the surface, and although media practitioners have access to international news and information, they lack in-depth cultural understanding and cross-cultural communication skills [3]. On the other hand, the shaping of "cultural foundation" remains insufficient, and no effective approach

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has yet been established to support both the inheritance and innovation of outstanding traditional Chinese culture, which makes it difficult to accurately convey the essence of Chinese culture in international communication [4]. As for the training mode of talents in universities, the traditional single training system is difficult to meet the demand for complex talents in international cultural communication. The media industry requires practitioners not only to have professional knowledge of news communication, but also to master the knowledge and skills of cross-cultural communication, digital media technology, international relations and many other fields. The current training system often focuses on the teaching of theoretical knowledge and lacks opportunities for interdisciplinary integration and practical training, which makes it difficult for talents to apply what they have learned to practical work, especially in the new media environment, where this deficiency is particularly obvious [5-8].

In addition, the limitation of resources is also a major challenge facing the cultivation of Chinese culture and international communication talents at present. Although some universities and media organizations have begun to try to cooperate with international media organizations to provide internships and exchange opportunities for practitioners, on the whole, such resources are still limited, making it difficult to meet the demand for large-scale and high-quality talent training [9-11]. At the same time, China's media industry is relatively lagging behind in the internationalization process, providing practitioners with practice opportunities and career development paths that are not broad enough [12]. The implementation of differentiated strategies for talent cultivation is insufficient, failing to fully consider the characteristics of different practitioners and the diversified needs of the international cultural communication field [13].

The literature has demonstrated the necessity of improving the efficacy and efficiency of the training process for qualified individuals, and researchers are always looking for ways to use cutting-edge technology to do so. Through the application of artificial intelligence technology, literature [14] optimized the training process of cross-cultural international communication talents and demonstrated high recognition accuracy and precision through the RBFNN model through iteration, thereby facilitating the cultivation of international cultural communication talents. Literature [15] recognizes the importance of intercultural communication skills within the framework of the "Belt and Road" initiative and suggests a successful method for developing intercultural international communication skills by fusing language and culture education. A network information service (NIS) system that uses IoT technology, wireless sensor networks, and machine algorithms for interactive talent training is proposed in literature [16]. This system improves the real-time development of international communication talent training and helps to increase its intelligence and efficiency. By integrating artificial intelligence technology into the development of cross-cultural international communication talent, literature [17] created a Cross-cultural Intelligent Language Learning System (CiLS) that aims to give students individualized learning opportunities to improve their cross-cultural communication competency. Literature [18] explores the various dimensions of intercultural communication in the international communication training process, and states that the best method of acquiring intercultural communication skills is by training in a simulated environment, and the application of AI tools such as dialogue systems or chatbots can yield great success in achieving that goal. Literature [19] observes that intercultural coordination skills are vital in ensuring that the quality of international communication training is improved and learners are developed, and hence proposes a theoretical model of intercultural coordination in the digital era to explore the interactions between learners, education systems, digital environments, and educators in a globalized and digitized world.

The paper's goal is to discuss how Chinese talent is developing in terms of their ability to communicate culturally and internationally in the setting of the Internet era. In order to do this,

a structural equation modeling method to talent development is created, after which the influencing elements are determined. Based on this, the mechanism of the training system for the talents of Chinese culture in worldwide communications is analyzed using system dynamics modeling methodologies and industry-university-research collaboration. Based on this, a model for educating such abilities is created after the method for enhancing their cultural communication skills is determined.

2 Empirical Analysis of the Influencing Factors of Chinese Culture International Communication Talent Training

This chapter uses structural equation modeling and a questionnaire to explore the influencing factors of Chinese culture international communication talent cultivation in the Internet era.

2.1 Study design

2.1.1 Questionnaire process

This questionnaire was designed to investigate seven dimensions of cultural and international communication talent cultivation: institutional orientation, grassroots leadership, knowledge base, knowledge ability, discipline-professional synergy, intensity of industry-academia cooperation, and performance of talent cultivation, with the target of 2023 undergraduates of language majors, current students, and faculty members of China's "double first-class" universities. The questionnaire is based on the different focuses of each level. The questionnaire is designed according to the different focuses of each level, and the questions are designed in accordance with the principles of scientific rationality and reliable results, and the scale-type questions are chosen as much as possible. The questionnaire contains three parts: basic information of the sample subjects, satisfaction evaluation of various practical courses, internship bases, training mechanisms, etc. and evaluation of disciplinary construction and curriculum construction, etc. The Likert 5-point scale was used to evaluate each measurement index, and the online questionnaire survey was conducted, with the number of validly filled in questionnaires being 1,546, and the validity rate being 96.05%.

2.1.2 Questionnaire reliability tests

Reliability is a valid measure of the consistency or stability of research data or findings. Prove its validity by measuring the expression of the question. In this paper, the reliability coefficient of the questionnaire is measured using the Cronbach α reliability coefficient method (Cronbach's Alpha), which is more commonly used nowadays:

$$\alpha = \frac{k}{k-1}\left(1-\frac{\sum_{i=1}^{k} S_i^2}{S^2}\right) \tag{1}$$

where: k denotes the total number of questions, S denotes the variance of the total score for similar questions, and S_i denotes the variance of the score obtained for question i.

The data were tested for reliability and the Cronbach's alpha value was 0.914, which is greater than 0.7, and the overall data of the questionnaire was considered credible. In addition, reliability testing was conducted separately for each latent variable, so that the item data under every latent construct could reach the highest possible level of credibility. The results of the

reliability analysis of the questionnaire measurement variables are shown in Table 1. It can be seen that the Cronbach's Alpha coefficients of the seven latent variable factors set in this paper are all higher than 0.9 in two of them, higher than 0.8 in three of them, and higher than 0.7 in only two of them, which indicates a high level of internal consistency and correlation among the measurement variables, confirming that the measurement data satisfy the reliability requirements of Structural Equation Modeling.

Table 1: Results of reliability analysis

Project	Project Name	Load coefficient	Cronbach's Alpha	Number of items
Institutional orientation (IO)	Development plan (IO1)	0.904	0.906	4
	Resource guarantee (IO2)	0.907		
	Professional title evaluation (IO3)	0.906		
	Incentive measures (IO4)	0.902		
Grassroots leaders (GL)	Human capital (GL1)	0.859	0.798	3
	Social capital (GL2)	0.927		
	Management cognition (GL3)	0.932		
Knowledge foundation (KF)	Knowledge breadth (KF1)	0.895	0.947	3
	Depth of knowledge (KF2)	0.872		
	Knowledge heterogeneity (KF3)	0.884		
Knowledge and ability (KA)	Absorption capacity (KA1)	0.736	0.843	3
	Integration ability (KA2)	0.951		
	Transformation ability (KA3)	0.963		
Discipline – major synergy mechanism (SM)	Discipline construction (SM1)	0.628	0.779	4
	Practical internship (SM2)	0.882		
	Course construction (SM3)	0.837		
	Academic research (SM4)	0.859		
The intensity of industry-academia cooperation research (RI)	Joint research and development project (RI1)	0.708	0.825	3
	Participate in consulting advisors (RI2)	0.684		
	Funding for horizontal projects (RI3)	0.652		
The performance of cultivating talents for the international dissemination of Chinese culture (CP)	Knowledge system (CP1)	0.895	0.805	3
	Learning and practical ability (CP2)	0.923		
	The intelligence quotient, emotional quotient and resilience quotient of talents (CP3)	0.954		

In this paper, the validity of the scales was tested using a structural validity approach:

$$KMO = \frac{\sum_{i \neq j} r_{ij}^2}{\sum\sum_{i \neq j} r_{ij}^2 + \sum\sum_{i \neq j} p_{ij}^2} \tag{2}$$

where: r_{ij} is the correlation coefficient of variables x_i and x_j. p_{ij} is the partial correlation coefficient of variables x_i and x_j under the condition of controlling other variables unchanged. KMO is a metric used to test the suitability of factor analysis. factor analysis can

be performed when the KMO value is greater than or equal to 0.6. The closer it is to 1, the higher the correlation is and the more suitable it is for factor analysis.

The validity of the data in this survey was tested using SPSS 28.0 software; the validity test results are displayed in Table 2. The questionnaire data collected for this study is appropriate for factor analysis, as evidenced by the KMO measure value of the sample data reaching 0.932 and the probability value p of the Bartlett's ball test reaching the significance requirement ($p=0.000<0.001$).

Table 2: Validity analysis results

KMO sampling appropriateness quantity/test statistics		0.932
Bartlett's sphericity test	Approximate chi-square χ^2	29341.524
	df	253
	Sig.	0.000

2.2 Constructing and analyzing the structural equation model of talent cultivation

2.2.1 Structural equation modeling

Structural equation modeling (SEM) is a multivariate statistical approach that integrates and improves upon methods such as factor analysis, path analysis, and regression analysis, and is mainly applied to the exploration and analysis of complex multivariate data.

(1) Composition of structural equation modeling

A set of variables and parameters make up structural equation modeling, as illustrated in Figure 1. The variables can be separated into measurement variables and potential variables; the measurement variables can be measured directly; the potential variables can be estimated by projecting the measurement variables; the potential variables may have a measurement error; the measurement error forms the portion of the measurement variables that cannot be interpreted by the common potential variables. A comprehensive structural equation model typically consists of two parts: the measurement model, which defines the interactions between latent variables and observable variables, and the structural model, which captures the relationships among latent variables.

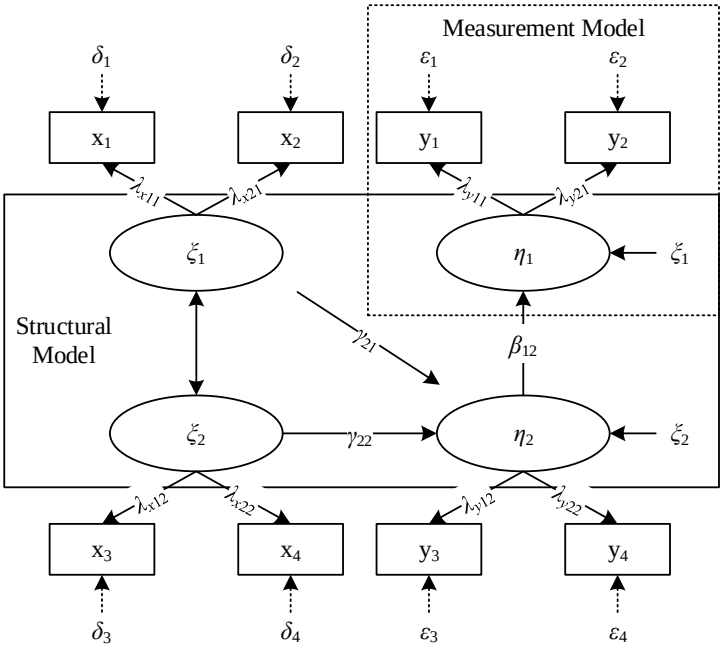

Figure 1: Structural equation model

In Figure 1, the rectangles represent the measured variables and the ellipses represent the potential variables, where ξ_1 and ξ_2 only affect the other variables with a single arrow, and are not themselves pointed to by the other variables with a single arrow, and are therefore called exogenous potential variables, and η_1 and η_2 are pointed to by the other variables with a single arrow, and are therefore called endogenous potential variables. The correlation between latent and observed variables is represented by λ, the relationship between exogenous and endogenous variables is denoted by γ, the relationship among endogenous latent variables is expressed by β, and δ, ε, and ζ represent the residual terms of exogenous observed variables, endogenous observed variables, and endogenous latent variables, respectively.

Equations (3) to (4) provide the linear relationships of the measurement model, while equation (5) represents the relationships of the structural model. These linear equations may also be used to describe the relationships between the parameters and variables in the figure:

$$y = \Lambda_y \eta + \varepsilon \tag{3}$$

$$x = \Lambda_x \xi + \delta \tag{4}$$

$$\eta = B\eta + \Gamma\xi + \zeta \tag{5}$$

(2) Analysis process of structural equation modeling

The analysis process of structural equation modeling is shown in Figure 2, which is mainly divided into two stages: model building and model estimation and evaluation. The first stage is to establish the hypothetical model to be verified through clear logical reasoning and dialectical thinking on the basis of information and literature, and to transform the theoretical hypothetical model into the path diagram of SEM. In the second stage, it is necessary to collect and organize data according to the content of the model in order to validate the hypothetical model, and it is necessary to identify the identifiability of the model and test the hypothetical model to meet the requirements of statistical analysis and software analysis before parameter estimation, and the

commonly used methods of parameter estimation are the great likelihood method, the two-stage least-square method, and the asymptotic distribution of the free method. The chi-square test (χ^2 , χ^2 / df), fitness index (GFI, AGFI, NFI, etc.), substitutability index (CFI, RMSEA, etc.), and residual analysis (RMR, SRMR) in the results of parameter estimation are compared with the standard judgmental values so as to assess the suitability of the hypothesized model, and the hypothesized model may be re-tested if the difference in the comparison results is large If the difference in comparison results is large, the theoretical basis, modification of the hypothetical model to assess again, and repeated to get the construction model closest to the factual model.SEM emphasizes the overall suitability of the model, so individual parameters do not meet the reference range can be combined with the theoretical analysis to consider the suitability.

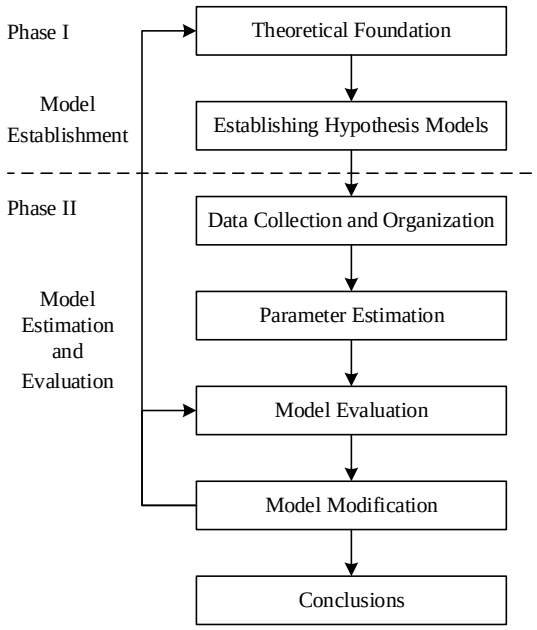

Figure 2: SEM analysis process

2.2.2 Model assumptions

The structural equation model of Chinese culture and international communication talent cultivation was constructed by selecting seven latent variables, including institutional orientation, grassroots leadership, knowledge base, knowledge competence, discipline-specialty synergy mechanism, research intensity of industry-university cooperation, and talent cultivation performance, and exploratory factor analysis was used to test the explanatory power of the selected measurement variables on the related issues. The structural equation modeling contains 7 latent variables and 23 observed variables. On the basis of the established latent variables and measurement variables, the following hypotheses are proposed:

H1: Discipline-specialty synergy mechanism has a significant positive effect on the quality improvement of Chinese culture and international communication personnel training.

H2: The institutional orientation of universities has a significant positive influence on the discipline-profession synergy mechanism.

H3: The leadership of grassroots academic organizations has a significant positive influence on discipline-profession synergy mechanism.

H4: The knowledge base of grassroots academic organizations has a significant positive effect on discipline-profession synergy mechanism.

H5: The knowledge capability of grassroots academic organizations exerts a significant positive effect on the discipline-profession synergy mechanism.

H6: The research intensity of industry-academia cooperation has a significantly positive moderating effect on the relationship between the quality of Chinese culture and international communication personnel training.

2.2.3 Factor analysis

In this paper, exploratory factor analysis was used to analyze the influencing factors, so as to analyze the rationality of variable design. The total variance explained and rotated component matrix are shown in Tables 3~4, respectively. Among them, F1, F2, F3, F4, F5, F6 and F7 are institutional orientation, grassroots leadership, knowledge base, knowledge ability, discipline-specialty synergy mechanism, research intensity of industry-academia cooperation, and talent cultivation performance, respectively. It can be seen that there are seven components with eigenvalues greater than 1, and the cumulative variance explained rate reaches 81.045%, so seven principal components can be extracted, corresponding to the seven potential variables set. Meanwhile, the loading coefficients of all the measured variables are greater than 0.7, which means that they can effectively respond to the influence of each measured variable on the potential variables, and the grouping of each indicator is consistent with that set in the previous section, so there is no need to correct the measurement model.

Table 3: Explanation of total variance

	Initial eigenvalue			Extract the sum of squares and load it			Rotate the sum of squares to load		
Component	Total	Variance /%	Accumulate /%	Total	Variance /%	Accumulate /%	Total	Variance /%	Accumulate /%
1	5.019	21.822	21.822	5.019	21.822	21.822	4.532	19.705	19.705
2	3.582	15.574	37.396	3.582	15.574	37.396	3.214	13.974	33.679
3	3.230	14.044	51.44	3.230	14.044	51.44	3.153	13.709	47.388
4	2.558	11.122	62.562	2.558	11.122	62.562	2.662	11.574	58.962
5	1.801	7.831	70.393	1.801	7.831	70.393	1.929	8.387	67.349
6	1.398	6.078	76.471	1.398	6.078	76.471	1.704	7.409	74.758
7	1.052	4.574	81.045	1.052	4.574	81.045	1.446	6.287	81.045
8	0.751	3.265	84.31						
9	0.421	1.83	86.14						
10	0.397	1.726	87.866						
11	0.365	1.587	89.453						
12	0.343	1.491	90.944						
13	0.323	1.404	92.348						
14	0.290	1.261	93.609						
15	0.273	1.187	94.796						
16	0.234	1.017	95.813						
17	0.208	0.904	96.717						
18	0.180	0.783	97.5						
19	0.157	0.683	98.183						
20	0.136	0.591	98.774						
21	0.120	0.522	99.296						
22	0.089	0.387	99.683						
23	0.073	0.317	100						

Table 4: Rotating component matrix

Variables	F1	F2	F3	F4	F5	F6	F7
IO1	0.964						
IO2	0.943						
IO3	0.931						
IO4	0.927						
GL1		0.884					
GL2		0.825					
GL3		0.796					
KF1			0.773				
KF2			0.754				
KF3			0.826				
KA1				0.831			
KA2				0.863			
KA3				0.792			
SM1					0.872		
SM2					0.854		
SM3					0.803		
SM4					0.815		
RI1						0.795	
RI2						0.798	
RI3						0.814	
CP1							0.827
CP2							0.809
CP3							0.804

2.2.4 Talent training structural equation modeling and testing

Based on the theoretical model constructed in the previous section and the data recovered from the questionnaire, Amos24 software was used to establish a structural equation model of the factors influencing the performance of Chinese culture and international communication personnel training, and to test the relevant research hypotheses. The analysis process includes two stages: initial model construction, model correction and determination, and the final model fitting results after correction are shown in Table 5 and Figure 3. The fitted parameter values of χ^2 / df , RMSEA, TLI, CFI, IFI and GFI corresponding to the model are 2.157, 0.069, 0.898, 0.901, 0.882, 0.912, respectively, with reference to the data analysis criteria of $1< \chi^2 / df <3$, RMSEA<0.8, TLI, CFI, IFI and GFI. The data analysis standard close to 0.9 shows that the model fits the indicators well. Specific research hypothesis analysis and verification results are as follows.

(1) Verification of the relationship between discipline-specialization synergy mechanism and the performance of Chinese cultural and international communication talents training. The standardized path coefficients between discipline-professional synergy mechanism and the performance of Chinese culture and international communication talents cultivation are 0.74 (P<0.001), respectively, which indicates that the research hypothesis H1 passes the validation.

(2) The validation of the relationship between organizational factors and discipline-profession synergy mechanism. The standardized path coefficients between institutional orientation, team leadership, knowledge base, knowledge competence and discipline-professional synergy mechanism are 0.94, 0.55, 0.67, 0.73 (P<0.001), respectively, which

indicates that the research hypotheses H2, H3, H4, and H5 pass the verification.

(3) Verification of the discipline-profession synergy mechanism's mediating role. It is evident from the results of structural equation modeling analysis and the aforementioned analysis of the relationship between discipline-professional synergy mechanism and organizational factors, as well as the relationship between discipline-professional synergy mechanism and the performance of China's cultural and international communication talents training, that both the discipline-professional synergy mechanism and organizational factors have a significant positive impact on the performance of China's cultural and international communication talents training. These results suggest that the discipline-profession synergy mechanism plays a mediating role between organizational factors and the performance of Chinese cultural and international communication talent cultivation.

Table 5: Fitting results of the structural equation model

Fitting index	χ^2/df	RMSEA	TLI	CFI	IFI	GFI
Numerical value	2.157	0.069	0.898	0.901	0.882	0.912

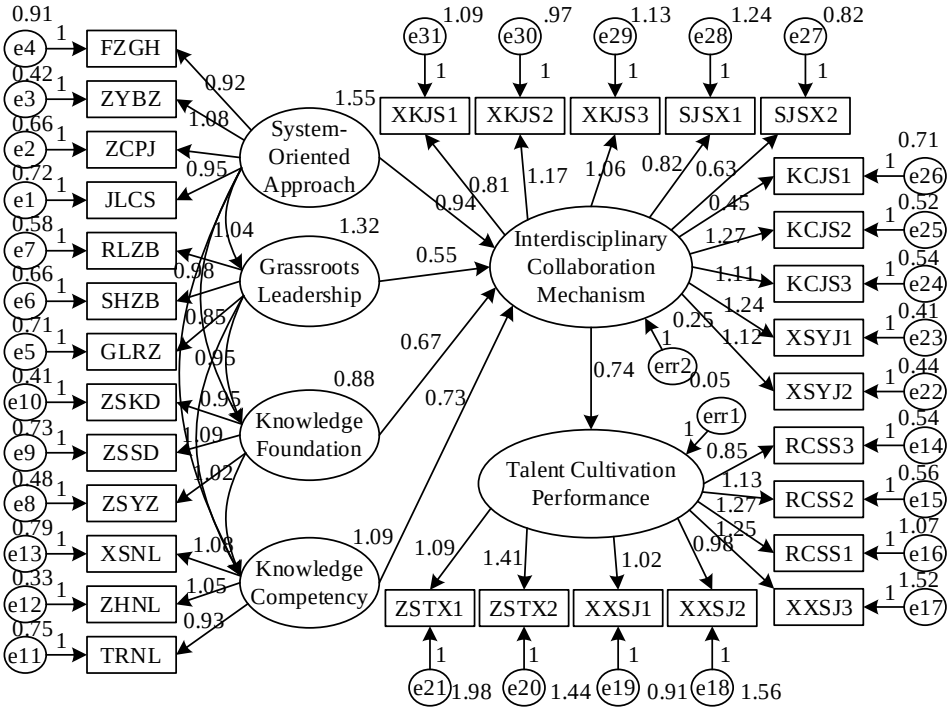

Figure 3: The final structural equation model

2.2.5 Moderating effects test

This study uses cascade regression analysis to test the moderating effect of the research intensity of industry-academia cooperation in the relationship between discipline-professional synergy mechanism and the performance of Chinese culture and international communication talents training. Referring to the moderating effect test method, in order to minimize the variance inflation factor (VIF) and reduce the problem of multicollinearity, the data of the research variables were firstly centered, and then the product terms and equations were constructed, and the variables were put into the regression equations in order to be analyzed using SPSS 28.0 software.

The regression models were checked for multicollinearity, autocorrelation, and heteroscedasticity problems using VIF, Durbin-Watson, and scatterplots of regression models

before proceeding to the analysis of moderated effects data. Data analysis showed that all regression models had VIF values significantly less than 10 and essentially less than 5, DW values were close to 2, and scatter plots were disordered and clustered around each center point. Therefore, the data results of the regression models in this study have good robustness.

In this paper, the research intensity of university-industry cooperation is divided into three levels of “low”, “medium” and “high”, and the corresponding scores are [1,3], (3,5] and (5,7]. The results of hierarchical regression analysis of the moderating effect of the research intensity of industry-academia cooperation on the relationship between discipline-profession synergy mechanism and the performance of Chinese culture and international communication talent cultivation are shown in Table 6, where ** denotes P<0.01, and *** denotes P<0.001. The moderating role of the research intensity of industry-academia cooperation is presented in Figure 4. The specific moderating effect research hypothesis validation analysis is as follows:

(1) When the research intensity of industry-academia cooperation is low, the discipline-specialty synergy mechanism shows a significant positive effect on the performance of Chinese culture and international communication talent cultivation, with a regression coefficient of 0.124 (P<0.01).

(2) When the intensity of industry-academia cooperative research is in the middle, the discipline-specialty synergy mechanism still exerts a significant positive influence on the performance of Chinese culture and international communication talent cultivation, and the regression coefficient reaches 0.612 (P<0.001).

(3) When the intensity of university-industry cooperative research is high, the discipline-specialty synergy mechanism no longer shows a significant positive influence on the performance of Chinese culture and international communication talent cultivation, and the regression coefficient becomes -0.131 (P<0.01).

This indicates that the regression coefficient and the probability of significance of discipline-specialty synergy mechanism on the performance of Chinese culture and international communication talents training do not increase linearly when the intensity of university-industry cooperative research changes from low to high, but rather develops in an inverted U-shape. Therefore, when the research intensity of University-Industry Cooperation increases, the discipline-specialty synergy mechanism does not necessarily promote the performance of Chinese culture and international communication talents training simultaneously, and the research hypothesis H6 is partially verified.

Table 6: Results of hierarchical regression analysis

Variables	The performance of cultivating talents for the international dissemination of Chinese culture			
	Model 1	Model 2	Model 3	Model 4
Predictor variable				
Discipline – major synergy mechanism (SM)	0.648**	6.405**	7.263**	5.421**
Adjusting variable				
The intensity of industry-academia cooperation research (RI)		0.485***	0.406***	0.079
Regulatory effect				
SM×RI		0.124**	0.612***	-0.131**
R^2	0.465	0.533	0.569	0.595
Adjusted R^2	0.437	0.472	0.443	0.462
F-statistic	27.219***	26.423***	28.424***	30.151***

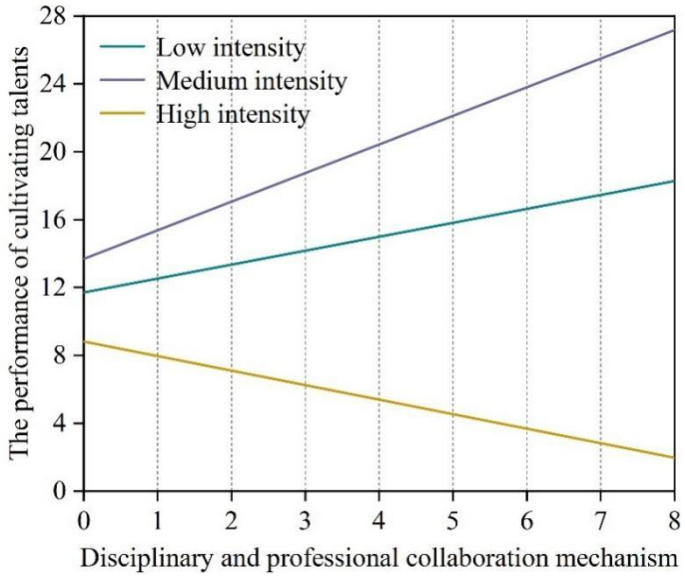

Figure 4: The moderating effect of the intensity of industry-academia cooperation research

3 Analysis of the System Dynamics of Chinese Culture International Communication Talent Cultivation

It is clear from the aforementioned empirical study on the variables influencing the growth of Chinese culture and international communication skills that the institutional orientation of the university itself, such as resource assurance and motivation, as well as the degree of industry-university cooperation and the discipline-specialization synergy mechanism play a significant role in the development of Chinese culture and international communication skills. In other words, the degree of industry-university-research collaboration will have a significant impact on the outcomes of talent development. In this instance, the dynamic model will be used to examine the mechanism of the Chinese cultural international communication talent development system, and the perspective of industry-university-research collaboration will be chosen for this chapter.

3.1 System dynamics modeling

System Dynamics (SD) is a discipline that analyzes and studies information feedback, which has the functions and advantages of recognizing system problems and solving them, and is suitable for analyzing system problems with many influencing factors and complex relationships.

Since the system is made up of a complex structure, it will be divided into several subsystems in order to properly characterize its holistic and non-linear properties. Based on their causal links, the systems will be connected; this model may be defined as:

$$\begin{cases} T = \left(S, R_{\mu}\right) \\ S = \left\{S_j \mid j \in I\right\} \\ R_{\mu} = \left\{r_{\mu} \mid j \in J, k \in K, J + K = I\right\} \end{cases} \tag{6}$$

That is, the overall system T contains S subsystems, and R_{μ} describes the relationship

matrix between subsystems. According to the different structures, the subsystems can be categorized into benign and non-benign structures, in which the benign structures can be directly expressed by level variables, rate variables, auxiliary variables and correlation functions.

The structures in the system that cannot be accurately characterized by mathematical functions are often described by qualitative, semi-qualitative, or semi-quantitative methods, with the exception of Eq. (7), which explains different nonlinear interactions between variables at a particular moment:

$$\begin{aligned} L' &= KR \\ \begin{pmatrix} R \\ A \end{pmatrix} &= W \begin{pmatrix} L \\ A \end{pmatrix} \end{aligned} \tag{7}$$

where L' is the pure rate variable, K is the transfer matrix, R is the rate variable, A is the auxiliary variable, W is the relation matrix, and L is the level variable.

The principal steps of system dynamics modeling are presented in Figure 5. In the use of system dynamics modeling to analyze real-world problems, most of them are open systems, so the first step needs to define the object of study and analyze the system. The second step is to analyze the structure of the system, clarify the system level and sub-module feedback relationship and determine the connection between the system. The third step is to formulate structural equations and a system dynamics model on the basis of the causal relationships among system elements, while specifying parameter types and assigning initial values. In the fourth step, the model is examined and analyzed under scenario settings and policy simulations.

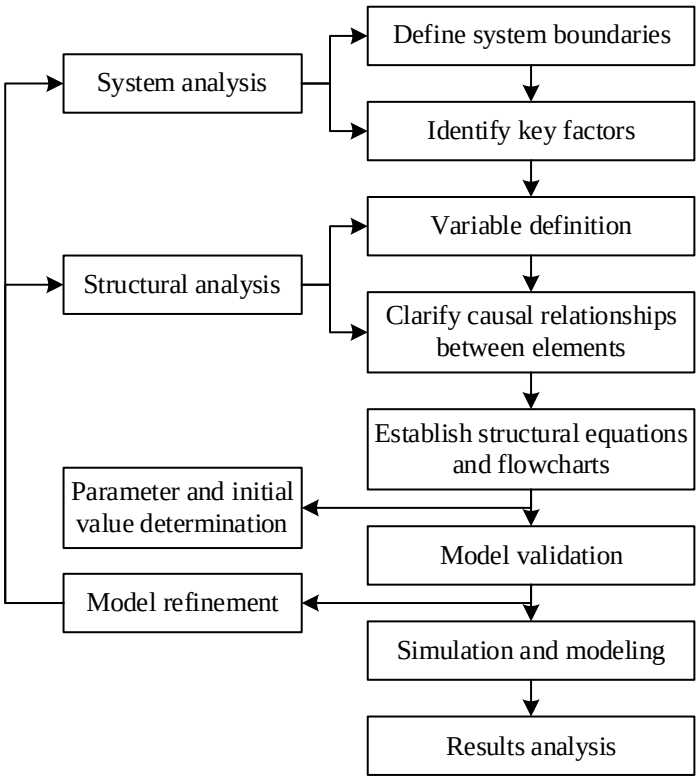

Figure 5: Main steps of system dynamics modeling

3.2 System Dynamics Modeling of Talent Cultivation

Considering that the ecosystem of industry-university-research cooperation involves the role of multiple subjects, and its ecological deduction and circulation is a complex dynamic process, system dynamics modeling is applied to generate multiple paths for the cultivation of Chinese culture international communication talents. According to the causal relationship within the model, the following loops are obtained.

Feedback loop 1: Cultures and international communication talents cultivation in universities → comprehensive strength of universities → capital investment → language knowledge base and ability → number of excellent papers → intercultural communication ability → number of certificates obtained by students → student quality index → employment rate of graduates → talent cultivation performance of industry-university-research cooperation platform.

Feedback Loop 2: Capital investment by research institutions→Cultural and international communication talent cultivation in colleges and universities→language knowledge base and competence→number of excellent papers→intercultural communication competence→student quality index→number of multilingual speakers→number of achievements→results transformation rate of university-industry-research cooperation efforts→talent cultivation performance of the platform for university-industry-research cooperation.

Feedback Loop 3: Enterprise capital investment→cultural international communication talent cultivation in universities→language knowledge base and competence→intercultural communication ability→number of certificates obtained by students→student quality index→ employment rate of graduates→number of multilingual employees cultivated→capacity building→enterprise earnings→industry-university-research cooperation platform talent cultivation performance.

Combined with the co-evolutionary process of Chinese culture international communication talent cultivation in the context of industry-university-research cooperation, the talent cultivation system dynamics model function is abstracted, with five state variables, namely, university capital, research institution capital, talent cultivation capacity of the cooperation platform, student quality index, and enterprise capital, in addition to five rate variables, nine auxiliary variables, and 12 constants. The data are partly derived from the China Statistical Yearbook, official websites of universities and relevant reports, and for the data that cannot be obtained in statistical information, questionnaires and regression fitting are used to derive them. For the quantification of certain qualitative indicators, a research questionnaire was made through the Richter Scale, and such indicators mainly include language knowledge base and competence, comprehensive strength of universities, cross-cultural communication competence, and talent cultivation performance of cooperative platforms, etc., to enhance the objectivity of the model's portrayal of talent cultivation behaviors.

3.3 Simulation analysis of system dynamics model

In order to study the development trend of industry-university-research cooperation in training cultural and international communication talents, we use VENSIM PLE to perform system simulation by analyzing the relations between system variables based on the role played by the system variables according to the data. In this paper, University A and the other institutions involved in cooperation with University A on industry-university-research cooperation will be used as the research object for system dynamics study. Certain state variables in the model are given their values immediately, whereas table functions, delay functions, and other functions are used to explain the other state variables.

3.3.1 Role of higher education institutions

Industry-university-research cooperation is the main way to cultivate talents for international cultural communication in China at present. In order to explore the influence of the input ratio of universities in the whole industry-university-research cooperation system on the overall efficiency at this stage, the magnitude of the change of the main output parameters is analyzed by changing the inputs of individual aspects respectively and keeping other parameters unchanged.

(1) Capital input ratio of universities

Set the model step as 1 year, the time as 10 years, do not change other parameters, increase the capital investment ratio of universities to the University-Industry-Research Cooperation Platform by 1%, you can get the performance change curve of the cooperation platform for cultivating cultural and international communication talents as shown in Figure 6. Among them, Curve 1 and Curve 2 represent before and after the change, respectively, and the same afterward. It can be seen that curve 1 and curve 2 do not have great variability. Relatively speaking, the contribution of colleges and universities to the cultivation of talents by industry, academia and research in the simulation is not significant.

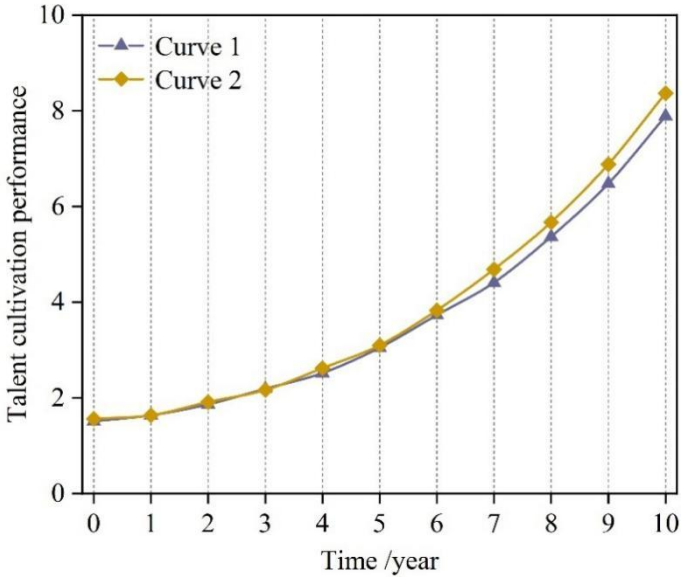

Figure 6: The performance of talent cultivation from the perspective of capital in universities

(2) Student quality training index

By changing the proportion of school capital investment without changing other parameters, the student training quality index can be obtained as shown in Figure 7. The results from the changes of curve 1 and curve 2 also show that the contribution of university capital to the cultivation of talents by industry, university and research is relatively insignificant.

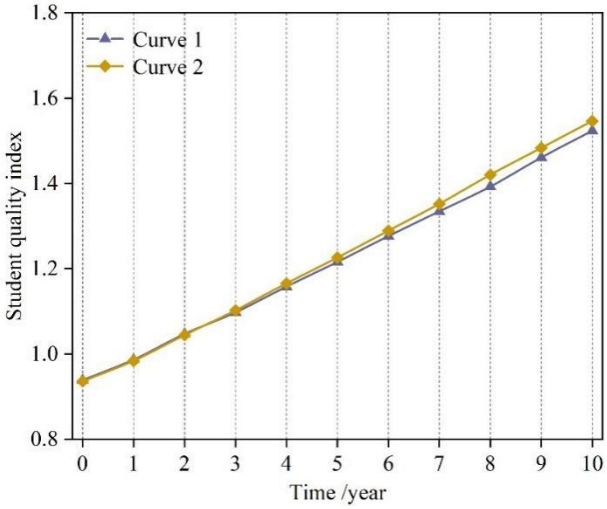

Figure 7: Student quality index

3.3.2 Enterprise roles

Enterprises, as the users of Chinese culture international communication talents and the main body of culture international communication, undertake the important tasks of talent use and development, the function of integrating Chinese culture into product design and industrial development. In the system dynamics model of industry-university-research, in order to explore the correlation between enterprise input contribution and talent cultivation in industry-university-research cooperation, the enterprise behavior subsystem is taken as the research scope, to change the intensity of the enterprise's input of industry-university-research linkage, and to compare the output results of talent cultivation.

(1) Proportion of enterprise capital input

The model step setting is still 1 year, the length of time is 10 years, change the proportion of enterprise capital input, keep other parameters unchanged, you can get the simulation curve of talent cultivation performance of cooperation platform as shown in Figure 8. It can be seen that the contribution of enterprise capital to the talent cultivation performance of the cooperative platform is not significant.

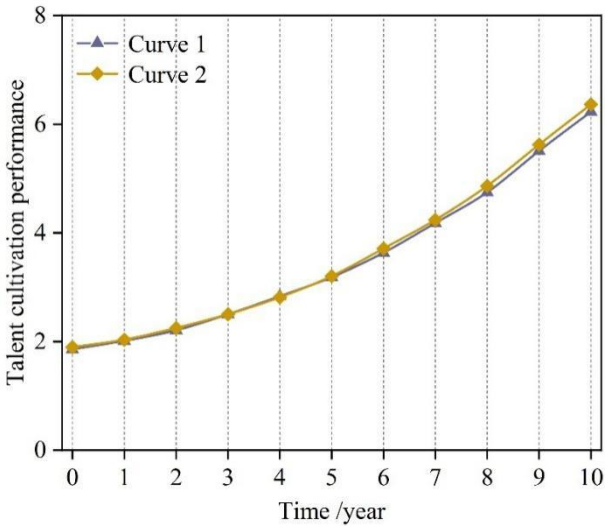

Figure 8: The performance of talent cultivation from the perspective of corporate capital

(2) Simulation of industry-university-research cooperation strength

Increasing the coefficient of industry-university-research cooperation by 5%, the following change curve of talent cultivation performance of cooperation platform can be obtained as shown in Figure 9. At the 10th year, the talent cultivation performance of cooperation platform in curve 2 is improved by 49.46% compared with curve 1. Compared with the financial input, the coefficient of the intensity of industry-university-research cooperation is the main variable affecting the talent cultivation performance of the cooperation platform.

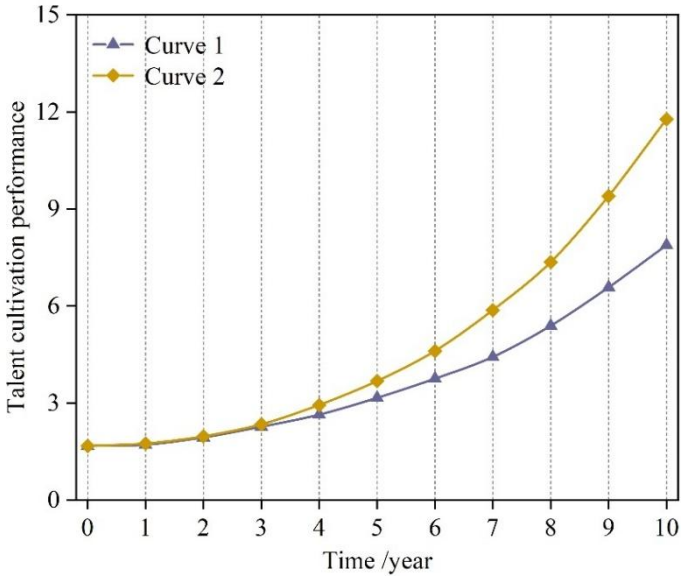

Figure 9: Performance from the perspective of cooperation intensity

3.3.3 Role of scientific institutions

In the industry-university-research cooperation, the participation of scientific research organizations in the process of project organization, human capital, and results incubation is of great significance for resource allocation, advantageous resource pooling, talent introduction, and results transformation. In the system dynamics model of Chinese culture international communication talent cultivation through University-Industry-Research Cooperation (UIRC), we change the proportion of the financial input of research organizations and keep other parameters unchanged to assess the strength of the influence of research organizations in the cultivation of talents through UIRC. This paper mainly analyzes the influence of scientific research institutions in the performance of talent cultivation on the platform of University-Industry-Research Cooperation in terms of the capital input of scientific research institutions and the conversion rate of achievements.

(1) Achievement transformation rate

The model step is set to 1 year, the time is set to 10 years, do not change the other parameters, the University-Industry Cooperation strength of the results of the conversion rate increased by 1%, you can get the capital of scientific research institutions to change the curve as shown in Figure 10. It can be seen that the conversion rate of the results of industry-university-research cooperation efforts is significantly positively correlated with the capital investment affecting research institutions, and compared with curve 1, the enhancement of curve 2 reaches 49.34% in the 10th year.

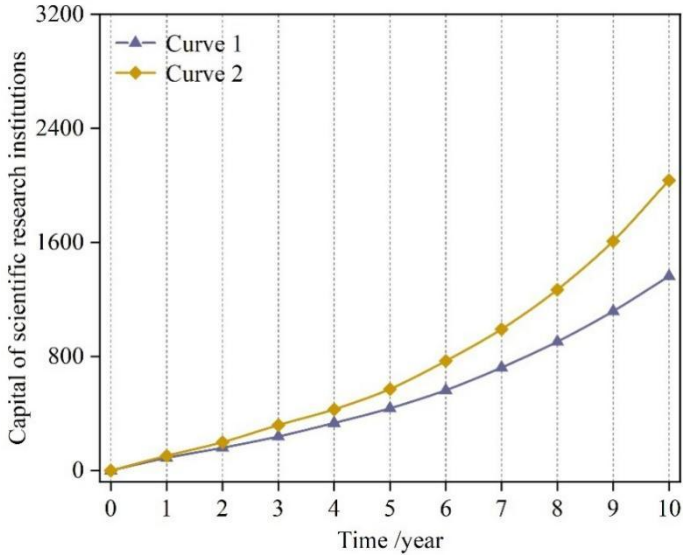

Figure 10: Capital of research institutions

(2) Capital input ratio of research organization

Without changing other parameters, increasing the capital investment ratio by 1%, we can get the change curve of talent cultivation performance of cooperative platform as shown in Figure 11. Obviously, the contribution of research institution capital to the talent cultivation performance of cooperative platform is not significant.

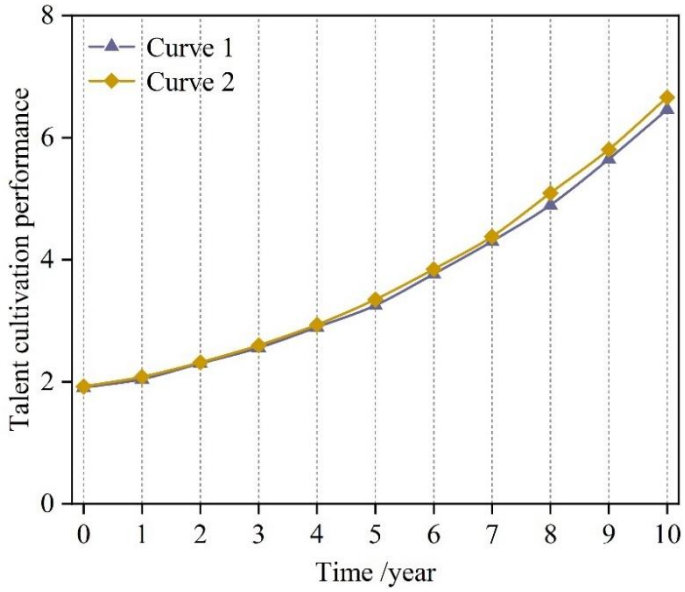

Figure 11: Performance from the perspective of research institution capital

3.3.4 Role of Government

In University-Industry-Research Cooperation, the government plays a variety of roles, mainly as a guide, a facilitator and a coordinator. As a guide, the government mainly utilizes policy instruments to promote the development of University-Industry-Research Cooperation, supplemented by necessary public opinion guidance. As a promoter, the government mainly adopts financial subsidies and establishes scientific research funds to encourage and promote the development of University-Industry-Research Cooperation. As a coordinator, the

government chiefly provides universities, research institutes, and enterprises with the necessary support in technology, data, and policy consultation related to University-Industry-Research Cooperation. In the SD model of talent cultivation of Chinese culture and international communication through University-Industry-Research Cooperation, the government's role is examined mainly by changing government input while keeping other parameters constant. The analysis of the government's role is mainly from the government's financial input and policy making to analyze the government's role, and the increase of government's financial input and the government's policy making, the performance of the talent cultivation platform under university-industry-research cooperation can be represented by the curve shown in Figure 12. It can be seen that the influence of the government on the talent cultivation performance of the industry-university-research cooperation platform is more significant. This suggests that the government plays a crucial role in advancing the cultivation of Chinese culture international communication talents through guidance, promotion, and coordination in university-industry-research collaborative education.

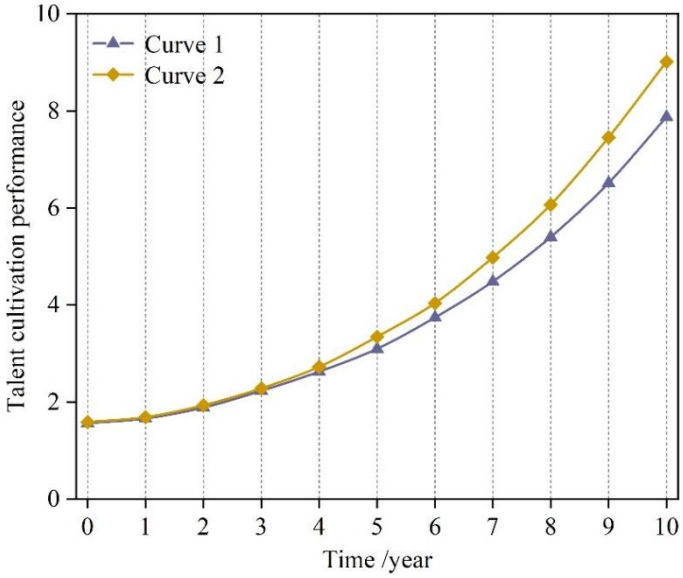

Figure 12: Performance from the perspective of the government

4 Design of Teaching Models for Cultivating Talents for International Communication of Chinese Culture

4.1 Pathways for the development of cultural communication competencies for international communication professionals

For international communication talents, proficiency in foreign languages is not equal to the ability to carry out effective cross-cultural communication and exchanges, and they also need to have excellent cultural communication ability. Based on the results of the previous study and relevant literature, this paper proposes the following paths for cultivating the cultural communication ability of Chinese culture international communication talents.

(1) Further optimize the training system for international communication talents

1) Establishing "small language + cultural communication" majors

The prerequisite and foundation of cultural communication is to master the language that carries culture. Under the overall shortage of talents in small languages, universities should improve the system innovation, build disciplines and specialties to adapt to the new situation,

accelerate the construction of "small languages + cultural communication" majors, and enhance the social competitiveness of the majors.

2) Specialized curriculum focuses on the cultivation of translation ability.

Translation ability is the "necessary equipment" for international communication talents to carry out cultural communication, therefore, colleges and universities should pay attention to and accelerate the improvement of the relevant professional translation course system to meet the demand for Chinese culture international communication talents for the construction of "Belt and Road".

In the process of translation teaching, in addition to the study of translation theory, more emphasis should be placed on applying students' practical translation ability to the field of cultural communication and strengthening translation practice. In addition, students should be trained to utilize the latest translation technology to improve the information technology quality of Chinese culture international communication talents, so as to serve the field of cultural communication in the Internet era more efficiently.

(2) Strengthen the cultivation of cultural self-awareness and cultural confidence

1) In-depth study of cultural theories in class

In today's Internet era, when cultural exchanges, collisions and fusions among countries are exceptionally frequent, the importance of maintaining a high degree of cultural self-confidence and cultural self-awareness is becoming more and more prominent. Therefore, colleges and universities should adjust their curricula to incorporate Chinese cultural literacy into the mandatory courses of international communication majors, so as to give equal importance to both secondary school and western studies, with a view to firmly establishing students' cultural self-confidence and cultivating their cultural self-awareness.

2) Actively carry out cultural practices outside the classroom

Colleges and universities can actively carry out various forms of cultural practice activities according to their own local realities and guide students to participate in them. International communication faculties should give full play to their own professional advantages and carry out close exchanges with cultural organizations and associations of domestic and foreign universities, so as to open up students' cultural horizons and cultivate an open and tolerant cultural mindset. At the same time, in the process of mutual exchanges and collisions of cultures from different regions and countries, they should establish self-confidence and pride in Chinese culture.

(3) Cultivation of international communication talents not only needs to be "invited in", but also needs to "go out".

1) Explore diversified cooperative education

Chinese universities should actively seek cooperation with similar universities in countries along the Belt and Road to build high-quality international communication talents, realize complementarity of advantages, and promote cultural communication among different countries. In addition, universities can also regularly organize cultural field trips for students to broaden their international horizons and deepen their understanding of foreign cultures.

2) Leveraging the "Internet +", teachers and students "go out"

Chinese universities should make full and reasonable use of the "Internet +" technology to provide international communication students with an online platform for international learning, so that they can take courses of similar majors in foreign institutions through online open courses, and at the same time, they can learn about foreign cultures in accordance with their own interests, so as to enhance their learning effect more effectively.

In addition, Chinese universities can set up special scholarships to encourage teachers to participate in international academic exchanges, conduct overseas internships, exchange visits of scholars and pursue further studies, which is conducive to improving the professional quality

of teachers, cultivating an open cultural mindset among them, and providing a guarantee for the cultivation of talents for the international dissemination of Chinese culture.

4.2 Practice of applying teaching model based on cultivation pathway

4.2.1 Experimental design

This part provides an applied evaluation of the planned pathway for developing skills for the global spread of Chinese culture. The research participants were second-year English majors from University A's School of Foreign Languages. Two classrooms, each with thirty-five students, were created for the experimental and control groups. For two semesters, there were six classes each week in the experimental course on basic English. While the experimental class used the teaching approach supported by the international communication talent cultivation route, the control class used the conventional teaching approach. The four elements of the intercultural communication competence survey scale are awareness, knowledge, attitude, and skills. The experiment uses students' intercultural communicative competence as a measure for assessing the efficacy of instruction. The scale adopts the Likert 5-point scale, with 0 indicating no ability, 1 poor ability, 2 average ability, 3 good ability, and 4 strong ability. Twelve questions were designed around each of the four dimensions of intercultural communication, totaling 48 questions. The collected data were analyzed using SPSS 28.0 and Excel.

The group analyzed the reliability of the four dimensions of the scale and the whole. The reliability Cronbach alpha coefficient values for the 12 questions of the four dimensions were 0.972 for attitude, 0.904 for knowledge, 0.727 for awareness, and 0.885 for skills, with high reliability for each dimension. The Cronbach’s alpha coefficient for the full 48-item scale was 0.948, indicating a high level of internal consistency for the overall questionnaire.

The null hypothesis (H0) of this study is as follows:

H7: There is no significant difference between the pathway-supported teaching model and the traditional teaching model in their effect on improving students’ intercultural communicative competence.

H8: There is no significance in the difference in the magnitude of improvement between male and female students in this teaching model from the perspective of gender.

4.2.2 Results of the pre-test of intercultural communication competence

The intercultural communication skill of the students in the experimental class and the control class was assessed before to the experiment; the pre-test results are displayed in Table 7.

It can be seen that the p-values from the independent-samples t-test for the total intercultural communicative competence score and the four sub-dimensions in the experimental and control classes are all above 0.05, indicating that no significant difference exists between the two classes either in overall intercultural communicative competence or in any of the four dimensions.

Table 7: The results of the independent sample t-test in the pre-test

	Variable	Experimental class (n=35)		Control class (n=35)		P value
		Mean	SD	Mean	SD	
Pre-test	Average score of dimensions	1.88	0.32	1.94	0.27	0.46
	Awareness	1.43	0.39	1.48	0.36	0.53
	Knowledge	1.74	0.35	1.86	0.29	0.12
	Attitude	2.47	0.36	2.49	0.31	0.85
	Skill	1.88	0.38	1.91	0.32	0.64

4.2.3 Student differences between the two teaching models

We administered the Intercultural Communication Competence Questionnaire once again a year after the teaching experiment was put into place, and we utilized the data to do a paired samples t-test on the experimental and control groups. Table 8 displays the paired samples t-test findings. It can be seen that the p-values of the paired-samples t-tests comparing pre-test and post-test mean scores in each dimension for the experimental class are all below 0.05, which leads to rejection of the null hypothesis and indicates that the experimental class improved significantly in overall intercultural communicative competence as well as in each specific dimension. Regarding the control class, there was no significant difference in intercultural communicative competence or in any of the dimensions; the p-values of the paired sample t-test of the mean scores of the pre-test and post-test in the variable dimensions with each dimension were 0.12, 0.14, 0.28, 1.03, and 0.41, respectively, which were greater than 0.05 and could not reject the null hypothesis.

Table 8: The paired sample t-test for comparison before and after the experiment

	Variable	Pre-test (n=35)		Post-test (n=35)		P value
		Mean	SD	Mean	SD	
Experimental class	Average score of dimensions	1.88	0.32	2.01	0.32	0.00
	Awareness	1.43	0.39	1.52	0.38	0.00
	Knowledge	1.74	0.35	1.88	0.34	0.00
	Attitude	2.47	0.36	2.56	0.38	0.00
	Skill	1.88	0.38	2.07	0.42	0.00
Control class	Average score of dimensions	1.94	0.27	1.95	0.26	0.12
	Awareness	1.48	0.36	1.49	0.33	0.14
	Knowledge	1.86	0.29	1.88	0.30	0.28
	Attitude	2.49	0.31	2.49	0.30	1.03
	Skill	1.91	0.32	1.92	0.34	0.41

4.2.4 Gender Differences in Teaching Effectiveness with Pathway Support in this Paper

The intercultural communication proficiency of male and female students in the experimental class was tested using an independent samples t-test under the gender approach. Table 9 shows the results of this test. The table below shows that the p value obtained using the independent samples t-test for assessing the intercultural communication competence of both male and female students before and after the test exceeds 0.05, with the exception of the knowledge sub-dimension in the pre-test ($p = 0.03$) and the skill sub-dimension in the post-test ($p = 0.02$). In this way, it can be argued that there is no statistically significant difference between the intercultural communication competence of both male and female students of the experimental class.

Table 9: Independent sample T-test of gender perspective in the experimental class

	Variable	Male (n=11)		Female (n=24)		P value
		Mean	SD	Mean	SD	
Pre-test	Average score of dimensions	1.81	0.14	1.91	0.34	0.21
	Awareness	1.39	0.26	1.45	0.41	0.65
	Knowledge	1.52	0.22	1.84	0.33	0.03
	Attitude	2.39	0.09	2.51	0.38	0.24
	Skill	1.94	0.11	1.85	0.39	0.67
Post-test	Average score of dimensions	2.06	0.10	1.97	0.34	0.08
	Awareness	1.48	0.23	1.54	0.40	0.72
	Knowledge	1.80	0.26	1.86	0.34	0.53
	Attitude	2.56	0.09	2.56	0.39	0.94
	Skill	2.40	0.15	1.92	0.38	0.02

For the difference in the role of the teaching model supported by the international communication personnel training pathway on the development of male and female students, an independent-samples t-test was conducted to compare the magnitude of progress made by male and female students, and the results are reported in Table 10.

It can be seen that, except for the difference in the dimension of awareness (p=0.97), the p-values of the independent-samples t-tests for the remaining dimensions are all below 0.05, so the null hypothesis is rejected, indicating significant gender differences between male and female students in both the mean scores and the degree of improvement across the dimensions of knowledge, attitudes, and skills. This means that male students have made more progress than female students under the teaching mode of the pathway support for the cultivation of international communication talents and the mode has been more effective. In terms of gender, this may be due to the fact that in this teaching model, there are many classroom activities that mimic the real world, and the number of male students is small, so they have relatively more opportunities to get exercise, and thus male students make more significant progress. The use of the teaching model supported by the International Communication Talent Cultivation Pathway in English classrooms enhances students' motivation to learn English, and the model has a significant effect on improving students' intercultural communication skills, thereby verifying the feasibility of the Talent Cultivation Pathway proposed in this paper.

Table 10: Independent sample t-test for the progress of male and female students

Variable	Male (n=11)		Female (n=24)		P value
	Mean	SD	Mean	SD	
Average score of dimensions	0.25	0.11	0.06	0.05	0.00
Awareness	0.09	0.14	0.09	0.08	0.97
Knowledge	0.28	0.16	0.02	0.07	0.00
Attitude	0.17	0.01	0.05	0.09	0.02
Skill	0.46	0.18	0.07	0.10	0.00

5 Conclusion

Based on structural equation modeling and system dynamics modeling, this paper explores the influencing factors and main dynamics of the cultivation of Chinese culture and international

communication talents, and designs a teaching model for the cultivation of Chinese culture and international communication talents.

Among the influencing factors of Chinese culture and international communication talents cultivation, system orientation, grassroots leadership, knowledge base and knowledge ability all have significant positive effects on discipline-specialization synergy mechanism ($P<0.001$). Discipline-profession synergy mechanism has a significant positive effect on talent cultivation performance ($P<0.001$), and plays a mediating role between organizational factors and talent cultivation performance. At the same time, the impact of discipline-specialty synergy mechanism on talent cultivation performance was significantly regulated by the intensity of University-Industry Cooperative Research, and its regulating effect showed an inverted U-shape development, with the regulating effect of low-intensity and medium-intensity cooperative research increasing in turn, and the negative regulating effect of high-intensity cooperative research.

Among the power sources of University-Industry-Research cooperation in cultivating Chinese culture international communication talents, relatively speaking, the contribution of universities themselves to University-Industry-Research cooperation in cultivating talents is not significant, while the government has a prominent position in University-Industry-Research cooperation in cultivating talents, and the capital investment of enterprises and scientific research institutes is an important guarantee for the smooth implementation of University-Industry-Research cooperation in cultivating talents.

Students in the experimental group using the teaching model significantly improved their intercultural communication skills compared to those in the control group using the traditional teaching model ($P<0.05$), according to the results of applying the recommended teaching approach for the development of talents in international communication based on Chinese culture in teaching. There are no differences in the intercultural communication skills of male and female students in the experimental group ($P<0.05$); however, the improvement of male students' intercultural communication skills is significantly better than that of female students' ($P<0.05$), which can be explained by gender inequality among the students. To accomplish this goal, more research should take a closer look at the problem and carry out more logical experimentation.

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References

[1] Zi-ze, Z., Hui-jia, S., Han-jie, Z., Le-le, T., Yan-zhao, C., & Wen-huan, W. (2025). Telling Chinese Stories in English: A Study on Strategies for Cross-cultural Communication and Dissemination. Available at SSRN 5222968.

[2] Sun, S. C. (2023). Confucius institutes: China’s cultural soft power strategy. Journal of Culture and Values in Education, 6(1), 52-68.

[3] Pan, S. Y. (2013). Confucius Institute project: China's cultural diplomacy and soft power projection. Asian Education and Development Studies, 2(1), 22-33.

[4] Zhang, H., Song, X., & Li, M. (2025, June). Research on the Cultivation of Intercultural Communicative Competence of Chinese Engineering Science and Technology Talents under the “Belt and Road” Initiative. In 2025 ASEE Annual Conference & Exposition.

[5] Flew, T. (2016). Entertainment media, cultural power, and post-globalization: The case of China’s international media expansion and the discourse of soft power. Global Media and China, 1(4), 278-294.

[6] Tang, W. (2025). Knowledge, Competencies, Vision: A Tripartite Framework for Cultivating Integrated Translation and Communication Talents. Translation and Foreign Language Learning, 1(2).

[7] Li, X. (2016, May). On the Paths to Cultivate International Talents under the Background of the Silk Road Economic Belt and the 21st Century Maritime Silk Road. In 2016 International Conference on Politics, Economics and Law (ICPEL 2016) (pp. 81-84). Atlantis Press.

[8] Gill, B., & Huang, Y. (2023). Sources and limits of Chinese ‘soft power’. In Survival (pp. 17-35). Routledge.

[9] Zhou, X. (2017, June). Analysis on Cross-cultural Competence and the Demands for Compound International Business Talents. In 2017 2nd International Conference on Education, Sports, Arts and Management Engineering (ICESAME 2017) (pp. 863-866). Atlantis Press.

[10] Guan, Y. (2024). Research and practice on international talent cultivation mode of film and television photography and production in undergraduate colleges and universities. Higher Education and Practice, 1(3), 98-102.

[11] Miao, L., Zheng, J., Jean, J. A., & Lu, Y. (2022). China’s International Talent Policy (ITP): The changes and driving forces, 1978-2020. Journal of Contemporary China, 31(136), 644-661.

[12] Yuanting, L. I. (2021). The Cultivation of Intercultural Communication Talents in Sino-Foreign Cooperative Education. DEStech Transactions on Social Science, Education and Human Science, (aeim).

[13] Yan, J., Wu, Q., & Guo, C. (2019, November). Research on educational pattern for international postgraduate talents cultivation. In 2019 IEEE 11th International Conference on Engineering Education (ICEED) (pp. 26-30). IEEE.

[14] Shen, G. (2022). AI-enabled talent training for the cross-cultural news communication talent. Technological Forecasting and Social Change, 185, 122031.

[15] Liu, D. (2020, April). The training of foreign language talents with intercultural communicative competence under the belt and road initiative. In International conference on mental health and humanities education (ICMHHE 2020) (pp. 95-98). Atlantis Press.

[16] Lin, F. (2022). Internet of Things Based Korean Cross-Cultural Communication Interactive Talent Training Model under Curriculum, Ideology, and Politics. Scientific Programming, 2022(1), 9122934.

[17] Xia, Y., Shin, S. Y., & Kim, J. C. (2024). Cross-cultural intelligent language learning system (CILS): Leveraging AI to facilitate language learning strategies in cross-cultural communication. Applied Sciences, 14(13), 5651.

[18] Serdyukova, E. F., Shapovalova, M. L., & Goncharova, O. V. (2024). Use of digital technologies in forming business communication skills and cross-cultural communication of students. In SHS Web of Conferences (Vol. 195, p. 04007). EDP Sciences.

[19] Shonfeld, M., Cotnam-Kappel, M., Judge, M., Ng, C. Y., Ntebutse, J. G., Williamson-Leadley, S., & Yildiz, M. N. (2021). Learning in digital environments: a model for cross-cultural alignment. Educational Technology Research and Development, 69(4), 2151-2170.