

Research on the Evaluation System of Bilingual Finance and Accounting Curriculum under the Background of Curriculum Ideology and Politics

-- An analysis based on CIPP framework

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Abstract: Under the new background of curriculum ideology and politics, bilingual finance and accounting curriculum, with its international vision and practical orientation, needs to combine curriculum ideology and politics to build a new scientific curriculum evaluation system. Guided by the concept of OBE, this paper comprehensively uses CIPP evaluation model and grey correlation analysis method to construct an evaluation system of bilingual finance and accounting courses under the background of curriculum ideology and politics, and analyzes its evaluation system by taking a typical course "International Trade" as an example. Finally, the conclusion is drawn: (1) Under the background of curriculum ideology and politics, the evaluation system of professional curriculum is constructed to fully reflect curriculum ideology and politics elements and promote the in-depth development of bilingual finance and accounting curriculum teaching. (2) The construction of bilingual finance and accounting curriculum evaluation system has higher requirements, and its scientific and comprehensive nature is crucial for cultivating finance and accounting talents with international vision. (3) Bilingual curriculum evaluation, represented by International Trade, should go beyond maximizing teaching results and combine ideological and political education with professional skills teaching to ensure that teaching results serve national interests.

Keywords: Curriculum Ideology and Politics; Accounting Course; CIPP Evaluation System; Grey Correlation Analysis.

1. Introduction

In 2020, the Ministry of Education issued the "Guiding Outline for the Construction of Ideological and Political Education in Higher Education Institutions," which clearly stated that integrating ideological and political education throughout the talent cultivation system and comprehensively advancing the construction of ideological and political education in courses is a strategic measure to implement the fundamental task of cultivating morality and talent [1]. This document signifies the official commencement and implementation of course ideological and political education, marking a new stage in the ideological and political education of colleges and universities. The aim of course ideological and political education is to permeate the entire educational process with ideological and political work, representing a new strategy for ideological and political education in the new era of higher education and a novel concept of curriculum. Therefore, it is essential to design and reform from the perspective of a broader ideological and political education framework. In 2024, the National Conference on Education emphasized the acceleration of building a high-quality education system, providing education that satisfies the people, advancing comprehensive reforms in the field of education, further constructing a new pattern of high-quality development in education, promoting new breakthroughs in the educational cause, and opening up new prospects for the high-quality development of education. It can be seen that "course ideological and political education" is not only an educational concept but also a teaching method; it is a new curriculum concept that promotes the intrinsic development of various subject courses and a curriculum teaching system

that constructs a new pattern of "education for all students, throughout the entire process, in all aspects, and with all elements involved," highlighting its essence in shaping the soul and nurturing talents [2].

Under the backdrop of globalization, the international flow of capital is becoming increasingly frequent, and as the core business language of international communication, the trend of accounting internationalization is particularly prominent [3]. With the continuous deepening of teaching practice and the ongoing exploration of ideological and political education, we are becoming more and more aware that there are both challenges and opportunities in the ideological and political construction of bilingual finance and accounting courses. On the one hand, compared to traditional teaching resources, bilingual courses that use English textbooks employ a large number of cases related to international finance and international financial accounting, which may lead to teaching content that deviates from China's national conditions at the macro level and does not conform to the actual situation of Chinese enterprises at the micro level. The cultural conflicts between China and the West that appear in the textbooks may also cause students' values to become blurred or their cultural beliefs to be lost, failing to meet the basic teaching objectives of course ideological and political education [4]; on the other hand, international content provides a unique perspective and ample space for the integration of ideological and political elements [5]. Based on the objective existence of internationalization in bilingual teaching content and materials, it is particularly important to integrate certain ideological and political elements into the teaching process of bilingual courses. How to accurately identify the intersection of course professional knowledge

and ideological and political content, and deconstruct the relevant content of the course, determines the teaching quality of bilingual courses. Based on this, the author has constructed a course evaluation system based on the GA-BP algorithm-optimized CIPP model, hoping to provide a reference method for the quality evaluation of finance and accounting bilingual courses in the context of course ideological and political education in Chinese higher education institutions, and to promote the high-quality development of talent cultivation in higher education institutions.

2. Methods and Materials

2.1. System Construction Principle based on OBE Teaching Concept

OBE (Outcome-based Education) is an advanced pedagogical approach that emphasizes the orientation of learning outcomes in the design and practice of teaching, forming a closed-loop assessment system for self-improvement through the evaluation of its weaknesses, which has spread rapidly worldwide [6]. In the context of the new liberal arts, the construction of the curriculum system is a key link in achieving the goals of talent cultivation in higher education. Ideological and political elements serve as the guidance of higher education, fostering students' sense of social responsibility, historical mission, and correct values. Professional knowledge is the core of higher education, and the curriculum system needs to be systematically designed around the professional training objectives. Foreign language education helps students broaden their international horizons and enhance their cross-cultural communication skills. From the perspective of talent cultivation, there is a coordinated relationship among ideological and political elements, professional knowledge, and foreign language abilities. Integrating these elements organically forms an educational ecosystem that supports and promotes each other, achieving the goals of "value guidance through ideological and political elements, knowledge impartation through professional content, and ability cultivation through English skills," and cultivating high-quality talents with an international perspective, professional literacy, and good moral qualities, see [Figure 1](#).

In the field of higher education, moral education and talent cultivation are regarded as the fundamental tasks of education, with the core focus on cultivating students' moral qualities and sense of social responsibility to achieve comprehensive development. Professional knowledge, as an important component of students' core competitiveness, is the concrete manifestation of their professional capabilities, while foreign

language ability, as an important communication tool, provides students with a way to expand cross-cultural exchanges and international horizons. The OBE model emphasizes student learning outcomes, achieving the organic unity of teaching and evaluation by clarifying teaching objectives, designing teaching activities, and assessing learning outcomes. In the context of bilingual finance and accounting courses, teaching strategies such as situational teaching and inquiry learning are adopted to combine ideological and political elements with professional knowledge teaching, promoting students' in-depth understanding and internalization of socialist core values. Teaching evaluation and output evaluation, as key links in the OBE model, achieve comprehensive monitoring and assessment of student learning outcomes through a combination of formative and summative evaluations, continuously refining the ideological and political teaching design, thus forming a set of teaching methods for bilingual finance and accounting courses under the background of course ideological and political education based on the OBE model.

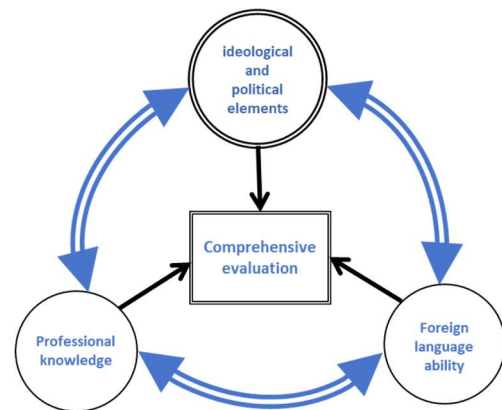


Figure 1. Schematic diagram of "Trinity" education ecology based on curriculum ideology and politics

In line with the OBE philosophy, the integration of ideological and political elements into the daily teaching of bilingual finance and accounting courses in a subtle and profound way, constructing a teaching system that not only meets the fundamental tasks of education but also has professional characteristics and an international perspective, provides strong support for cultivating high-quality finance and accounting professionals with international competitiveness and a sense of social responsibility, see [Figure 2](#).

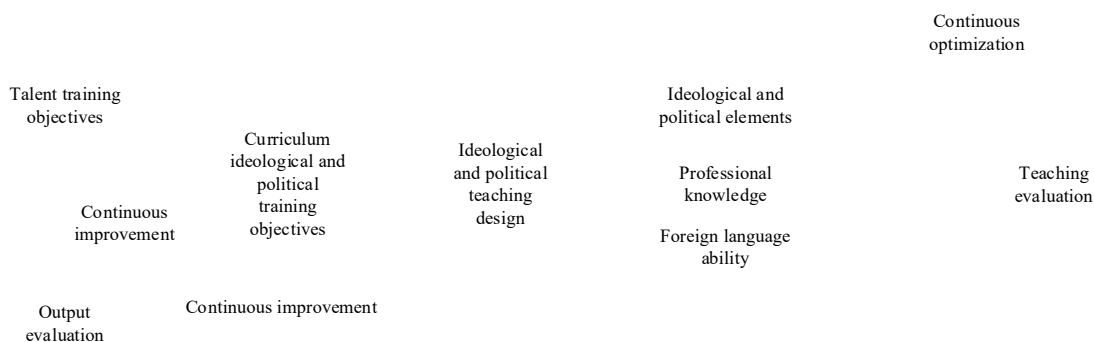


Figure 2. Teaching design route of bilingual curriculum under the ideological and political background of curriculum based on OBE model

2.2. Construction of Bilingual Finance and Accounting Curriculum Evaluation System under Curriculum Ideological and political Background based on CIPP Model

Table 1. Evaluation system index construction of bilingual finance and accounting curriculum based on CIPP curriculum ideological and political background

Target level	Guideline level	Indicator layer
Curriculum background	Curriculum orientation	The goal of ideological and political teaching of the course is derived from the training program of finance and accounting professionals
		The goal of curriculum ideological and political construction is clear
	Teaching objectives	The teaching goal is clear and easy to operate
		The teaching goal integrates value shaping, knowledge imparting and ability cultivation
	Curriculum ideas	The teaching concept is in line with the development of the accounting industry
		The guiding ideology of course teaching is in accord with the overall goal of teaching
Curriculum input	Teacher construction	Teachers receive teaching ability improvement, curriculum ideology and politics related training
		Teachers participate in bilingual teaching and research activities of various finance and accounting courses
	Curriculum design	Ideological and political elements are abundant in teaching
		The ideological and political content of the course has the support of academic theory and is highly integrated with the teaching content
		Comprehensive language application ability of listening, speaking, reading, writing and translating
	Curriculum resources	Ideological and political elements library, case library construction complete
		Bilingual teaching resources are abundant
		Curriculum resources keep pace with The Times, reflecting The Times, cutting-edge
	Curriculum implementation	Before class
Teachers participate in curriculum ideological and political collective lesson preparation		
During class		Curriculum content applicability
		Curriculum Content Difficulty
		Curriculum content is international
		Interactive classroom participation
		Variety of teaching methods
		Degree of integration of ideological elements
After class		Expand the content, broaden students' horizons
		Cross-cultural communication skills
Curriculum effect		Teaching effect
	Peer evaluation of the course	
	The student's evaluation of the course	
	Curriculum influence	Goal achievement degree
		Course satisfaction
	Educating effect	Improvement of students' ideological and political literacy

The decision oriented evaluation (Context, Input, Process, Product, CIPP) model was proposed by Stavbeam, an

American scholar, and is used in educational evaluation. The starting point of the model is to obtain effective feedback

information to help decision makers formulate and improve policies, so as to improve the quality of education [7]. CIPP model can be divided into four elements: background evaluation, input evaluation, process evaluation and outcome evaluation. In the evaluation, one or several types of association combinations can be selected. This model pays more attention to process evaluation and feedback, focusing on the improvement function of evaluation rather than the result of evaluation, so it is helpful to comprehensively and systematically reflect the overall situation of evaluation objects, and is highly consistent with the needs of continuous curriculum ideological and political construction based on the OBE teaching concept.

In combination with the characteristics of finance and accounting major, the CIPP evaluation model is used to construct a scientific, reasonable and operable curriculum ideological and political evaluation system from four dimensions: curriculum background, curriculum input, curriculum implementation and curriculum effect, and to conduct a comprehensive and objective evaluation of the implementation effect of bilingual teaching of finance and accounting major under the background of ideological and political education. To achieve the goal of promoting construction, reform and development through evaluation, and continuously improve the effectiveness of curriculum ideology and politics. The ideological and political evaluation indicators of primary school courses are shown in [Table 1](#)

Based on the ideological and political background and the characteristics of bilingual teaching, this paper innovatively sets up an index of the integration degree of ideological and political elements in four dimensions: curriculum background, curriculum input, curriculum implementation and curriculum effect. In the evaluation stage of curriculum background, teachers should first clarify the objectives of curriculum ideological and political construction, integrate the ideas of curriculum ideological and political ideas into the teaching objectives and teaching tasks, and evaluate the degree of integration of teachers' ideological and political ideas in the target stage. In the evaluation stage of curriculum input, we should consider appropriate integration of ideological and political elements, which is highly integrated with the teaching content and reflects The Times and cutting-edge. In this regard, we can evaluate the degree of teachers' ideological and political integration in the course input stage with the help of expert scoring. In the evaluation stage of curriculum implementation, the goal setting should reflect the transformation from "educating talents" to "educating morality", combine ideological and political elements with professional core knowledge and international vision, deepen students' thinking, and consciously carry out task-driven classroom activities in the teaching process to truly promote the effective integration of curriculum content and ideological and political elements. In the course effect evaluation stage, experts, peers, teachers and students are the evaluation subjects, and the standardization, practicability and timeliness are the principles to strengthen the bilingual teaching construction of finance and accounting under the ideological and political background of the course.

2.3. Grey correlation analysis to determine index weights

In the curriculum teaching quality evaluation model, the weight of the quality evaluation index should be analyzed first, and then the overall quality of the curriculum can be evaluated.

The main methods to determine the weight of indicators are divided into subjective and objective categories. In this paper, based on the index weighting method combining subjective and objective, the index weight is determined by grey correlation degree. The steps are as follows:

(1) Determine the parent indicator and child indicator. Usually, the most important factor affecting the evaluation scheme is selected as the parent index, and its corresponding index value vector is $X_0 = (x_{10}, x_{20}, \dots, x_{n0})^T$, Other factors are denoted as sub-indicators:

$$X_j = (x_{1j}, x_{2j}, \dots, x_{nj})^T, (j = 1, 2, \dots, p) \quad (1)$$

(2) Initialize X_0, X_j , That is, the order:

$$x'_{i0} = x_{i0}/x_{10}, x'_{ij} = x_{ij}/x_{1j}; \quad (2)$$

Consequently $X'_0 = (x'_{10}, x'_{20}, \dots, x'_{n0})^T, X'_j = (x'_{1j}, x'_{2j}, \dots, x'_{nj})^T$

And get the initialized index matrix:

$$B = (X'_0, X'_j) \quad (3)$$

(3) Calculate the correlation coefficients of X_0 and X_j . The calculation formula is as follows:

$$\rho_{ij} = \frac{\min_{1 \leq j \leq p} \min_{1 \leq i \leq n} |x'_{i0} - x'_{ij}| + \zeta \max_{1 \leq j \leq p} \max_{1 \leq i \leq n} |x'_{i0} - x'_{ij}|}{|x'_{i0} - x'_{ij}| + \zeta \max_{1 \leq j \leq p} \max_{1 \leq i \leq n} |x'_{i0} - x'_{ij}|} \quad (4)$$

Where ζ is the resolution, usually 0.5, The correlation matrix is obtained:

$$\rho = (\rho_{ij})_{p \times n} \quad (5)$$

(4) Then average the columns of the matrix. To wit:

$$\rho_j = \frac{1}{n} \sum_{i=1}^n \rho_{ij}, j = 1, 2, \dots, p \quad (6)$$

This formula reflects the degree of correlation between each sub-index and the parent index. The greater the value of the above formula, the closer the sub-index is to the parent index, and thus the greater the impact on the evaluation scheme. Therefore, the greater the proportion of the indicator in the whole indicator system.

(5) The calculated $\rho_j, j = 1, 2, \dots, p$ is normalized.

$$\omega_j = \rho_j / \sum_{j=1}^p \rho_j, j = 1, 2, \dots, p \quad (7)$$

Thus, we can consider using $\omega = (\omega_1, \omega_2, \dots, \omega_n)^T$ as the weight of the index.

3. Results and Discussion

3.1. Results of the Ideological and Political Evaluation System of Bilingual Finance and Accounting Courses based on CIPP

In the context of ideological and political curriculum, bilingual finance and accounting teaching determines the teaching quality of bilingual curriculum by identifying the intersections between curriculum professional knowledge and ideological and political content and deconstructing the

relevant content of the curriculum [8]. The ideological and political evaluation system of bilingual finance and accounting courses built on the basis of CIPP (Context, Input, Process, Product) model is a systematic and circular educational evaluation mechanism, aiming to improve the effect of ideological and political education of courses through continuous evaluation and improvement. It is divided into three stages.

The first stage is the construction of curriculum ideological and political evaluation system. Education experts, fellow teachers, teachers and students are the main evaluation subjects to ensure the comprehensiveness and diversity of evaluation. At the same time, based on the analysis of policy documents, the CIPP theory constructs the curriculum ideological and political index system from four dimensions: curriculum background, curriculum input, curriculum implementation and curriculum effect.

The second stage, the implementation of curriculum ideological and political evaluation. The weight of each evaluation index is determined by the grey relational analysis method, and scoring factors are established according to the evaluation index system. Through the calculation of comprehensive scores, the implementation effect of curriculum ideology and politics is comprehensively evaluated, providing a basis for subsequent evaluation and

improvement.

The third stage, the application of curriculum ideological and political evaluation. The GA-BP neural network model is used to analyze and optimize the evaluation results. The evaluation results are fed back to the curriculum designers and teachers, and the curriculum content and teaching methods are adjusted according to the evaluation results. Through continuous optimization and re-implementation, a circular system of "implementation - evaluation - feedback - improvement - re-implementation" is formed to ensure the continuous improvement and enhancement of the quality of bilingual finance and accounting courses under the ideological and political background of the curriculum.

Through the implementation of these three stages, the ideological and political evaluation system of bilingual finance and accounting curriculum can not only ensure that the course content and teaching methods are consistent with the national education policy and the goal of ideological and political education, but also improve the ideological and political education effect of the course through scientific evaluation and continuous improvement, and provide strong support for the all-round development of students.

3.2. Discussion on Overall Course Quality Evaluation based on GA-BP Algorithm

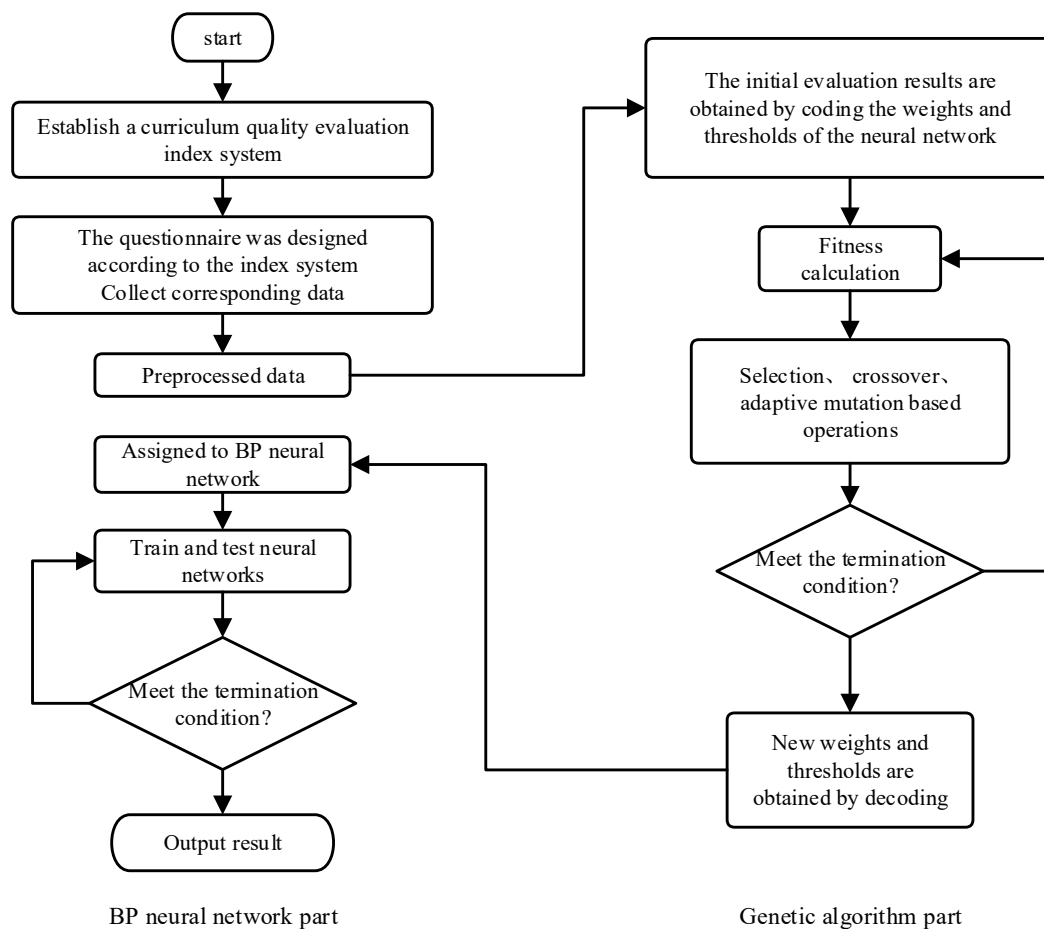


Figure 3. Bilingual curriculum teaching quality evaluation model based on GA-BP neural network under curriculum ideological and political background

In order to improve the teaching quality of bilingual finance and accounting courses under the ideological and political background, this study proposes to use BP algorithm to classify students at different levels, and then carry out targeted training to improve the overall comprehensive ability of students. The main feature of BP algorithm is that signal propagates forward and error propagates backward (Lou, 2017)[9], which can simulate any type of nonlinear input-output relationship. The principle of

BP network is that the input signal propagates forward, and then adjusts the weight through the error signal propagated back, thereby reducing the error. In order to solve the shortcomings of neural network, we combine genetic algorithm with neural network, and use genetic algorithm to improve the structure, learning rules, weights and thresholds of neural network, so as to improve the learning accuracy and learning rate of neural network. Genetic algorithm includes multiple processes such as initialization, selection, crossover and mutation, aiming to find the chromosome with the highest adaptability as a solution to the problem (Li, 2011)[10]. BP neural network optimized by genetic algorithm has better performance of network approximation.

The index system of bilingual finance and accounting curriculum evaluation system based on CIPP curriculum ideological and political background includes 4 first-level indicators, 12 second-level indicators and 30 third-level indicators. As shown in the figure, grey correlation analysis is used to determine the weight of the quality evaluation index established based on the CIPP model, and then GA-BP neural network is used to evaluate, feedback and improve the overall quality of the course, so as to improve the overall quality of the model, see [Figure 3](#).

4. Conclusion

(1) Under the background of curriculum ideology and politics, the evaluation system should be built based on curriculum ideology and politics requirements and reflect the elements of curriculum ideology and politics requirements. In order to implement the guiding opinions of the Outline, all colleges and universities actively promote the work of full coverage of curriculum ideological and political teaching, and the curriculum ideological and political teaching has continuously made new progress and results, but few colleges and universities still carry out the evaluation of ideological and political teaching of subject courses. Therefore, this paper attempts to construct a professional curriculum evaluation system under the background of curriculum ideology and politics from different dimensions and multiple perspectives, based on curriculum ideology and politics requirements, reflecting the elements of curriculum ideology and politics requirements, while comprehensively considering the key dimensions of professional knowledge mastery and foreign language application ability, hoping to give full play to its leading role in promoting the ideological and political teaching of bilingual finance and accounting courses.

(2) Bilingual courses of finance and accounting, due to its internationalization and practicality, put forward higher requirements for the construction of an evaluation system. Finance and accounting is one of the popular majors in the new liberal arts, and the relevant working procedures are gradually in line with international standards. In the context of the great development of education internationalization, there is a significant imbalance between the demand for international high-end finance and accounting talents in social and economic development and the cultivation and output of finance and accounting talents in colleges and universities. Finance and accounting majors in colleges and universities cultivate new finance and accounting talents with international vision through bilingual teaching practice, and a scientific and comprehensive bilingual teaching evaluation system in colleges and universities is an important guarantee for the formation of a good bilingual teaching operation mechanism. Therefore, it is of great significance to construct the evaluation index system of curriculum ideological and political teaching which conforms to the characteristics of bilingual finance and accounting curriculum to promote the reform of curriculum teaching and improve the teaching effect.

(3) Finance and accounting majors offer multiple bilingual courses. Take "International Trade" as an example. As a globalized economic management course, this course is a model of bilingual teaching construction. When evaluating the teaching effect of this course, we should go beyond the narrow perspective of simply pursuing the maximization of

teaching results, but should put the leading role of ideological and political education elements in the first place. Through the cultivation of foreign language ability as a medium, we can teach necessary professional skills, form a joint force of ideological and political education with professional characteristics, and finally realize the organic combination of international trade behavior and national development, so as to ensure that the teaching results truly serve the interests of the country and long-term development.

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