

# A CIPP-Based Evaluation Index System for Moral Cultivation in Blended Learning Courses for Vocational Colleges in China

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**Abstract:** *The effectiveness of moral cultivation in blended learning courses hinges on robust teaching evaluation mechanisms. This study develops an evaluation model rooted in the CIPP framework, tailored specifically for these educational contexts at Chinese vocational colleges. Through a comprehensive review and analysis of pertinent indicators used in global assessments of moral cultivation in blended learning, an index system is formulated to assess moral cultivation in blended learning courses. The system comprises four dimensions: Context, Input, Process, and Product, encompassing 14 secondary and 27 tertiary indicators. These encompass policy background, curriculum context, system elements, teacher attributes, student factors, course design, instructional content, teaching methodologies, teaching assessment, teacher and student support, academic performance, moral development, and satisfaction. Emphasizing continuous monitoring of moral cultivation across various stages of blended learning, the index integrates diagnostic, formative, and summative evaluation methods. This comprehensive approach enhances instructional decision-making and advances moral cultivation in blended learning courses, providing theoretical underpinnings for educational evaluation research and practice for vocational colleges.*

**Keywords:** *CIPP Model; Blended Learning Courses; Moral Cultivation; Evaluation Index System*

## 1. Introduction

Curriculum ideological and political education (CIPE), originates from the 2017 document issued by the Chinese Central Committee titled *Opinions on Deepening the Reform of the Education System and Mechanism*. It integrates all aspects of education to emphasize moral cultivation (MC)<sup>[13]</sup>. The *Guidelines for the Ideological and Political Construction of Higher Education Courses* (2020) explicitly stated the need to promote the construction of CIPE in higher vocational colleges<sup>[13]</sup>. Compared to moral education (ME), which refers to practice, civic and moral awareness, and motivation to act morally<sup>[4]</sup>, CIPE is more inclusive, which focuses on fostering moral integrity, integrating values, knowledge, and skills to enhance overall talent cultivation<sup>[13]</sup>. Since CIPE emphasizes MC, we adopted it as the keyword to explore its evaluation index system.

Blended learning is regarded as the *new normal* in education with its flexibility, timeliness, and continuity. In the context of the digital transformation of vocational education, the latest model of teaching reform through blended learning needs to receive further attention. The reorganization of the teaching process in blended learning poses challenges to the construction and practice of course evaluations in this teaching model, especially when integrating it with MC.

Muqorobin et al. noted the underuse of the CIPP (Context, Input, Process, and Product) evaluation model in MC programs<sup>[16]</sup>. The CIPP model could enhance MC programs through comprehensive evaluation by addressing contextual mismatches, resource shortages, poor implementation, unclear outcomes, and lack of continuous improvement. The research has also evaluated various aspects of blended learning, such as the design of evaluation systems and evaluation mechanisms from different perspectives. For example, Yang discussed the design of quality evaluation indicators for blended learning in vocational colleges<sup>[28]</sup>. Nonetheless, many practitioners and researchers remained perplexed about evaluating blended courses, uncertain about which frameworks, methods, and tools to use<sup>[7]</sup>.

Current evaluation research on blended learning has been extensive, such as evaluating the implementation effects of platforms or programs used in blended learning, with a particular focus on contextual factors of the evaluation<sup>[3][24]</sup>. Based on predetermined standards or goals, educational evaluation involves systematically collecting, analyzing, and presenting information about the quality of specific evaluation objects<sup>[5]</sup>. These evaluation results often serve as decisive reference factors, attracting great interest from educational experts, observers, educators, and other individuals involved in the education field<sup>[5]</sup>.

To provide theoretical support and practical guidance for the evaluation of moral cultivation in blended courses in vocational colleges, this research intends to explore the CIPP-Based Evaluation Index System.

## 2. Construction of a CIPP-Based Evaluation Model for Moral Cultivation in Blended Learning Courses

Stufflebeam's CIPP evaluation model is a comprehensive, systematic, and objective evaluation method widely applied in the field of education<sup>[22]</sup>. This model provides a thorough evaluation paradigm at each evaluation level. From a theoretical perspective, the CIPP model has advantages in evaluating the sustainability of educational projects<sup>[14][23]</sup>. Moreover, the CIPP model could also serve as a practical and concise tool for evaluators to identify issues that need to be addressed during the evaluation process<sup>[8]</sup>.

By drawing on international experiences and theories, this study aims to construct a comprehensive, multidimensional evaluation indicator system based on the CIPP model (see Figure 1)<sup>[12]</sup>.

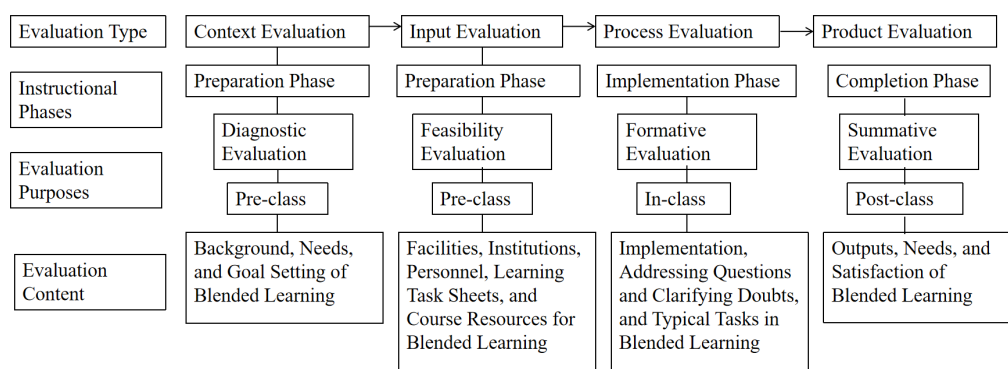


Figure 1: CIPP-Based Evaluation Model of Blended Learning Courses

Each evaluation, from context to output, relates to the stages of blended learning that involve preparation, implementation, and completion phases. These levels differ in terms of the evaluation goals and content emphasis. Analyzing the mixed learning settings online and offline allows for context evaluation, which helps determine how reasonable the learning objectives are for each mode<sup>[12]</sup>. The goal of input evaluation is to assess the viability of the blended teaching plan by examining the resources—such as instructors and course materials—necessary for pre-class blended learning. Process evaluation entails continuing quality control over the blended learning plan's implementation<sup>[22]</sup>. To evaluate educational accomplishments, output evaluation combines data from process assessment with quantitative and qualitative methodologies<sup>[11]</sup>. It is possible to execute these four assessment methods alone or in combination because they are independent but related. Evaluation indicators for blended learning combined with moral cultivation will determine the specific evaluation content.

## 3. Identification of the Content and Elements of a CIPP-Based Evaluation Model for Moral Cultivation in Blended Learning Courses

The Web of Science and Google Scholar were used to search the literature to create a summary of research related to the evaluation model for moral cultivation (see Table 1). Search terms included “blended teaching,” “blended learning,” “moral education,” “moral cultivation,” “evaluation,” and “assessment.” Frequently used assessment metrics for blended learning courses with moral cultivation were found through an extensive review and analysis of the literature. The content and components for assessing the dimensions of moral cultivation in blended learning courses were developed based on this

literature analysis.

*Table 1: Research Related to Evaluation Models for Moral Cultivation*

Research Study	Context	Input	Process	Product
Haryono & Florentinus <sup>[9]</sup>	Basic preparation: learning plan	Supporting resources: human resources (education personnel, school principal), and infrastructure	Implementation: be integrated into the school's basic vision and mission, learning, extracurricular activities, and school culture	Achievement: moral knowledge, moral feelings, and moral actions
Meivawati, Kartowagiran & Rustini <sup>[15]</sup>	Teachers and principals can identify potential values and objectives	Understanding of character and moral cultivation, qualifications of teachers, an allocation of funds, school infrastructure, written rules, operational standards, media, learning planning, and syllabus	Learning activities, at rest (carry out the book reading movement), extracurricular activities, and school programs (other than extracurricular and cocurricular)	All indicators
Huda, Dahliana & Aseri <sup>[10]</sup>	Vision, mission, program objectives, program requirements, and problems in the program	Human resources funding curriculum, facilities and infrastructure, worship formation, and religious skills	Worship formation, religious skills, success story goal-setting training, and student satisfaction	Adversity intelligence, emotional intelligence, spiritual intelligence, and intellectual intelligence
Tunas & Sunaryo <sup>[25]</sup>	Requirements, policies, purpose, and target analysis of enhancement program	Resources, organization, and infrastructure of the enhancement program	Work procedures, timeline, and implementation for enhancing programs	Outcome and output of the implementation of the education enhancement
Sholawati & Khilmiyah <sup>[19]</sup>	History or background of the implementation, problems found in the field, program documentation, and the program is socialized to parents and students	Teachers are selected, students are selected and classified, there is an allocation of funds, and there are supporting facilities for character education programs	Material, media, methods, and the assessment system	Student learning outcomes, the results of emotional and social intelligence assessments
Rohman & Mentari <sup>[18]</sup>	School environmental conditions, school security, and school comfort	Intracurricular activities, co-curricular activities, and extracurricular activities	Availability of facilities and infrastructure, and human resources (principals, educators, education personnel, students)	Results achieved in the implementation of the character education strengthening program on religious values, nationalism, independence, cooperation, and integrity

### ***3.1 Context Evaluation on Moral Cultivation in Blended Learning Courses***

The creation of policies, the school setting, and the constraints of the existing curriculum and course structure all influence how moral cultivation is implemented in blended learning courses. According to Stufflebeam, context evaluations identify opportunities, issues, and needs to prioritize tasks, define goals, and weigh the significance of results<sup>[21]</sup>. Policy and course background analyses should be part of the evaluation process for the moral cultivation teaching background in these courses, among other considerations.

#### **(1) Policy Background**

Policy background involves government and institutional guidelines for moral cultivation in blended learning, detailing resources, implementation, and supervision to ensure quality. School rules align teaching with national policies and the institution's mission. Context evaluation aids in planning, identifying needs, and setting objectives. It addresses unmet needs, program suitability, and goal difficulties<sup>[1]</sup>.

#### **(2) Course Background**

Course background evaluation considers learners' needs, blended learning policies, curriculum structure, and teacher composition to assess a course's foundation (i.e., the core content and basic components of the course), objectives, prerequisites, skills, and conditions<sup>[12]</sup>. This helps clarify course positioning and supports planning for future development. Therefore, course background evaluation is crucial when designing evaluation criteria for moral cultivation in blended learning.

### ***3.2 Input Evaluation on Moral Cultivation in Blended Learning Courses***

Stufflebeam stated that input assessments evaluated various methods for meeting the needs of program scheduling and allocating resources<sup>[21]</sup>. It aims to evaluate the resources involved and analyze the feasibility of the teaching plan. Input evaluation for moral cultivation in blended learning evaluation includes teaching system elements, teacher elements, and student elements.

#### **(1) Teaching System Elements**

In blended learning, the online teaching system is vital for connecting teachers and students and facilitating teaching activities<sup>[12]</sup>. The design, quality, and technical infrastructure of this system impact the quality of moral cultivation. Key aspects include the design of courses with moral cultivation, technical infrastructure, and course materials. For instance, course materials should meet moral cultivation requirements, reflect value guidance, be systematic and scientific, align with student abilities, and relate to social realities. Teaching resources should be evaluated for richness, applicability, usability, and update status.

#### **(2) Teacher Elements**

Teacher elements—characteristics such as technical ability, teaching style, motivation, interaction skills, attitudes towards moral cultivation in blended learning and students, and fairness beliefs—are crucial<sup>[26]</sup>. Teachers must focus on the entire blended learning process, continuously improving their skills to integrate moral cultivation into their teaching practices.

#### **(3) Student Elements**

Students' diverse backgrounds and characteristics—including learning motivation, technical ability, content and system perception, collaboration skills, self-efficacy, and experience with technology—influence the use of online teaching systems<sup>[29]</sup>. Teachers should incorporate these factors into the lesson plans that include moral cultivation, enhancing interaction and self-efficacy through various activities in and out of class.

### ***3.3 Process Evaluation on Moral Cultivation in Blended Learning Courses***

Stufflebeam pointed out that process evaluations examined how plans were carried out to direct activities and then defined results<sup>[21]</sup>. For the blended learning courses integrated with moral cultivation to be executed, precise assessment data must be gathered that assess the overall effectiveness of the plan's execution and pinpoint areas in need of improvement.

Evaluation aspects of moral cultivation in blended learning courses include course design, teaching

content, teaching methods, assessment, and student and teacher support<sup>[12]</sup>. These aspects ensure continuous monitoring of the online and offline processes to identify shortcomings. Taking some of the evaluation aspects as examples, moral cultivation goals should align with the school's vision, learning activities, and culture. For blended courses, teachers should integrate moral elements into content, using institutional and regional resources. While course design should reflect objectivity and generativity, incorporating moral elements into an orderly teaching process with after-class support is imperative<sup>[6]</sup>. Teaching methods should guide students to understand legal concepts and professional ethics by integrating moral elements<sup>[27]</sup>. Teachers should stimulate critical thinking, use classic cases, and organize discussions on ideological viewpoints to enhance moral understanding<sup>[20]</sup>.

### ***3.4 Product Evaluation on Moral Cultivation in Blended Learning Courses***

Using Stufflebeam, product assessments serve to determine the success of a process as well as to identify desired and unexpected effects<sup>[21]</sup>. The evaluation of the product assesses goal achievement and program impacts. Outcome evaluation determines overall goal attainment, combining context, input, and process evaluations<sup>[12]</sup>. It considers academic performance, moral achievement, and satisfaction, alongside moral knowledge, feelings, and actions, as well as adversity intelligence, emotional, spiritual, and intellectual intelligence<sup>[2]</sup>. Additionally, student learning outcomes and emotional-social intelligence results are assessed to comprehensively gauge program effectiveness, especially in character cultivation emphasizing independence, cooperation, and integrity, offering valuable insights into the educational initiative's impact<sup>[17]</sup>.

## **4. Construction of a CIPP-Based Evaluation Model for Moral Cultivation in Blended Learning Courses for Vocational Colleges**

Based on our previously developed model, this study constructs an index system for evaluating moral cultivation in blended learning courses. The dimensions and sub-indicators are detailed in Table 2, drawn from indicators used in international research on blended learning and moral cultivation evaluations.

The primary objective of assessing the context of a blended learning program is to identify the curriculum and policy contexts to create the basic framework. This entails analyzing the curriculum structure and online course under the context of vocational colleges in addition to reviewing laws, rules, legal standards, and strategic planning of the blended learning environment. The evaluation of the policy backdrop looks at how well the school's blended teaching approach, which emphasizes moral cultivation, complies with regional laws and vocational colleges' stated objectives. A foundation for the future creation and implementation of blended courses is laid by the curriculum background review, which guarantees that the plans, structure, and mixed course system satisfy the needs of vocational college students.

Evaluation of moral cultivation in blended teaching inputs assesses the feasibility of system, teacher, and student factors, focusing on human, financial, and material resources for vocational colleges. To determine the rationality and feasibility of online teaching plans, system factors that integrate moral cultivation include the stability and efficiency of the online platform, its design, its quality, and its IT infrastructure. Teacher factors assess preparedness, technical skills, and attitudes toward moral cultivation in blended teaching for vocational colleges. Vocational college student factors evaluate readiness, including motivation, internet efficacy, content, and system perception of moral cultivation in blended learning and online learning strategies.

The evaluation of moral cultivation in blended teaching processes for vocational colleges aims to continuously monitor and address potential issues during implementation. This includes assessing course design, content, methods, and evaluations, teaching support (instructional, managerial, and technical support for moral cultivation in blended teaching), and student support (academic, and technical in blended learning provided by the teacher). The goal is to ensure alignment with the course plans of vocational colleges and evaluate the effectiveness of school support for teachers and students.

The evaluation of moral cultivation in blended teaching outcomes for vocational colleges offers a summative assessment of expected results, including academic achievements, moral achievements (such as learning attitudes, social responsibility, and comprehensive abilities), and overall satisfaction from teachers and students. It focuses on the achievement of anticipated results and the fulfillment of needs. This outcome evaluation assesses the effectiveness of blended teaching in vocational colleges

from a results perspective, providing feedback for improvement. The CIPP model-based system, covering preparation, implementation, and completion stages, integrates diagnostic, feasibility, formative, and summative evaluations. This approach helps identify and address issues early, allowing time to refine and enhance the quality of blended teaching with moral cultivation integration.

Table 2: The CIPP-based Index System for Evaluating Moral Cultivation in Blended Learning Courses

Level-1 indicator	Level-2 indicator	Level-3 indicator
Context evaluation	Policy background	Government and institutional guidelines, rules in vocational colleges for moral cultivation in blended learning
	Course background	Curriculum structure, system, and structure for vocational colleges, integrating with moral cultivation in blended learning
Input evaluation	Teaching system elements	The design, quality, and technical infrastructure of this system, integrating with moral cultivation for vocational colleges
		The infrastructure of vocational colleges facilitates the execution of character and moral cultivation initiatives
		Course materials should meet moral cultivation requirements, reflect value guidance for vocational colleges
		The school has set aside funds specifically for program that promote morality for vocational colleges
		Vocational colleges uphold an operational level for moral cultivation
	Teacher elements	The principal and the teacher understand moral cultivation and character in general.
		Technical ability, teaching style, motivation, and interaction skills with vocational college students
		Teaching attitudes toward moral cultivation in blended learning for vocational colleges
		Fairness beliefs for vocational colleges students
	Student elements	Learning motivation
		Technical ability
		Content and system perception
		Self-efficacy
Process evaluation	Course design	Identify the moral cultivation elements within the course content based on the internal logical structure of the curriculum for vocational colleges
	Teaching content	Integrate moral elements into content within vocational colleges' context
	Teaching methods	Incorporate moral and character cultivation into the classroom's curriculum, extracurricular activities, or other vocational college programs
	Assessment	Incorporating moral cultivation contents into vocational college course assessments
	Student support	Academic support
		Blended learning support
	Teacher support	Blended teaching support for vocational colleges
		Moral cultivation support for vocational colleges
		Management support for moral cultivation in blended teaching for vocational colleges
Product evaluation	Academic performance	Learning behaviors of vocational college students
	Moral achievement	Learning outcomes (e.g., learning attitudes, sense of social responsibility, comprehensive abilities) of vocational college students
	Satisfaction	Vocational college students exhibit a strong awareness of moral cultivation and express high levels of satisfaction with it

## 5. Conclusions

The evaluation index system for moral cultivation in blended teaching courses developed in this study is interconnected but independent, allowing flexible use of one or more indices as needed. For targeted evaluations, relevant indices can be selected: context and input indices for analyzing the rationality and feasibility of teaching plans of moral cultivation in blended courses of vocational colleges in China, process indices for quality monitoring, and product indices for overall evaluation of teaching outcomes.

Limitations to this evaluation index system study were found. First, the study did not assign weights to each index, listing primary indicators only. Second, the literature sample size and scope were limited, potentially affecting the generalizability of the findings. Third, the study focused on theoretical aspects, with limited practical application and feedback from actual teaching environments. Fourth, potential biases in selecting and interpreting indices were not fully addressed. Fifth, there is a lack of longitudinal data to validate the effectiveness of the proposed indices over time.

There are five suggestions for future research on the evaluation index system for moral cultivation in blended teaching courses for Chinese vocational colleges. First, future research should use the Analytic Hierarchy Process (AHP) to refine the system and determine index weights. Second, studies should establish evaluation standards to support theoretical and practical research in online teaching evaluation. Third, longitudinal studies should be conducted to evaluate moral cultivation programs in vocational colleges. Fourth, the association between assessment outcomes is critical to understanding the system's overall impact and should be examined. Fifth, future studies should include more evaluation indicators to ensure the representativeness and robustness of the findings.

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