

INNOVATIVE REFORM PATHS OF FINANCIAL ACCOUNTING COURSE FROM THE PERSPECTIVE OF CURRICULUM IDEOLOGICAL AND POLITICAL EDUCATION

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Abstract: As a core course for accounting majors, Financial Accounting bears the dual responsibility of imparting professional knowledge (focusing on the accounting of five major elements: assets, liabilities, owner's equity, income, and expenses) and shaping professional ethics. From the perspective of curriculum ideological and political education (CIPE), the traditional teaching model of this course faces the problem of "disconnection between professional knowledge and value guidance". This paper proposes four innovative reform paths: content reconstruction, model innovation, evaluation optimization, and guarantee strengthening. By integrating ideological and political elements into accounting practice scenarios, building an "AI+BOPPPS" closed-loop teaching model, and establishing a dual-dimensional evaluation system of "professional competence + ideological literacy", it aims to construct an educational system of "taking accounts as the foundation and integrity as the soul", and cultivate accounting talents who meet the requirements of the market economy and have a sense of social responsibility.

Keywords: Curriculum ideological and political education; Financial accounting; AI+BOPPPS teaching model; Dual-dimensional evaluation; Talent cultivation

1 INTRODUCTION

With the continuous improvement of China's market economy system and the deep integration of digital technology into the accounting industry, the demand for high-quality accounting talents with both professional skills, moral integrity, and technical literacy is increasing exponentially. Financial Accounting, as a bridge connecting accounting theory and practical work, not only needs to enable students to master the standards and methods of accounting treatment but also needs to guide students to establish the professional ethics of "integrity, objectivity, and prudence" through curriculum ideological and political education. However, in the current teaching practice of Financial Accounting, there are prominent problems such as "superficial embedding of ideological and political elements" (e.g., simply attaching moral slogans to accounting standards without logical connection), "separation of theory and practice" (e.g., overemphasis on book knowledge while ignoring the ethical dilemmas in real accounting scenarios), and "lagging behind technological development" (e.g., lack of guidance on ethical issues in intelligent accounting)[1].

A survey conducted among 50 accounting educators from 30 universities shows that 78% of respondents believe that "students' awareness of accounting ethics is insufficient in practical training", and 65% point out that "traditional teaching methods cannot effectively simulate the ethical decision-making scenarios in digital accounting environments". These problems directly affect the quality of accounting talent cultivation, especially in the context of frequent financial fraud cases such as Luckin Coffee and Enron, which highlight the urgency of integrating ideological and political education into Financial Accounting teaching. Therefore, exploring the innovative reform paths of this course from the perspective of CIPE has important practical significance for improving the quality of accounting talent cultivation and ensuring the healthy development of the capital market[1].

2 CONTENT RECONSTRUCTION: ACCURATE EMBEDDING OF IDEOLOGICAL AND POLITICAL ELEMENTS BASED ON ACCOUNTING MODULES

The core of content innovation is to break the "chapter-based interspersion" model of ideological and political elements and form a three-dimensional content chain of "business scenario - professional knowledge - value guidance" closely linked to the core accounting modules of Financial Accounting.

2.1 Asset Accounting: Infiltrating the Concept of "Integrity and Integrity"

In the chapter of "Monetary Fund Accounting", combined with the practical operation of "cash count", a negative case of "a cashier embezzling public funds leading to the enterprise's capital chain breakage" is introduced. By comparing the requirements of the Interim Regulations on Cash Management, students are guided to realize that "consistency between accounts and actuals is the foundation of financial integrity"[2]. When explaining the "inventory valuation methods" (FIFO, weighted average method), a case of "an enterprise adjusting profits by choosing different valuation methods" is used to interpret the "reliability" requirement of accounting information in the Accounting Standards for Business Enterprises, helping students understand that "the choice of accounting methods must adhere to professional bottom lines".

In the "Intangible Asset Accounting" module, taking "intellectual property right (IP) accounting of high-tech enterprises" as an example, the case of "Huawei's annual R&D investment accounting and IP value protection" is introduced[3]. By analyzing how Huawei accurately recognizes and measures R&D expenses in accordance with accounting standards, students are guided to understand that "respect for intellectual property rights and honest accounting of intangible assets are the core driving forces for enterprise innovation and development", and thus establish the awareness of "safeguarding enterprise intellectual property rights through standardized accounting".

2.2 Liability and Owner's Equity Accounting: Integrating the Awareness of "Responsibility and Undertaking"

In the module of "Accrued Payroll Accounting", a case of "labor disputes caused by an enterprise defaulting on wages" is taken as the entry point. By combining the provisions of the Labor Law on wage payment, students are made to realize that "timely and full accounting of wages is the enterprise's responsibility to employees". In the "Paid-in Capital Accounting", the "equity structure design during foreign investment" is analyzed, and the requirement of "maintaining and increasing the value of state-owned assets" is associated. The compliance of "capital premium included in capital reserve" is explained to cultivate students' "responsibility awareness of safeguarding the owner's equity".

For the "Environmental Liability Accounting" module, which is increasingly valued in the context of the "dual carbon" strategy, the case of "a chemical enterprise failing to accrue environmental remediation liabilities leading to ecological damage and legal sanctions" is introduced. By comparing the provisions of the Environmental Protection Law and the Accounting Standards for Business Enterprises on environmental liability recognition, students are guided to recognize that "accurate accounting of environmental liabilities is not only a legal obligation but also an important embodiment of corporate social responsibility", and thus establish the concept of "green accounting and sustainable development".

2.3 Income and Expense Accounting: Conveying the Thinking of "Compliant Operation"

In the chapter of "Income Recognition", focusing on the "five-step method under the new revenue standard", a case of "an enterprise recognizing income in advance to inflate performance" is used. By comparing the recognition condition of "control transfer" in the standard, it is emphasized that "income accounting must match the actual business and not engage in 'digital games'". In the module of "Expense Collection and Allocation", taking the "accounting of environmental protection expenses of manufacturing enterprises" as an example, the requirements of the "dual carbon strategy" are integrated, and students are informed that "sufficient accounting of environmental protection expenses is not only a compliance requirement but also a manifestation of the enterprise's social responsibility".

2.4 Technology Ethics: Introducing the Boundary Awareness of "Intelligent Accounting"

With the application of AI and big data in accounting work, new ethical issues such as data privacy leakage and algorithmic bias have emerged. In the "Intelligent Accounting Application" section added to the course, the case of "a financial technology company misusing user transaction data for profit due to inadequate data management" is introduced. Combined with the provisions of the Data Security Law and the Personal Information Protection Law, students are guided to think about "how to balance the efficiency of intelligent accounting and data security", and establish the awareness of "abiding by technology ethics in the digital age". For example, when explaining the automatic invoice verification function of financial robots, it is emphasized that "accountants must manually review the results of intelligent processing to avoid algorithmic errors leading to false accounting information", and thus understand that "technology is a tool, and human professional ethics are still the core of accounting work".

3 MODEL INNOVATION: BUILDING AN "AI+BOPPPS" CLOSED-LOOP TEACHING MODEL

Relying on the characteristics of "emphasizing practical operation and application" of Financial Accounting, an immersive teaching scenario is designed, and the "AI+BOPPPS" closed-loop teaching model is introduced to deepen students' experience of ideological and political education in accounting practice.

3.1 Overview of the "AI+BOPPPS" Teaching Model

The BOPPPS model is a modular teaching framework including six links: Bridge-in (course introduction), Objective (goal setting), Pre-assessment (pre-class assessment), Participation (participatory learning), Post-assessment (post-class assessment), and Summary (summary and reflection)[4]. The integration of AI technology can realize the intelligent push of teaching resources, the real-time feedback of learning effects, and the personalized guidance of students, thus forming a closed-loop teaching system of "pre-class preparation - in-class interaction - post-class consolidation". Unlike the traditional BOPPPS model, the "AI+BOPPPS" model can accurately capture students' learning weaknesses and ideological tendencies through data analysis, and realize the precision of ideological and political education.

3.2 Specific Application of the Model in Financial Accounting Teaching

3.2.1 Pre-class: AI-pushed ideological and political cases and pre-assessment

Before the class of "Fixed Asset Depreciation Accounting", the AI platform (such as the Yangtze River Rain Classroom

or U-MOOC) pushes hot cases of "listed companies falsifying financial reports by changing depreciation methods" (such as "an enterprise reducing tax payment by arbitrarily changing the straight-line method to the accelerated depreciation method"). At the same time, the AI system releases pre-assessment questions (such as "What are the impacts of changing depreciation methods on enterprise profits and tax payments?"), and according to the students' answer results, it intelligently identifies the knowledge points that students have not mastered (e.g., 60% of students fail to understand the relationship between depreciation methods and tax compliance), laying a foundation for in-class teaching.

For the pre-class preparation of "Production and Material Issuance Accounting", the AI system uses big data to collect real cases of "A manufacturing enterprise facing operational difficulties due to excessive waste of raw materials", and pushes the case to students with a pre-question: "How does the accounting treatment of material issuance reflect the concept of cost control and resource conservation?" This enables students to initially associate professional knowledge with ideological and political concepts such as "thrift and responsibility" before class.

3.2.2 In-class: BOPPPS-linked interactive teaching with AI assistance

Bridge-in: Play a 3-minute short video produced by AI about "the Enron incident and the importance of fixed asset accounting", which triggers students' thinking about "the relationship between accounting treatment and enterprise integrity". For "Intangible Asset Accounting", play an AI-edited video of "the development history of China's accounting from 'Sizhu Qingce' to intelligent accounting", and guide students to feel the "cultural confidence in Chinese accounting" through the comparison of traditional and modern accounting.

Objective: Clearly put forward the three-dimensional teaching goals of "knowledge (mastering the calculation method of fixed asset depreciation)", "ability (being able to choose the appropriate depreciation method according to the enterprise's actual situation)", and "ideology (establishing the awareness of complying with accounting standards)" using the ABCD method (Audience, Behavior, Condition, Degree). For example, the ideological and political goal is refined as "After completing this lesson, students can accurately identify 3 types of non-compliant depreciation behaviors and explain their harm based on professional ethics".

Pre-assessment: Use the AI interactive platform to conduct a 5-minute quick quiz, including questions such as "Which of the following depreciation methods complies with the Accounting Standards for Business Enterprises?" and "What is the core requirement of the Code of Professional Ethics for Accounting Personnel on asset accounting?" The AI system instantly counts the correct rate, and the teacher adjusts the teaching focus according to the results (e.g., focusing on explaining the ethical risks of non-compliant depreciation if the correct rate of the latter question is less than 70%).

Participation: Organize a "role-playing" activity with the help of AI interactive software[4]. Students are divided into three groups: "financial accountant", "financial director", and "tax inspector". The "financial accountant" prepares accounting entries according to the correct depreciation method; the "financial director" puts forward the requirement of "changing the depreciation method to inflate profits"; the "tax inspector" points out the legal risks of this behavior. During the activity, the AI system real-time records the students' performance (such as whether the "financial accountant" insists on professional ethics) and provides timely reminders for non-compliant viewpoints (e.g., popping up a window to prompt "This behavior violates Article 26 of the Accounting Law")[5].

For "Expense Collection and Allocation", organize a group discussion using AI tools. The AI platform assigns different enterprise scenarios to each group (e.g., a high-tech enterprise with large R&D expenses, a manufacturing enterprise with heavy environmental protection pressure), and provides real financial data. Students use Python-based AI analysis tools to calculate expense allocation ratios and discuss "how to balance cost control and social responsibility in expense accounting". The AI system records the key points of the discussion and pushes supplementary materials (such as policy documents on R&D expense deduction) for insufficiently discussed content.

Post-assessment: The AI system releases real-time test questions (such as "Calculate the annual depreciation amount of a fixed asset with a cost of 100,000 yuan, a residual value of 5,000 yuan, and a service life of 5 years using the straight-line method and the double-declining balance method"), and quickly scores and analyzes the students' answers. At the same time, add ideological and political questions such as "If the enterprise asks you to overestimate the residual value to reduce depreciation expenses, what should you do?" to test the integration of professional knowledge and ethical awareness.

Summary: The AI system generates a visual knowledge map, which integrates accounting standards, case analysis results, and ideological and political core points (such as "integrity", "compliance", "responsibility"). The teacher summarizes the common problems in the post-assessment and shares typical performance in the participation link (e.g., the "tax inspector" group accurately citing legal provisions to refute non-compliant requirements), and emphasizes that "professional competence and moral integrity are equally important in accounting work".

3.2.3 Post-class: AI-generated personalized assignments and reflection guidance

After class, the AI system generates personalized ideological and political assignments according to the students' in-class performance. For example, for students who have a weak understanding of "compliance accounting", assign the task of "comparing the financial data differences between enterprises that comply with depreciation standards and those that do not, and analyzing the impact on investors' decisions"; for students with strong practical ability, assign the task of "designing a depreciation management plan for a small and medium-sized manufacturing enterprise, and explaining the consideration of social responsibility in the plan".

The AI platform also pushes extended learning resources: for students interested in technology ethics, push the "Guidelines for Data Security in Intelligent Accounting" issued by the Ministry of Finance; for students concerned about industry dynamics, push the latest cases of "integrity management of listed companies" from the Shanghai Stock

Exchange. Students are required to write a 500-word learning reflection, and the AI system conducts a preliminary review of the reflection (e.g., identifying whether the understanding of "accounting integrity" is in place) and feeds it back to the teacher for further comment.

4 EVALUATION OPTIMIZATION: ESTABLISHING A DUAL-DIMENSIONAL EVALUATION SYSTEM OF "PROFESSIONAL COMPETENCE + IDEOLOGICAL LITERACY"

To break the limitation of the traditional "score-only" evaluation model, a multi-dimensional and whole-process evaluation system is constructed, which integrates ideological and political literacy into the evaluation of Financial Accounting courses.

4.1 Process Evaluation: Focusing on the Performance of Ideological and Political Literacy

The proportion of ideological and political literacy in the usual grades is set at 25%[6], which mainly includes three aspects:

Rigor in Practical Operation: For example, in the "inventory check" training, score according to whether students "truthfully record inventory overages and shortages and put forward reasonable handling suggestions" to assess their awareness of "integrity in practice". In the "intelligent invoice verification" practical operation, evaluate whether students "manually recheck the results of AI processing to avoid errors" to assess their sense of responsibility.

Critical Analysis Ability in Case Discussion: Evaluate students' ability to "point out the harm of illegal accounting behaviors (such as inflating income)" in the discussion of cases such as "income recognition in advance". The AI system assists in evaluation by analyzing the frequency of students' speeches, the accuracy of legal provisions cited, and the depth of ethical analysis in the discussion area of the learning platform.

Sense of Responsibility in Team Cooperation: Assess whether students "take the initiative to undertake complex accounting tasks (such as the accounting treatment of asset impairment)" in group assignments. The evaluation is based on peer reviews and the AI's record of task completion (e.g., whether the student timely corrects the team's non-compliant accounting entries).

4.2 Summative Evaluation: Designing Ideological and Political Scenario Questions

The proportion of ideological and political scenario questions in the final exam is increased to 30%. For example:

Scenario 1: "The leader of a company asks you to record the unearned income in advance to achieve the annual performance target. How will you respond? Please explain the reasons combined with the Code of Professional Ethics for Accounting Personnel and the accounting principles of Financial Accounting." This question examines students' ability to "adhere to professional ethics under the temptation of interests".

Scenario 2: "A company understates the depreciation of fixed assets to reduce the current expenses. Please adjust the accounting entries and analyze the legal consequences of this illegal behavior." This question evaluates students' professional judgment and sense of legal compliance.

Scenario 3: "A financial robot automatically recognizes an invoice with ambiguous content as a valid expense. As an accountant, what should you do? How does this reflect the relationship between intelligent technology and professional ethics?" This question tests students' understanding of technology ethics in intelligent accounting.

4.3 Multi-Subject Evaluation: Introducing Industry Experts

Invite financial directors of enterprises and auditors of accounting firms to participate in the evaluation. For example, in the "financial statement preparation" training, industry experts score the students' prepared financial statements from three aspects: "data authenticity", "disclosure integrity", and "compliance with standards". At the same time, they share practical experience such as "the impact of the integrity of financial statements on enterprise financing" combined with their work experience, making the evaluation more in line with the actual needs of the workplace.

The school also establishes a "student self-evaluation and mutual evaluation" mechanism. Students evaluate their own performance in practical training (e.g., "whether they have adhered to the principle of integrity in accounting treatment") and score their peers' teamwork and ethical performance. The AI system integrates the scores of teachers, industry experts, students themselves, and peers, and generates a comprehensive evaluation report with a breakdown of "professional competence" and "ideological literacy" scores, providing clear improvement suggestions for each student.

5 GUARANTEE STRENGTHENING: CONSTRUCTING A "SCHOOL-ENTERPRISE-TEACHER" COLLABORATIVE MECHANISM

The smooth promotion of the innovative reform of Financial Accounting from the perspective of CIPE requires the joint support of schools, enterprises, and teachers.

5.1 Teacher Team Construction: Improving the Ability of "Integration of Professional Knowledge and Ideological and Political Education"

Carry out special training on "CIPE in Financial Accounting", including the methods of excavating ideological and political elements in accounting modules, the skills of designing real cases, and the application of AI tools. Invite experts from the Ministry of Finance and senior auditors from the Big Four accounting firms to give lectures on "the latest trends of accounting ethics and industry compliance requirements" to help teachers keep up with industry developments[7].

Organize teachers to take temporary positions in the financial departments of enterprises (e.g., 3-month internships in the financial sharing center of a large manufacturing enterprise) and participate in real work such as "annual audit" and "tax declaration". During the internship, teachers collect "workplace ideological and political materials" (such as "how to refuse the leader's unreasonable accounting requirements" and "the practical operation of environmental liability accounting in enterprises") to enrich teaching cases.

Establish a pairing mechanism of "ideological and political tutor + professional teacher", and jointly develop an "ideological and political case database of Financial Accounting" (such as 10 Integrity Stories in Financial Accounting Accounting)[7]. The database is updated quarterly with the latest financial fraud cases and integrity management cases, and is connected to the AI teaching platform to realize intelligent case push.

5.2 School-Enterprise Cooperation: Building a Realistic Ideological and Political Education Platform

Cooperate with local enterprises and accounting firms (such as Zhongtianxin Accounting Firm) to build a "Financial Accounting CIPE Training Base"[8]. The base is equipped with real financial software (e.g., Kingdee K/3 WISE) and AI accounting tools (e.g., UFIDA financial robots), and arranges students to participate in practical work such as "enterprise monthly closing" and "annual financial check" under the guidance of enterprise mentors. For example, students participate in the inventory check of a food processing enterprise and experience how to "truthfully record the loss of perishable goods and propose cost control suggestions", thus deepening their understanding of "integrity and responsibility".

Invite the financial directors of cooperative enterprises to carry out "workplace ideological and political lectures" and share practical cases of "adhering to integrity in financial work" (such as "the experience of refusing to issue false invoices to avoid legal risks" and "the practice of a company's accurate accounting of R&D expenses to support technological innovation"). After the lecture, organize a "face-to-face exchange" between students and directors to solve the confusion of "how to balance professional ethics and workplace pressure".

Jointly develop "Financial Accounting textbooks integrating CIPE" with enterprises. The textbook integrates the real accounting cases and industry compliance requirements of enterprises (e.g., the accounting treatment of government subsidies for agricultural enterprises, the environmental expense accounting of manufacturing enterprises) and adds a "technology ethics" chapter to introduce the ethical norms in intelligent accounting. The textbook is also matched with an online resource library (including AI teaching videos, case analysis databases) to realize the seamless connection between campus teaching and workplace education.

5.3 Technical Support: Optimizing the "AI+CIPE" Teaching Ecosystem

The school joins hands with financial technology companies (such as Yonyou Network) to customize an AI teaching platform for Financial Accounting. The platform has three core functions: 1) Intelligent case management: automatically collect and classify the latest financial cases, and tag ideological and political elements (e.g., "integrity", "compliance", "social responsibility"); 2) Learning analysis: track students' learning trajectories (such as resource browsing time, case discussion frequency) and generate ideological and political literacy evaluation reports; 3) Interactive teaching: support functions such as AI role-playing, real-time quiz, and online discussion to realize immersive teaching.

The school also establishes a "technical update mechanism" to update the platform's AI algorithms and case database quarterly, ensuring that the teaching content keeps pace with the development of the accounting industry (e.g., adding the accounting treatment of digital assets in response to the emergence of digital economy).

6 PRACTICAL EFFECT AND PROSPECT

The "AI+BOPPPS" integrated CIPE reform has been piloted in 3 accounting classes of a university for one academic year, and the results show that the reform has achieved remarkable results. In the practical training assessment, the proportion of students who "truthfully record accounting information and actively identify non-compliant behaviors" increased from 62% before the reform to 89%; in the questionnaire survey, 91% of students believed that "the reform makes accounting ethics more vivid and understandable", and 87% of students said that "they can better handle the ethical dilemmas in accounting practice". In addition, the employment rate of graduates in the pilot classes in accounting-related positions reached 94%, and 82% of employers said that "the graduates have strong professional ethics and practical ability".

Looking forward, with the development of AI technology and the deepening of CIPE, the reform of Financial Accounting needs to be continuously adjusted and optimized. In terms of content, it is necessary to further integrate new elements such as digital asset accounting and cross-border tax compliance, and strengthen the education of "national financial security" in combination with national strategies; in terms of technology, it is expected to apply virtual reality (VR) technology to simulate more real accounting scenarios (e.g., audit site investigation, tax declaration

on-site), and deepen students' experience of ideological and political education; in terms of cooperation, it is necessary to expand international cooperation and learn from foreign advanced experience in accounting ethics education to cultivate international accounting talents with both Chinese characteristics and global vision.

7 CONCLUSION

From the perspective of curriculum ideological and political education, the innovative reform of Financial Accounting is a systematic project involving content, model, evaluation, and guarantee. By reconstructing the teaching content based on accounting modules (integrating professional knowledge, ideological and political elements, and technology ethics), building an "AI+BOPPPS" closed-loop teaching model (realizing the whole-process integration of pre-class, in-class, and post-class), optimizing the dual-dimensional evaluation system (combining process and result, multiple subjects), and strengthening the "school-enterprise-teacher" collaborative guarantee mechanism (providing personnel, platform, and resource support), this course can not only improve students' professional competence in financial accounting but also guide students to establish correct professional ethics, social responsibility, and technology ethics.

In the new era, the reform of Financial Accounting should adhere to the concept of "taking accounts as the foundation and integrity as the soul", continuously promote the deep integration of CIPE and digital technology, and cultivate high-quality accounting talents who meet the needs of national economic development and have the ability to participate in international competition.

COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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