ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

A Case Study on Integrating Ideological and Political Education into Accounting Courses from a Reverse Engineering Perspective: Taking Cost Accounting as an Example

Qingqing Duan, Lan Shu

School of Finance and Economics, Guangdong University of Science and Technology, Dongguan 523083, Guangdong, China

Abstract

Addressing the practical challenges in accounting course ideological and political education—such as superficiality, fragmentation, and disconnect from professional knowledge—this study employs reverse design theory to systematically construct a three-dimensional integration model for Cost Accounting. Guided by the "654" ideological and political education philosophy and structured around "goal setting—content reconstruction—evaluation feedback," the model focuses on core teaching units like "Allocation of Manufacturing Overheads." The case practice focuses on core teaching units such as "Allocation of Manufacturing Overhead Costs," detailing how the "2+3" teaching strategy seamlessly integrates ideological and political elements throughout the entire teaching process—before, during, and after class. Practice demonstrates that this model effectively stimulates students' learning interest and classroom engagement, significantly enhances their value recognition and professional ethics awareness, and establishes a measurable, replicable innovative pathway for integrating ideological and political education into accounting courses. It provides a concrete "Guangke solution" and "Guangdong experience" for the development of similar courses.

Keywords

Backward Design; Ideological and Political Education in Courses; Case-Based Practice; Cost Accounting; Teaching Model.

1. Introduction: Problem Focus and Theoretical Foundation

The report of the 20th National Congress of the Communist Party of China emphasised "implementing the fundamental task of fostering virtue through education." The May 2020 Ministry of Education Guidelines for Ideological and Political Education in Higher Education Courses stated that comprehensively advancing course-based ideological and political education constitutes a strategic measure for fulfilling this fundamental task, stressing the need to advance such education categorically according to disciplinary characteristics. As a core discipline within economic management, accounting courses must not only impart professional skills but also shoulder the mission of value guidance. However, current efforts in integrating ideological and political education into accounting curricula still suffer from superficiality and fragmentation, with insufficient integration of ideological elements into professional content. There is an urgent need to explore systematic and innovative pathways for integration. While universities have progressively implemented curriculum reforms, accounting programmes face the following challenges: Firstly, integration models remain limited, lacking deep interweaving with the discipline's logical framework; Second, the absence of an evaluation system, with no closed-loop feedback mechanism established through backward design (starting from the end); Third, insufficient regional specificity, failing to fully integrate local strategic demands such as Guangdong's digital economy and the development of the Guangdong-Hong Kong-Macao

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

Greater Bay Area. How to achieve the innovative "deep integration of accounting courses with ideological and political elements" has become an urgent issue requiring resolution.

To address these challenges, this study adopts the "backward design" theory proposed by Grant Wiggins and Jay McTighe. This theory advocates a "start with the end in mind" design logic. Its classic three-stage approach—"define expected outcomes → determine assessment evidence → design learning experiences"—provides highly practical methodological guidance for course-based ideological and political education. It compels instructional designers to first deeply contemplate the course's ultimate goal—namely, "what kind of person should students become after completing this course"—thereby laying the logical foundation for the deep integration of value guidance and knowledge transmission. This study employs Cost Accounting as its practical vehicle, aiming to systematically present a highly actionable case study of ideological and political education integration within accounting courses, grounded in reverse design theory. It seeks to provide frontline teaching practitioners with a replicable and transferable practical model.

2. Constructing the Integration Model: Transforming Theory into an Operational Framework

Based on reverse design theory and accounting discipline characteristics, this study constructs a "One Core, Three Stages" integration model.

2.1. Core Guidance: The "654" Ideological and Political Education Objective System

The model employs the "654" target system as its value compass, ensuring all teaching activities are directed towards explicit value outcomes.

The "6 Core Competencies" encompass: learning to learn, healthy living, responsibility and accountability, practical innovation, humanistic literacy, and scientific spirit. These six foundational competencies form the bedrock for students' holistic development, spanning personal growth, social engagement, and cultural refinement. The "5 Key Abilities" include: autonomous learning, independent critical thinking, workplace communication, emotional regulation, and practical hands-on skills. These five key competencies focus on the core competitiveness essential for students' future career development. Notably, the inclusion of emotional regulation ability represents a proactive response to contemporary university students' mental health challenges and the complexities of the workplace environment. The "Four Consciousnesses" comprise: national consciousness, ethnic consciousness, collective consciousness, and sense of responsibility. These four consciousnesses are pivotal in guiding students to establish correct worldviews, outlooks on life, and values, aiming to cultivate them into new-era individuals capable of shouldering the great mission of national rejuvenation.

The "654" framework is not a mere numerical construct but an organically interconnected and mutually reinforcing system. Literacy represents intrinsic character and comprehensive cultivation, capability denotes observable skills and competencies, while consciousness signifies cognitive orientation and value alignment. Together, these three dimensions constitute the competency model for new-era, multi-skilled accounting professionals, providing a clear value framework for subsequent instructional design and assessment.

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

2.2. Operational Framework: Operationalising the Three-Stage Reverse Design Model

2.2.1. Phase One: Defining Expected Outcomes – Constructing the "Dual-Dimensional Objectives Matrix"

The core of this stage involves translating the "654" philosophy into clear, actionable integrated objectives at the course content level. We employ a "two-dimensional objective matrix" tool to restructure the objectives for each chapter of Cost Accounting. The horizontal axis represents "Professional Knowledge and Skills Objectives," while the vertical axis denotes "Political Ideological Literacy and Value Objectives." Through cross-referencing, this ensures every teaching point of professional knowledge carries explicit political education functions.

Taking the chapter on "Manufacturing Overhead Allocation" as an example, its integrated objective is defined as: "Students shall be able to draft an optimisation proposal for manufacturing overhead allocation schemes, acting as cost consultants for a manufacturing enterprise undergoing cost management upgrades." This proposal shall not only feature rigorous technical justification but also comprehensively evaluate the long-term impacts of different allocation schemes across multiple dimensions—including corporate strategy, employee motivation, social responsibility, and sustainable development. It shall embody the spirit of meticulous craftsmanship, a sense of national commitment to serving the country's manufacturing strategy, and an awareness of responsibility for fairness and justice."

This formulation of objectives fundamentally shifts away from the previous singular knowledge-based goal of "mastering four allocation methods." Instead, it proactively positions value formation as the anticipated outcome of teaching, thereby addressing at its root the disconnect between ideological and political education and professional training.

2.2.2. Phase Two: Defining Evaluation Evidence – Designing a "Three-Dimensional Dynamic Assessment" System

To ensure measurable integration outcomes, we reverse-engineered the collection of assessment evidence, establishing a three-dimensional "process-outcome-feedback" framework.

(1) Formative Assessment: Focuses on students' performance and cognitive evolution during learning. This includes: Firstly, classroom observation records. Structured observation forms were designed to document students' value orientations, argumentative logic, and collaborative spirit during case discussions and group debates. Second, online learning behaviour analysis. Utilising teaching platforms such as SuperStar Learning Pass, backend analysis tracks completion rates for ideological and political case videos, alongside the quality and frequency of contributions in course discussion forums. Third, practice reflection journals. Students are required to regularly compose short essays on themes such as "Reflections on Ethical Dilemmas in Cost Management" and "Cost and Fairness in My Surroundings," enabling textual analysis of their evolving value recognition processes and ethical decision-making capabilities.

(2) Outcome-based assessment: Core evidence comprises performance-based task evaluations. For instance, the grading criteria for the aforementioned proposal explicitly include a "Strategic and Ethical Dimension" (40% weighting), examining comprehensiveness of analysis, foresight, and depth of consideration for employee welfare and social responsibility. This directly guides students to engage with value-based questions during task completion, rather than focusing solely on technical calculations.

(3) External Feedback Assessment: Incorporating societal and industry perspectives to validate educational outcomes. Corporate mentors and industry experts evaluate students' project deliverables and professional conduct during internships, providing authentic feedback from practical settings to achieve closed-loop verification of educational effectiveness.

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

2.2.3. Phase Three: Designing Learning Experiences – Implementing the "2+3" Teaching Strategy

This phase constitutes the implementation stage of the model, aiming to plan teaching activities that achieve objectives and generate evaluative evidence.

(1) "Two-Pronged Approach": Emphasising the synergistic advancement of both teaching and learning. Educators serve as designers and facilitators, responsible for creating pedagogical contexts rich in ideological and political elements, designing task-driven learning assignments, and organising profound classroom dialogues. Students function as explorers and co-creators, constructing knowledge and fostering shared values through active inquiry, collaborative learning, and reflective internalisation. Mutual growth through teaching and learning fosters mutual advancement. Cultivating a new generation upholding core socialist values requires adhering to students' physical and psychological developmental patterns, granting them ample respect and freedom within established frameworks, incorporating their personal perspectives into problem exploration, and restoring their central role in classroom inquiry.

(2) "Three Strategic Core Elements": Integrate the "survey analysis, guiding principles, and coherent activities" of sound strategy into teaching to enhance the systematic nature and execution of instructional design.

Survey Analysis: Prior to instructional design, employ student questionnaires and pre-assessments to precisely gauge learners' knowledge foundations, interests, cognitive characteristics, and existing perspectives on relevant social issues. This ensures targeted instructional design, achieving "teaching tailored to learning".

Guiding Principles: The "654" ideological and political education framework and the chapter's "dual-dimensional objective matrix" serve as the supreme benchmark and decision-making basis for all teaching activities. This ensures every activity and case study precisely serves the ultimate educational objectives, preventing arbitrary or haphazard teaching.

Sequential Activities: Design a chain of teaching activities linking pre-class, in-class, and post-class phases in a progressive, layered manner. Pre-class focuses on contextual activation and independent inquiry; in-class emphasises task-driven and collaborative exploration; post-class concentrates on knowledge transfer and reflective internalisation. This forms a logically coherent, goal-aligned deep learning loop, achieving comprehensive ideological and political integration throughout all participants, processes, and dimensions.

3. Case Study Presentation: The "Allocation of Manufacturing Overhead" Teaching Unit in Cost Accounting

The following case study of the "Allocation of Manufacturing Overhead" unit provides a comprehensive overview of the reverse design model's implementation within a 45-minute lesson.

3.1. Defining Expected Outcomes

The ultimate outcome for this unit is for students to produce a high-quality "Optimisation Proposal for Manufacturing Overhead Allocation" in the role of a cost consultant. Specific, measurable objectives for this lesson include:

Knowledge Objectives: Accurately master the four methods of manufacturing overhead allocation (proportion of production labour hours, proportion of production labour wages, proportion of machine hours, annual budget allocation rate), and gain an in-depth understanding of the principles and accounting treatment challenges of the annual budget allocation rate method.

Skill Objectives: Demonstrate the ability to apply allocation principles to analyse real-world corporate case studies (e.g., Huawei), develop foundational skills in data retrieval, academic

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

paper reading, report writing, and team collaboration; utilise the "Feynman Learning Technique" to facilitate learning through teaching, organise logical reasoning, and accept constructive feedback.

Educational Objectives: Naturally cultivate a meticulous, perfectionist "artisan spirit" through the inquiry process; Cultivate an objective, rigorous, and truth-seeking "scientific spirit"; strengthen "patriotic sentiment" and "national confidence" through studying domestic enterprise cases; develop a sense of "responsibility and accountability" by comprehensively considering internal equity, employee motivation, and social responsibility when analysing allocation schemes; and apply a dialectical materialist worldview and methodology to examine cost allocation issues holistically and contextually.

3.2. Determining Assessment Evidence

Table 1. Evidence Framework for Assessing the Teaching Effectiveness of Ideological and Political Education in Accounting Courses

Assessment Type	Specific Evidence Items	Key Observation Points and Evaluation Content	Assessment Method/Tool
1. Process-Based Evidence	"Five-Minute Pre-Lesson" Student Presentations	Content depth: Level of comprehension regarding topics such as allocation logic and national policies. Expression of views: Logical coherence, systematic organisation, and innovative thinking. Independent learning: Demonstrated research skills through resource gathering and PowerPoint creation.	Observation Record Sheet, Rubric (emphasising expression and content)
	Classroom Group Discussions (Huawei case study, debate on allocation methods)	Participation: Proactivity and frequency of contributions. Quality of contributions: Depth, accuracy, and sufficiency of supporting evidence for viewpoints. Logical Structure: Rigour of argumentation and critical thinking skills. Communication and collaboration: Teamwork, listening, and responsiveness.	Structured Classroom Observation Record, Peer Assessment Form for Group Discussion Contribution
	In-class "Standing Quick Response"	Accuracy: Immediate grasp of key knowledge points. Reaction speed: Mental agility and classroom focus.	Real-time statistics (e.g., Learning Pass polls, show-of-hands counts), teacher records
2. Outcome-Based Evidence	Core evidence: Proposal for Optimising Manufacturing Overhead Allocation	Strategic and Ethical Dimension (40% weighting): Comprehensive consideration of corporate strategy, employee motivation, social responsibility, and sustainable development. Professional Knowledge Dimension: Rigour of technical justification, accuracy of data calculations, appropriateness of methodology.	Assessment rubric: clearly defined grading criteria for each dimension
	Supplementary Evidence: Reflection Journal: "An Instance of 'Cost Allocation' in My Experience"	Knowledge Transfer: Ability to apply classroom principles to analyse real-life scenarios. Value Internalisation: Degree of self-reflection and value alignment regarding concepts such as cost, fairness, and responsibility.	Text analysis, thematic coding, scoring guidelines
	Chapter Assessment Questions	Knowledge mastery: Memorisation and comprehension of core concepts such as manufacturing overhead allocation methods. Ethical judgement: Making choices and judgements aligned with professional ethics in contextualised questions.	Standardised test papers combining objective questions with subjective scenario-based questions
3. External Feedback Evidence	Corporate mentor evaluations (online seminars/internships)	Professionalism: Demonstrated expertise and rigour in case analysis. Ethical Awareness: Identification of potential ethical risks in business practice and proposed approaches to addressing them.	Corporate mentor evaluation forms, internship appraisal comments, interview transcripts

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

A diversified chain of assessment evidence has been designed around the aforementioned objectives, with specific details outlined in Table 1.

3.3. Designing the Learning Experience and Implementation Process

Guided by the "2+3" strategy, this unit's teaching activities unfold coherently and systematically across three phases: pre-class, in-class, and post-class.

3.3.1. Pre-class: Contextual Activation and Independent Inquiry (Approximately 20 minutes of extracurricular time)

(1) Teacher Activities

First, distribute two core materials via the SuperStar Learning Platform. These comprise:

Second, pose guiding questions: "What underlies the management dilemma depicted in the 'The River Flows East' clip? How does it illustrate the critical importance of precise cost accounting for enterprises?" "From Huawei's case, how do you perceive cost management supporting both national strategy and corporate development?"

Thirdly, administer a pre-class knowledge assessment (multiple-choice and true/false questions) to evaluate students' grasp of foundational concepts.

(2) Student Activities

First, watch videos and read materials, then submit preliminary thoughts online.

Second, form groups to create a "Five-Minute Pre-Class Presentation" on themes such as "How China's Optimised Income Distribution System Promotes Common Prosperity" or "Cost Allocation Practices in a Micro-Enterprise," applying the Feynman Learning Technique to prepare peer presentations.

Design Intent: Utilise film and television dramas to create authentic, immersive scenarios that stimulate students' learning interest and emotional resonance; establish preliminary connections between professional studies, national strategy, and exemplary corporate practices through the Huawei case study; the initial application of the "Feynman Learning Method" (PPT creation) encourages students to actively organise knowledge and internalise understanding. Ideological and political elements (craftsmanship ethos, scientific spirit, patriotic sentiment) are subtly integrated within authentic contexts, achieving an "effective yet unobtrusive" introduction.

3.3.2. During the Lesson: Task-Driven Learning and Value Exploration (45-minute class period)

The lesson employs a task-driven approach, structured into three progressive teaching modules. The pace is rigorous with frequent interaction, aiming to deepen both knowledge internalisation and value guidance simultaneously.

Module One: Introduction and Principle Explanation (Lower-order cognition: memorisation and comprehension, 5 minutes)

Activity: Students deliver a "five-minute pre-class" presentation outlining their understanding of the underlying logic of allocation. The teacher provides precise feedback, naturally introducing the new lesson theme: "The Aggregation and Allocation of Manufacturing Costs." The teacher then uses a PowerPoint presentation to concisely explain the fundamental principles, applicable conditions, and formula derivations of the four allocation methods, ensuring clarity of focus and precision of language.

Ideological Integration: The teacher skilfully incorporates the case study of the television series The Grand Canal, guiding students to reflect on the specific harms of neglecting precise cost accounting for corporate survival, product quality, employee interests, and even national industrial development. This allows the "craftsman spirit" (pursuit of excellence) and the

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

"scientific spirit" (rigorous pragmatism) to emerge naturally within the learning of professional principles, rather than through rigid didacticism.

Module Two: Case Study Exploration and Applied Analysis (Advanced Understanding: Application and Analysis, 25 minutes)

Activity: This constitutes the core classroom segment. First, the teacher guides students to revisit the pre-class Huawei case study, organising a "Huawei Cost Management Strategy Workshop". Students engage in deep group discussions seated in clusters, add ressing questions such as: "In what specific aspects does Huawei's cost management demonstrate its strengths? What management philosophy underpins it?" and "Is its highly refined cost control model (e.g., management of manufacturing overheads) applicable to all types and stages of enterprise development? Why?"

Interaction and Classroom Management: To counteract "dopamine-driven" distractions and maintain high focus, the teacher incorporates 2-3 "stand-up quick-fire rounds" during discussions. These involve timed questions on recently covered concepts, physically interrupting distractions while energising the classroom and reinforcing key knowledge points.

Ideological Integration: During discussions, the teacher guides students to examine Huawei's strategic resolve, innovative responsibility, and cultural confidence as an exemplary national enterprise in global competition, deeply embedding "patriotic sentiment" and "national confidence." By debating the universality of its model, students develop "critical thinking" and "global awareness," recognising the situational adaptability of management accounting methods. Emphasising the importance of scientific cost management for enterprises in reducing costs, enhancing efficiency, achieving sustainable development, and fulfilling social responsibilities, linking this to "responsibility" and "risk awareness".

Module Three: Synthesis and Value Elevation (Advanced Cognition: Synthesis and Evaluation, 15 minutes)

Activity: Instructors guide students to establish higher-order connections, analysing analogies between the micro-level principle of "allocating manufacturing overhead based on benefit" ("who benefits, who bears the cost") and the macro-level strategy of "China's income distribution system promoting common prosperity". Students engage in brief brainstorming or draft micro-analysis outlines, reflecting on the dialectical relationship between "equity and efficiency" – exploring similarities, differences, and balancing approaches across micro-level corporate cost allocation and macro-level societal income distribution.

Ideological Integration: This segment aims to bridge micro-accounting practices with macro-level value concepts, guiding students to deeply comprehend the intrinsic logic and profound significance of the national strategy for advancing common prosperity, thereby deepening their "political identification" and "social responsibility." The instructor concludes by emphasising that "in accounting, every debit must have a corresponding credit, and rights and obligations must be balanced." This principle is elevated to a worldview and methodology grounded in dialectical materialism, encouraging students to examine professional issues and social phenomena from multiple perspectives.

3.3.3. Post-class: Knowledge Transfer and Reflective Internalisation (Extracurricular Time)

(1) Teacher Activities

Assign tiered, optional practical tasks: Low-level task (mandatory): Each group selects a familiar local micro-enterprise and, using public data or research, prepares a qualitative/quantitative analysis report on its product cost structure or expense allocation. Advanced task (optional): Write a reflective essay on a designated academic paper (e.g., Chen Guojin et al., "China's Green Finance Policies, Financing Costs, and Corporate Green Transformation"), or compose a short paper on "Ethical Considerations in Cost Allocation";

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

Publish preparatory resources for the next lecture ("Scrap Losses and Downtime Losses") and links to national premium course videos on the Learning Pass platform for students' extended study.

(2) Student Activities

Complete group reports or individual assignments; Compose a reflective journal titled "An Instance of 'Cost Allocation' in My Surroundings," documenting thoughts, challenges encountered, solutions implemented, and value insights regarding costs, fairness, and responsibility during task completion.

Design Intent: Practical, real-world tasks such as "Proposing a Strategy for My Hometown Enterprise" encourage students to transfer classroom knowledge, skills, and values to authentic scenarios, simultaneously enhancing "learning transfer ability" and "social responsibility awareness." The reflective journal facilitates metacognitive development, supporting the psychological process of value internalisation. Preview assignments ensure learning continuity and cultivate lifelong learning habits.

4. Practical Outcomes, Reflections and Challenges

Following two consecutive semesters of implementation within accounting specialisation classes, and through comprehensive evaluation via questionnaires, in-depth interviews, portfolio analysis, and platform data, this model has yielded notable practical outcomes while also revealing issues requiring further refinement.

4.1. Analysis of Practical Outcomes

Substantial improvement in student engagement and classroom atmosphere: Based on classroom observations and SuperStar Learning Platform data, student participation rates and interaction quality during case discussions and group presentations markedly increased. The traditional phenomenon of "heads down, minds off, hearts absent" was effectively curbed, with significant rises in classroom engagement rates and interaction frequency. Post-class feedback questionnaires indicate that over 85% of students perceive these specialised classes incorporating ideological and political elements as "engaging, informative, warm, and substantive." The classroom atmosphere has shifted from passive reception to active inquiry and collaborative sharing.

Preliminary internalisation of value recognition and professional competence: Systematic content analysis of student submissions—including Optimisation Proposals for Manufacturing Cost Allocation and reflective journals—across multiple teaching iterations reveals clear positive shifts in value perceptions. For instance, many proposals now extend beyond technical calculations to proactively address: "Allocation schemes should consider impacts on frontline worker motivation to avoid 'machines devouring people' negative effects"; "Recommend introducing environmental cost metrics to guide green production"; and "Plans must align with corporate medium-to-long-term strategic goals, avoiding core competitiveness erosion for cost reduction." In discussion records concerning Huawei, students' sense of identification with and pride in domestic enterprises, along with the resulting motivation for learning, is palpable. This indicates that ideological and political elements have begun to transition from external guidance to an intrinsic dimension within students' problem-solving frameworks.

Effective development and enhancement of students' comprehensive capabilities: Analysis of performance-based assessment rubric data reveals that, compared to the control group using traditional teaching methods, the majority of students in the experimental class transcended mere technical drills. They demonstrated the ability to analyse and make decisions on cost management issues from multiple dimensions and perspectives. In the final course synthesis reports, the experimental class produced a number of outstanding submissions that integrated

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

cost control with corporate strategy, business model innovation, and social responsibility fulfilment. This demonstrates the students' nascent development of a "holistic perspective," "critical thinking," and "ethical decision-making capabilities." Furthermore, through the application of the "Feynman Learning Technique" and frequent group collaboration, students' verbal expression skills, logical reasoning abilities, emotional regulation capabilities, and teamwork spirit were universally enhanced.

4.2. Practical Reflections and Challenges Encountered

Unprecedented Challenges to Teaching Roles and Competencies: Reverse design fundamentally requires educators to undergo a profound transformation from "knowledge disseminators" to "curriculum designers," "learning facilitators," and "value awakening agents." This demands not only robust subject expertise but also advanced ideological and political literacy, sophisticated instructional design capabilities, agile classroom management skills, and extensive practical experience. The systematic enhancement of all subject-specific teachers' capacity for ideological and political education within their curricula, alongside the establishment of a sustainable teacher development, training, and incentive support system, is pivotal to the model's continued promotion and deepening.

The systematic development and ongoing maintenance of teaching resources present formidable challenges: a high-quality, localised repository of ideological and political cases, videos, and literature that aligns closely with professional knowledge and resonates with students constitutes the "arsenal" and foundational guarantee for the model's successful operation. Initial resource development demands substantial time and effort from teaching teams for collection, screening, adaptation, and creation. Concurrently, cases require ongoing updating and iteration to reflect current economic events, policy regulations (e.g., new accounting standards, ESG disclosure requirements), and technological advancements (e.g., AI's impact on cost accounting). This places significant demands on sustained teaching team commitment and collaborative mechanisms.

Refining assessment criteria and ensuring fair implementation presents challenges: evaluating soft metrics such as "strategic and ethical dimensions," "value alignment," and "embodiment of craftsmanship" with precision, fairness, and consistency involves greater subjectivity and complexity than assessing the accuracy of computational outcomes. Despite employing detailed rubrics, scoring discrepancies may arise between instructors or even within the same instructor over time. This necessitates unifying understanding through regular collective lesson planning sessions, scoring calibration meetings, and building standard case libraries. Additionally, actively exploring pathways for intelligent assessment support using information technology—such as natural language processing to analyse sentiment and viewpoint tendencies in reflective journals—is essential to enhance the objectivity, consistency, and efficiency of evaluation.

The precision of "differentiated instruction" and "process management" requires refinement: Practice reveals that despite repeated optimisation of division-of-labour mechanisms in group collaborative learning, it remains challenging to entirely prevent individual students from "free-riding". Further exploration is required to identify effective technological tools and management strategies for more precisely recognising and stimulating each student's potential, providing personalised guidance and task allocation based on individual characteristics to achieve genuine differentiated instruction. Concurrently, the quality and participation levels in post-class extension tasks vary significantly. Addressing how to effectively track, incentivise, and evaluate the outcomes of ideological and political education during extracurricular time remains a practical challenge in implementing this model.

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

5. Conclusions and Outlook

Guided by reverse design theory, this study systematically constructed the "One Core, Three Stages" integrated practice model to address practical challenges in ideological and political education within accounting courses. Using the "Allocation of Manufacturing Overhead" unit from Cost Accounting as a case study, it detailed the complete closed-loop process from goal setting and assessment planning to instructional activity design. Case practice demonstrates that this model, through its "backward design" systematic top-level planning, effectively ensures the intentionality, structure, and measurability of ideological and political education. Guided by the "654" objective framework and implemented via the "2+3" teaching strategy, it achieves the seamless integration, deep mutual fusion, and effective internalisation of ideological and political elements within professional teaching. It has successfully shifted value formation from the periphery to the core of teaching, offering a practice-proven and actionable pathway to resolve the disconnect between theory and practice. The resulting "Guangke Model" holds significant reference value for accounting course ideological and political development in peer institutions.

Looking ahead, this practice will advance in two key dimensions:

Firstly, horizontal expansion to foster synergistic effects within disciplinary clusters. This reverse-design-based model for integrating course-based ideological and political education will be progressively applied to other core courses within the accounting discipline cluster, including Financial Management, Management Accounting, Auditing, and Strategic Management. By unifying design principles across courses, sharing ideological and political teaching resources, and collaboratively developing cross-course integrated case studies, we will forge a cohesive educational force within the "course-based ideological and political education cluster". This will establish a more robust and sustainable professional education ecosystem, achieving synergistic effects where "1+1>2".

Secondly, vertical deepening embraces educational transformation in the intelligent era. We actively explore deep integration with modern information technologies, particularly advanced tools like generative artificial intelligence (AIGC). For instance: - Utilising AIGC tools to dynamically generate highly realistic virtual business scenarios and ethical dilemma cases aligned with teaching objectives, enabling students to engage in iterative simulated decision-making exercises; develop intelligent assessment tools to conduct preliminary sentiment analysis, viewpoint extraction, and logical structure evaluation of students' written assignments (such as reflective journals and analytical reports), providing objective data support for teachers to assess students' value internalisation and thinking quality; utilise AI learning analytics to achieve more precise learning diagnostics and personalised learning path recommendations. Through technological empowerment, we may further enhance the precision, interactivity, engagement, and effectiveness of ideological and political education, thereby addressing implementation challenges inherent in certain large-scale teaching contexts.

In summary, the development of ideological and political education within curricula constitutes a long-term and complex systemic endeavour. Reverse design theory provides us with a potent methodological tool, yet its ultimate efficacy hinges upon the sustained practical exploration, profound reflection and summarisation, and relentless model innovation of the broader educational community. This research represents but a small step along this exploratory path. We look forward to welcoming more colleagues to join us in contributing grassroots wisdom and strength towards cultivating outstanding accounting professionals for the new era — individuals of both moral integrity and professional competence, capable of shouldering the great responsibility of national rejuvenation.

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

Acknowledgements

2025 Guangdong Provincial Education Science Planning Project (Higher Education Special Program): “Research on Innovative Pathways for Integrating Accounting Courses with Ideological and Political Elements from a Reverse Design Perspective: Taking Cost Accounting as an Example” (Project Number:2025GXJK0640); The 2024 Guangdong Science and Technology University School-level Quality Project (Higher Education Teaching Reform Project) "Construction and Practice of a New Accounting Professional Training Model Based on the SECI Model in the Context of New Business Sciences" (Project Number: GKZLGC2024196).

References

[1] Xie Yong. The Value Implications and Implementation Pathways of Ideological and Political Education in Agricultural and Forestry Institutions: A Case Study of the "2023 Seminar on Ideological and Political Education in Higher Education Institutions" [J]. Forest Products Industry, 2024, 61(11): 93-94.

[2] Bao, J. B. (2024). Elemental Exploration and Instructional Design for Ideological and Political Education in Sports Training Programmes at Chinese Higher Education Institutions [J]. Journal of Tianjin University of Sport, 39(05), 573-580.

[3] Kang Yu. Exploring the Synergistic Education Mechanism Between Ideological and Political Courses and Ideological and Political Education in Higher Education Institutions: A Review of Research on Synergistic Education Between Ideological and Political Courses and Ideological and Political Education [J]. Research on Science and Technology Management, 2024, 44(02): 225.

[4] Nian Yaxian, Wang Zheng. An Analysis of Enhancing the Ideological and Political Education Capabilities of Specialised Subject Teachers in Higher Education Institutions [J]. School Party Building and Ideological Education, 2023, (04): 52-54.

[5] Zhang Xu, Wang Zhixiu. Practice of Teaching Reform in Course-based Ideological and Political Education at Higher Education Institutions under the New Agricultural Sciences Paradigm: Taking Poultry Production Courses as an Example [J]. Chinese Poultry, 2022, 44(12): 121-124.

[6] Hou Yong, Qian Jin. Current Status, Evaluation and Innovation in Curriculum Ideological and Political Education Research [J]. Journal of Jiangsu University (Social Sciences Edition), 2021, 23(06): 66-76.

[7] He Yanhua, Liu Qiang. Upholding Moral Education and Talent Cultivation: Integrating Ideological and Political Education with General Education in Foreign Language Courses — A Review of the "Special Academic Forum on Ideological and Political Education and General Education in Foreign Language Courses at Higher Education Institutions under the New Liberal Arts Paradigm" [J]. Foreign Language Audio-Visual Teaching, 2021, (02): 119-120.

[8] Ministry of Education. Guiding Outline for Ideological and Political Education in Higher Education Institution Curricula [Z]. 2020.

[9] Wiggins G, McTighe J. Designing for Understanding [M]. Shanghai: East China Normal University Press, 2017.

[10] Sibel Peksoy Kaya, Birgül Özkan, Betül Çakmak. The relationship between the hidden curriculum and fourth-year nursing students' career plans, professional values, and professional readiness: A cross-sectional correlational study. [J]. Nurse education in practice, 2024, 82104235.

[11] Spohrer Konstanze. Resilience, self-discipline and good deeds–examining enactments of character education in English secondary schools [J]. Pedagogy, Culture & Society, 2024, 32(1): 1-20.

ISSN: 2637-6067 DOI: 10.6918/IJOSSER.202512_8(12).0015

[12] Dayoung, K. Promoting Professional Socialisation: A Synthesis of Durkheim, Kohlberg, Hoffman, and Haidt for Professional Ethics Education [J]. Business and Professional Ethics Journal, 2022, 41(1).

[13] Juan Yin. An Analysis of the Idea, System and Strategy of Moral Education in American Colleges and Universities [J]. Frontiers in Educational Research, 2019, 2(3): 1-1

[14] Donohue W. 1988. Why Schools Fail: Reclaiming the Moral Dimension in Education [J]. Heritage Lecture, 2018, 2(14):15-23.