

# Research on the Whole-Process Innovation of *Principles of Accounting* Course Based on the “Four New” Construction

Hong Wu\*

Hankou University, Wuhan 430212, Hubei, China

\*Author to whom correspondence should be addressed.

**Copyright:** © 2026 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

**Abstract:** Against the background of the deep integration of the digital economy with the construction of “New Liberal Arts” and “New Business”, the traditional teaching of *Principles of Accounting* faces problems such as rigid models, outdated content, single evaluation, separated ideological and political education, and superficial technology application. Guided by the “Four New” construction and centered on the concepts of “student-centered, output-oriented, and continuous improvement”, this study systematically promotes the whole-process innovation of curriculum teaching. By reconstructing the trinity teaching goal of “integration of business and finance, digital intelligence empowerment, and value guidance”, integrating interdisciplinary content, building a “two-line integration and three-stage progression” mixed teaching model, implementing a process-oriented and competency-based evaluation mechanism, and deeply integrating curriculum ideological and political education with intelligent teaching technology, the fundamental transformation from “knowledge transmission” to “literacy cultivation” is realized. Teaching practice shows that this innovation system has significantly improved students’ accounting practical ability, business insight, and professional responsibility, effectively promoting the high-quality development of the course and the comprehensive improvement of education effectiveness. From the five dimensions of problem orientation, innovation characteristics, curriculum ideological and political education, technology application, and achievement radiation, this study systematically elaborates on the teaching innovation practice and effectiveness of this course, aiming to provide a referenceable and promotable experience paradigm for the reform of similar basic courses under the background of the “Four New” construction.

**Keywords:** “Four New” construction; *Principles of Accounting*; Teaching innovation

**Online publication:** April 10, 2026

## 1. Background and motivation of curriculum reform

*Principles of Accounting* is a core course for business students to master financial language and understand business logic. Its teaching goal is not only to impart basic accounting theories and methods but also to cultivate students’ comprehensive abilities to use accounting information to support business decisions, abide

by professional ethics, and adapt to digital transformation<sup>[1]</sup>. However, traditional teaching has the following prominent problems: (1) One-way teaching methods; (2) Disconnection between theory and practice; (3) Single evaluation methods; (4) Superficial integration of ideological and political education; (5) Superficial application of technology.

In response to the above problems, this study takes the compulsory course of e-commerce major as an example, closely follows the requirements of the “Four New” construction, and carries out systematic teaching innovation around the concepts of “student-centered, output-oriented, and continuous improvement”, striving to cultivate compound business talents with solid accounting skills, sharp business insight, and a high sense of social responsibility<sup>[2]</sup>.

## **2. Teaching reconstruction driven by real classroom problems**

The innovation of this course always adheres to the practical logic of “coming from problems and solving problems”, focuses on the real dilemmas of classroom teaching, and proposes targeted solutions:

### **2.1. Addressing the problem of “low student interest and weak participation”: Implement a two-line driven model of “flipped classroom + situational cases”**

Students independently learn theories through micro-courses, animations, and other resources before class, while classroom time is used for in-depth discussions, simulated practical operations, and case analysis.

### **2.2. Addressing the problem of “fragmented knowledge and disconnection between business and finance”: Construct a content integration path of “from business to finance”<sup>[3]</sup>**

Integrate cross-departmental business processes and financial processing links to help students understand the logical connection between business activities and accounting information.

### **2.3. Addressing the problem of “one-sided competency evaluation”: Establish a “diversified process assessment + competency file” evaluation system**

Combine multiple evaluation methods such as assignments, class participation, project performance, and final examinations to comprehensively assess students’ knowledge mastery and ability improvement.

### **2.4. Addressing the problem of “separation of ideological and political education from teaching”: Develop embedded ideological and political teaching modules of “professional ethics + social responsibility”**

Carry out classroom debates and role-plays around themes such as “honest bookkeeping” and “the value of accountants in the AI era” to guide students to think about the social responsibility of the accounting profession<sup>[4]</sup>. Analyze the accounting disclosure of environmental costs and social responsibility investment in combination with Environmental, Social, and Governance (ESG) report cases to cultivate the concept of sustainable development.

### **2.5. Addressing the problem of “superficial technology application”: Promote the in-depth integration of “information technology + learning analysis”**

Use the Chaoxing Learning Platform to realize the whole-process onlineization of pre-class resource push, in-class real-time quizzes, and after-class extended learning. Introduce Robotic Process Automation (RPA)

demonstration videos through automated account processing in a big data environment, allowing students to intuitively feel the reshaping of accounting work by technology and improve their digital literacy <sup>[5]</sup>.

### **3. Whole-process teaching innovation implementing the “Four New” Requirements**

Closely following the connotations of the constructions “New Liberal Arts” and “New Business”, this course’s innovation has achieved systematic breakthroughs in teaching goals, content, methods, activities, and evaluation.

#### **3.1. Innovation in teaching goals: From “bookkeeping experts” to “business consultants”**

Breaking through the limitations of traditional accounting skill training, the trinity curriculum goals of “integration of business and finance, digital intelligence literacy, and professional ethics” are established. Students not only master core skills such as double-entry bookkeeping and financial statement preparation but also understand the supporting role of accounting information in e-commerce operations, investment and financing decisions, and risk management, initially possessing business data analysis and ethical judgment capabilities <sup>[6]</sup>.

#### **3.2. Innovation in teaching content: Interdisciplinary integration and dynamic update**

- (1) Business-finance integration module: Add special topics such as “e-commerce platform settlement accounting”, “cross-border e-commerce tax handling”, and “accounting issues in supply chain finance” to closely align with cutting-edge e-commerce practices.
- (2) Interdisciplinary connection projects: Link with the course “E-commerce Entrepreneurship Practice”, where students design financial management plans for entrepreneurial projects, including budget preparation, fund planning, and profitability analysis, realizing the integration of accounting, marketing, and operations knowledge <sup>[7]</sup>.
- (3) Dynamic content mechanism: Establish a regular update mechanism for the “industry case database”, introducing cutting-edge topics such as AI bookkeeping, digital currency, and sustainable development accounting to keep the course content up-to-date.

#### **3.3. Innovation in teaching methods: Multi-dimensional collaboration of mixed, interactive, and inquiry-based teaching**

- (1) Deepening flipped classroom: Produce theoretical difficulties into 3-5 minute micro-animations (such as “the capital balance principle of double-entry bookkeeping” and “the magic of T-accounts”) to improve self-learning effects; use classroom time for higher-order thinking training, such as financial statement analysis debates and accounting standard change discussions <sup>[8]</sup>.
- (2) Situational simulation teaching: Use projects from various college student innovation and entrepreneurship competitions to simulate the business flow and data docking between the financial department and procurement, sales, and logistics departments of e-commerce enterprises, cultivating students’ collaborative work capabilities.
- (3) Gamified learning design: Develop small games such as “accounting subject matching” and “financial statement puzzle challenge” to make learning fun and strengthen knowledge memory and application.

#### **3.4. Innovation in teaching activities: Construction of a student-centered practice community**

- (1) Role-playing and simulated decision-making: Students take turns acting as financial managers, auditors, tax specialists, etc., to handle account disputes, audit adjustments, tax declarations, and other issues in virtual enterprises, experiencing the responsibilities and challenges in professional scenarios<sup>[9]</sup>.
- (2) “Micro-projects” throughout unit learning: After the completion of each teaching unit, a micro-project task is set, such as “designing a monthly accounting processing plan for a campus coffee shop”, allowing students to deepen their theoretical understanding through practice.

### **3.5. Innovation in teaching evaluation: Competency-oriented and growth tracking**

- (1) Badge system incentive: Set up digital personalized badges such as “Journal Entry Master”, “Financial Statement Star”, and “Analysis Expert” to recognize students’ outstanding performance in each module in real-time and stimulate learning motivation.
- (2) Visualization of competency files: Use the learning platform to record students’ homework scores, project contributions, and interactive performance, generating personal competency development radar charts to provide students with personalized learning suggestions<sup>[10]</sup>.

## **4. In-depth integration of professional education and value guidance**

The construction of curriculum ideological and political education focuses on “dissolving salt in water”, imperceptibly shaping students’ professional ethics, sense of social responsibility, and patriotic feelings in the process of knowledge transmission.

### **4.1. Systematic ideological and political goals**

Refine ideological and political integration points for each chapter around five dimensions: “integrity and standardization, legal awareness, social responsibility, innovative spirit, and cultural confidence”.

### **4.2. Situational ideological and political carriers**

- (1) Ideological and political education through case teaching: Select negative cases such as financial fraud or financial statement fraud in certain industries to carry out in-depth discussions on “ethical anomie behind accounting distortion”, strengthening legal awareness and bottom-line thinking.
- (2) Ideological and political integration through practical projects: Require students to compile simulated ESG information disclosure reports in “innovation and entrepreneurship projects”, guiding them to think about how enterprises reflect their environmental and social contributions through accounting methods and cultivating the concept of sustainable development.

### **4.3. Localized ideological and political resources**

Dig deep into ideological and political elements in the history of Chinese accounting, such as the “double-entry bookkeeping wisdom” in Shanxi merchants’ accounting bureaus during the Ming and Qing dynasties, and the achievements of China’s accounting standards convergence with international standards since the reform and opening-up, enhancing students’ professional confidence and cultural identity. Combine accounting cases of Chinese enterprises’ overseas investment under the “Belt and Road” initiative to guide students to understand the function of accounting in serving national strategies<sup>[11]</sup>.

#### **4.4. Explicit ideological and political evaluation**

Incorporate ideological and political performance, such as professional attitude, team collaboration, and integrity, into process assessment, and record it through multiple channels, such as group mutual evaluation, teacher observation, and reflection logs, realizing the assessability and measurability of ideological and political education effectiveness.

### **5. Information technology empowering the learning revolution**

This course fully uses modern information technology to reshape the teaching process, constructing an “intelligent, interactive, and personalized” smart learning environment.

#### **5.1. Smart teaching platform supporting full-process interaction**

Relying on the Chaoxing Learning Platform:

- (1) Pre-class intelligent push: Differentially push learning resources based on students’ pre-knowledge test results.
- (2) In-class real-time interaction: Use functions such as voting, answering questions quickly, bullet screens, and random selection to improve classroom participation; conduct immediate tests through in-class quizzes to dynamically adjust teaching rhythm.
- (3) After-class extended learning: Release topic discussions and case analysis assignments to promote knowledge internalization; use AI to correct objective questions, freeing up teachers’ energy to focus on subjective guidance.

#### **5.2. Virtual simulation and software practical operation improving practical capabilities**

- (1) Financial software simulation: Introduce online simulation experimental projects to allow students to practice the whole process of voucher entry, account book registration, and financial statement generation repeatedly in a safe environment.
- (2) Application of data visualization tools: Guide students to use Excel advanced functions and Power BI tools for visual analysis of financial data generated from practical training, making dynamic Dashboards to improve data insight.

#### **5.3. Learning analysis assisting precision teaching**

Through learning behavior data collected by the platform (such as video viewing duration, quiz accuracy, and interaction frequency), identify students’ learning difficulties and interest areas, providing a basis for teachers to conduct academic early warnings and personalized tutoring. Regularly generate class learning analysis reports to assist teaching reflection and optimization<sup>[12]</sup>.

### **6. Promotable models, methods, and effects**

After three rounds of teaching iteration, the innovative practice of this course has achieved remarkable results and formed a replicable and promotable experience model<sup>[13,14]</sup>.

### **6.1. Extraction of innovative models: “Two-line · Three-stage · Four-integration” teaching model**

(1) **Two-line:** Combination of online independent learning and offline in-depth discussion.

(2) **Three-stage:** Progressive three stages of knowledge construction (basic theories) → competency advancement (scenario application) → literacy expansion (comprehensive innovation).

(3) **Four-integration:** Integration of business and finance, integration of ideological and political education, integration of technology, and integration of disciplines.

This model provides a clear operational framework for the reform of similar basic courses.

### **6.2. Positive presentation of practical effects**

(1) Academic performance: Students’ overall academic performance has steadily improved, and each cohort of students has passed the Preliminary Accounting Qualification Examination, which is a breakthrough for e-commerce majors<sup>[15]</sup>.

(2) Practical application: Students have successfully applied the learned knowledge to innovation and entrepreneurship competition projects, winning the third prize in the national innovation and entrepreneurship competition, the second prize in the provincial “Three Creations Competition”, and the bronze prize in the provincial China International College Students’ Innovation and Entrepreneurship Competition, demonstrating their ability to apply theories to practice.

(3) Learning experience: The vast majority of students’ feedback that the course content is vivid and close to reality, and their interest and recognition of the major have generally increased.

(4) Teacher development: The teacher team has achieved phased results in teaching research, published several teaching reform papers, and won university-level teaching achievement awards. Teachers’ comprehensive abilities in information-based teaching and curriculum design have been further exercised and improved.

### **6.3. Diversified radiation and promotion paths**

Experience has been shared within the Department of E-commerce, micro-course resources have been shared through the learning platform, and practical training cases have been jointly developed with cooperative enterprises. Enterprises’ feedback that students “get started quickly and have a deep understanding of business”, and their willingness to recruit has significantly increased.

### **6.4. Continuous improvement mechanism**

Establish a four-dimensional evaluation mechanism of “student feedback - peer review - enterprise evaluation - data analysis”, hold curriculum reflection meetings at the end of each semester, and dynamically adjust innovative measures. The next step is to deepen the “AI + accounting” teaching module and explore the application of blockchain technology in accounting transparency teaching.

## **7. Conclusion and Outlook**

The teaching innovation of *Principles of Accounting* is a systematic project, whose core lies in returning to the essence of education, focusing on student development, facing up to real teaching problems, fully integrating modern educational concepts and technical means, and seeking breakthroughs in continuous iteration<sup>[15]</sup>.

By constructing problem-oriented teaching design, whole-process innovation highlighting the “Four New” characteristics, deep integration of curriculum ideological and political education, intelligent technology application, and focusing on achievement radiation and promotion, this course has effectively stimulated students’ learning motivation and practical potential, cultivating business-finance integration capabilities and professional literacy adapting to the digital economy era.

Looking forward to the future, curriculum teaching will continue to deepen teaching innovation: first, further expand “intelligent accounting” teaching content, integrating more application cases of machine learning and natural language processing in financial analysis; second, strengthen the construction of inter-university and cross-regional teaching communities to share innovative resources; third, deepen school-enterprise collaboration, develop more “loose-leaf” practical textbooks based on real business scenarios, and promote accounting education to be closer to the forefront of industry changes, contributing to the cultivation of high-quality business talents in the new era.

## Disclosure statement

The author declares no conflict of interest.

## References

- [1] Yang DF, Cai YQ, 2024, Innovation and Practice of Teaching and Evaluation System for Public Computer Courses Under the Background of “Four New” Major Construction. *Heilongjiang Agricultural Sciences*, 9: 78–84.
- [2] Hu FD, Jiang XL, 2024, Research and Practice of Mixed Teaching Model of “Integration of Theory and Practice, Driving Innovation” in Inorganic Chemistry from the Perspective of “Four New” Construction. *University Chemistry*, 39(11): 1–8.
- [3] Wu S, Wang QR, 2026, Research on the Teaching Reform of Principles of Accounting Course Under the Background of Digital Intelligence Empowerment. *Chinese Agricultural Accounting*, 36(1): 106–108.
- [4] Mu D, 2025, Teaching Reform of University Accounting Courses Under the Background of Digital Economy. *Journal of Shanxi University of Finance and Economics*, 47(S2): 277–279.
- [5] Lin SW, 2024, Research on the Innovative Teaching Reform of “Principles of Accounting” Course Under the Digital Intelligence Background — Taking Hanshan Normal University as an Example. *Journal of Jinan Vocational College*, 5: 34–38.
- [6] Li MX, 2025, Design of Mixed Teaching Model in Accounting Course Based on OBE Concept. *Commercial Accounting*, 19: 115–119.
- [7] Zhao WJ, 2025, Research on the Teaching Reform of Accounting Courses for Non-Accounting Majors in the Digital Economy Era. *Time-Honored Brand Marketing*, 14: 235–237.
- [8] Wan ZH, Fang YH, 2022, Teaching Reform and Practice of Public Computer Courses Under the Background of “Four New” Major Construction. *Computer Knowledge and Technology*, 1: 167–169.
- [9] Wang SY, Wang N, Guo SC, et al., 2023, Exploration and Practice of Cultivating Students’ Innovative Practical Abilities by Integrating “Four New” Cases — Taking the Normal Major of Computer Science and Technology as an Example. *Journal of Langfang Normal University (Natural Science Edition)*, 23(1): 110–113.
- [10] Li SQ, Wang ML, Li M, et al., 2025, Construction and Practical Exploration of “AI + Course Group” Teaching Research Center Under the Background of “Four New” Construction. *Journal of Chinese Forestry Education*, 43(6):

17–23.

- [11] Li YL, 2019, Research on the Teaching Reform of Principles of Accounting Course Oriented to Competency Cultivation. *Teaching Research*, 42(3): 70–74.
- [12] Zhao SF, Zhu YQ, Zheng J, 2009, Discussion on the Innovation Ideas of Teaching Reform of Principles of Accounting Course. *Fiscal Supervision*, 6: 2.
- [13] Chen XP, 2016, Research on the Teaching of Principles of Accounting Course Based on the Systematic Work Process. *The Age of Wisdom and Wealth*, S2: 1.
- [14] Wang XH, 2023, Research on the Teaching Reform of Principles of Accounting in Universities Under the Background of “Digital Intelligence”. *Shanxi Youth*, 9: 22–24.
- [15] Sui YF, Wang GG, 2023, Comprehensively Improving the Quality of Independent Training: The Logic of the Innovation Action of University Talent Training Model. *Jiangsu Higher Education*, 9: 21–28.

Publisher’s note

Bio-Byword Scientific Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.