Education Reform and Development, 2025, Volume 7, Issue 4
https://ojs.bbwpublisher.com/index.php/ERD
Online ISSN: 2652-5372
Print ISSN: 2652-5364

# The Application of AI Technology in College Accounting Teaching

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**Abstract:** In the era of "Internet +", artificial intelligence, big data and virtual simulation technology are applied more and more deeply in the teaching of accounting majors in colleges and universities. They not only expand the teaching space of accounting majors and enrich teaching resources, but also accurately push personalized learning resources, online testing and other services for students, which is conducive to improving the teaching quality of accounting majors in colleges and universities. This paper analyzes the importance of AI technology to accounting teaching in colleges and universities, analyzes the logic of AI technology to boost accounting teaching reform, and puts forward the construction of intelligent financial sharing practical training teaching platform, the development of online and offline mixed teaching, the use of AI technology to carry out auxiliary teaching and improve the teaching evaluation system. The course teaching practice effect of evaluation and data analysis, the conclusion is that through the application of AI technology in accounting teaching, it effectively improves the students' understanding of accounting theory and practice, to achieve the effect of training talents more efficiently.

**Keywords:** AI technology; College accounting major; Importance; Application path

**Online publication:** April 28, 2025

## 1. Introduction

Since the Ministry of Finance issued the "Accounting Informatization Development Plan (2021–2025)" and the "Outline of the 14th Five-Year Plan for Accounting Reform and Development" at the end of 2021, the requirements for accounting teaching in colleges and universities have been continuously improved, especially to promote digital transformation and improve the comprehensive ability of enterprise financial personnel. Colleges and universities should actively integrate AI technology, build intelligent practical training platforms, carry out mixed online and offline teaching, promote the connection between in-class and out-of-class teaching, provide personalized learning resources, stimulate students to study independently, and improve their financial management and accounting skills. By investigating the practice and feedback of AI technology application in the School of Economics and Management of China University of Geosciences (Beijing), combined with data analysis, this paper aims to provide empirical support for the positive impact of AI technology in accounting

teaching and provide a reference for future teaching design.

## 2. The importance of AI technology to accounting teaching in colleges and universities

### 2.1. It is conducive to the development of personalized teaching

AI technology analyzes students' learning progress and ability through big data in accounting teaching in colleges and universities, supports personalized teaching, meets students' individual needs, and improves their independent learning ability [1]. Teachers can adjust teaching strategies according to students' learning data, customize learning resources and tasks, and help students master professional knowledge through online interaction and timely answer questions, thus improving teaching quality. The AI-driven teaching model focuses on personalized development of students and provides customized teaching support through intelligent analysis of data.

### 2.2. It is conducive to optimizing the allocation of teaching resources

The application of AI technology in accounting teaching in colleges and universities is helpful in optimizing the allocation of teaching resources. Through the virtual simulation technology, students can master the skills of accounting, practical operation and management accounting in the simulated enterprise financial management scenario, to improve their practical ability [2]. AI also makes the allocation of teaching resources more intelligent, and teachers can dynamically adjust the ratio of theoretical and practical courses according to students' learning progress and needs to ensure the optimal allocation of resources. AI supports blended teaching and uses big data to analyze student achievement and satisfaction to help teachers identify problems in teaching promptly and improve teaching effectiveness and quality [3].

### 2.3. It is conducive to improving the quality of training accounting professionals

With the development of the digital economy, the extensive application of ERP financial robots, financial sharing platforms and big data technologies in enterprise financial management has increased the requirements of financial managers for digital tools, which in turn has changed the demand for accounting talents [4]. AI technology helps to improve the training program for accounting professionals, integrates new technologies such as financial sharing, big data and cloud computing into teaching, improves students' application ability of digital tools and financial management ability, to improve the training quality of accounting talents [5].

## 3. The application path of AI technology in accounting teaching in colleges and universities

### 3.1. Build a financial sharing training platform to improve the quality of practical training

Colleges and universities should actively introduce enterprise financial sharing system, build intelligent accounting practical training platform, optimize teaching environment through AI technology, simulate the scenario of industry and finance integration, innovate teaching content and methods, and improve students' vocational skills in intelligent finance and taxation, management accounting and accounting practice [6].

#### 3.1.1. Construction of financial sharing training platform

Schools can build a training platform that simulates the integrated management process of industry and finance,

covering modules such as general ledger, receivables and payables, fixed assets and cost management. By allowing students to enter accounting vouchers, query account books and generate statements, the school can deepen their understanding of the connection between financial management and business marketing data, and help students master job skills [7].

### 3.1.2. Online practical training tasks and intelligent assessment

Teachers can design different online practical training tasks and require students to complete them within a specified time, and guide them through intelligent assessment and video review. By analyzing student operation videos, teachers can find problems in time and guide students to carry out targeted exercises, improve financial management and data analysis skills, and thus improve teaching quality [8].

## 3.2. Carry out blended teaching and build a wisdom classroom for accounting profession

In the era of artificial intelligence, accounting teachers in colleges and universities should actively adopt a mixed teaching mode to improve teaching quality.

### 3.2.1. Use the Hyperstar Learning APP to carry out blended teaching

Teachers should make clear the connection point between online and offline teaching, and help students master the teaching content through online micro-lessons and preview tasks [9]. For example, in the course of "Management Accounting", teachers can import data from various departments of enterprises, guide students to analyze financial data, and make operational and management forecasts based on this data to improve data analysis ability.

### 3.2.2. Intelligent online testing and marking

Teachers can design multiple choice questions, fill-in-the-blank questions, calculation questions and other online tests, and use artificial intelligence technology to conduct intelligent marking, which not only tests the teaching effect, but also evaluates students' knowledge grasp, and provides data support for offline teaching [10].

### 3.2.3. Targeted explanation of offline teaching

Teachers can focus on the wrong questions and common problems in students' online tests to help students improve their knowledge system, answer questions and solve doubts, further promote the effective connection between online and offline teaching, and improve the quality of blended teaching.

## 3.3. AI technology assists classroom teaching and improves the quality of classroom teaching

The application of AI technology in the teaching of accounting majors in colleges and universities can improve the quality of classroom teaching, help teachers realize personalized teaching, identify the shortcomings of students' majors, and improve students' learning results.

### 3.3.1. Data analysis and personalized teaching

Teachers can intelligently analyze students' learning effect, homework quality and online learning enthusiasm by exporting the data of the Super Star Learning platform and using big data and cloud computing technology. According to the analysis results, teachers can recommend personalized learning resources and exercises for

students, help students to check the gaps, and improve the learning efficiency and quality of professional courses [11].

### 3.3.2. AI-assisted accounting qualification certificate training

Teachers can use AI technology to carry out an online simulation test of the accounting professional technical qualification certificate, introduce exam questions from the past three years, clarify the assessment focus, and help students get familiar with the exam content. Students can choose practice modules to test personal operational ability, identify knowledge shortcomings, and conduct targeted review to successfully pass the exam and enhance employment competitiveness [12].

## 3.4. AI technology empowers teaching evaluation to improve the quality of teaching evaluation

The application of AI technology in teaching evaluation brings accurate and objective feedback to the teaching of accounting majors in colleges and universities, and promotes the improvement of teaching quality [14].

### 3.4.1. Process evaluation and teaching adjustment

Teachers can use AI technology to conduct real-time evaluation of the online teaching process and intelligent practical training operation, analyze students' learning engagement, homework quality and test scores and other data, timely find problems and adjust teaching content and methods, so as to improve teaching quality [14].

### 3.4.2. Student questionnaire survey and self-assessment and mutual assessment

Teachers can conduct anonymous questionnaire survey through AI, so that students can evaluate teachers' teaching ability, digital resources and intelligent practical training effects, stimulate the enthusiasm of independent learning, and promote mutual assistance and reflection among students through online self-assessment and mutual assessment, optimize the learning atmosphere and improve the teaching level of accounting [13].

# 4. Evaluation and analysis of applied teaching effect

## 4.1. Questionnaire survey and data analysis

After adding AI teaching mode to the traditional accounting teaching, accounting students' interest in learning has increased greatly. In November 2024, 119 accounting undergraduate questionnaires were issued on the Juanxing platform, and 101 valid questionnaires were recovered. The specific evaluation is as follows.

### 4.1.1. Experience analysis of the financial sharing practical training platform

According to the results of the questionnaire, 96.58% of the students believed that the AI-combined financial sharing training platform helped them better understand financial management and accounting practices. More than 92% of the students believe that AI answering questions is helpful to accounting practice in the operation exercises, such as accounting voucher entry, book inquiry and statement generation. 91.03% of the students were able to complete and understand the practical training tasks in the integrated management mode of industry and finance through the platform, and the AI accurately identified and gave feedback on specific operational errors.

### 4.1.2. Blended teaching mode

According to the results of the questionnaire, 93.24% of the students believe that AI micro-lessons and dynamic

videos help them master the classroom content in advance. 91.2% of the students believed that in the accounting course, they significantly improved their data analysis ability through the data analysis and prediction tasks of AI technology statistics, indicating that AI has played a role in improving students' practical operation ability in teaching. 91% of the students believed that AI online test system was effective in checking knowledge points, indicating that AI online test system played a positive role in students' learning evaluation. 95% of the students believe that making full use of AI to search specific topics in offline teaching can help students understand and master knowledge points, reflecting that the rational use of AI technology can improve learning results.

### 4.1.3. Overall comprehensive evaluation

92% of the students believe that the application of AI technology in accounting teaching has significantly improved the learning efficiency, indicating that AI has improved the learning effect of students in accounting teaching. 63% of the students believe that the biggest advantage of AI in accounting teaching is to enhance practical ability, which indicates that most students attach more importance to the role of AI in improving practical ability. 12% of students believe that the advantage lies in personalized learning, indicating that AI personalized learning is the future.

## 4.2. Conclusions and suggestions

Through the introduction of AI technology, students' learning experience and teaching effect have been significantly improved, especially in the application of a financial sharing practical training platform and blended teaching mode, students' practical ability and data analysis ability have been enhanced [14]. However, there is still some room for improvement, especially in the feedback mechanism of the platform, the intellectualization of the test system, and the optimization of the teaching evaluation system. By further strengthening the application of AI technology, improving teachers' ability to analyze data, and focusing on practical ability and the depth of personalized learning, it will help further improve the quality of accounting teaching and students' learning outcomes [15].

### 4.2.1. Further optimize the intelligent feedback of the platform

Although 91% of the students believe that the platform can accurately identify and give feedback on operational errors, there are still 9% of the students' feedback may be insufficient, suggesting that the intelligent feedback mechanism of the platform should be further optimized to provide more detailed and targeted error tips and improvement suggestions. AI technology can be combined with deep learning to automatically identify students' common error patterns and push targeted learning resources to help students make up for their knowledge blind spots.

### 4.2.2. Strengthen the intelligence of AI online tests

At present, the AI online test system can effectively check students' mastery of knowledge points, but it can further use big data and AI algorithms to analyze students' answer trends and provide more intelligent learning feedback. For example, according to students' error frequency and understanding deviation, push targeted review resources to help students make up for their shortcomings. A dynamic test system adapted to different learning levels will be developed to automatically adjust the difficulty of questions according to students' answers, to improve the personalization and accuracy of the test.

### 4.2.3. Enhance the depth and effect of personalized learning

While 12% of students identified personalized learning as one of the strengths of AI technology, there is still room for further improvement. More precise personalized learning resources can be pushed through a more detailed learning path planning system that combines students' learning progress and interests to help students better master knowledge at their own pace.

## 5. Conclusion

In short, it is an inevitable trend for AI technology to enable accounting teaching in colleges and universities, which is conducive to expanding the teaching content of professional courses, meeting the personalized learning needs of students, broadening the teaching channels, building the smart classroom model, and thus improving the teaching quality of accounting. However, there is still room for optimization in the application of AI technology in teaching, especially in the intelligent feedback mechanism, the personalized adjustment of the online test system and the personalized learning path design. In the future, colleges and universities should further deepen the application of AI technology, improve teachers' ability in data analysis, and promote a more intelligent and personalized teaching environment. Accounting teachers in colleges and universities should make good use of the financial sharing practical training platform, improve the quality of practical training, and deepen students' understanding of the integration mode of industry and finance. To carry out blended teaching and build a smart classroom for accounting majors. AI technology-assisted classroom teaching to improve the quality of classroom teaching; AI technology enables teaching evaluation, improves the quality of teaching evaluation, and comprehensively improves the teaching quality of accounting majors.

## Disclosure statement

The author declares no conflict of interest.

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