

PAPER • OPEN ACCESS

Reform and Exploration of Accounting Professional Practice Teaching under the Background of Artificial Intelligence

To cite this article: SONG Guomin 2019 *IOP Conf. Ser.: Mater. Sci. Eng.* **563** 052005

View the [article online](#) for updates and enhancements.

Reform and Exploration of Accounting Professional Practice Teaching under the Background of Artificial Intelligence

SONG Guomin

School of Accountancy, Shandong Women's University, P.R.China, 250300

songgm525@126.com

Abstract. The generation of artificial intelligence has brought about tremendous changes in the traditional financial processing model, financial processing process and the duties of financial personnel, which has brought great changes to the accounting field. This change in the accounting field directly affects the transformation of the teaching ideas of higher education institutions as a training medium for high-quality applied accounting talents. Based on this, in order to meet the needs of the accounting professional education in colleges and universities to adapt to the needs of intelligent accounting talents, this paper focuses on the analysis of the problems existing in the current accounting practice teaching in the context of artificial intelligence from the perspective of practical teaching reform. At the same time, this paper explores the new direction of accounting practice teaching reform from the aspects of accounting practice teaching content, accounting practice teaching environment, accounting practice teaching staff team and accounting practice teaching evaluation system.

1. Introduction

As new technologies such as cloud computing, big data, and artificial intelligence gradually penetrate into the accounting field, financial intelligence becomes the mainstream of future accounting development, which not only brings cost savings, efficiency improvement and process optimization, but also traditional financial processing modes, traditional financial business processes, and financial job responsibilities have changed significantly. This change in the practice circle has brought a big impact on the existing accounting practice teaching in colleges and universities. How to realize the effective connection between accounting practice teaching and industry enterprise accounting practice under the background of artificial intelligence is the main problem of current accounting practice teaching.

2. New Changes brought by Artificial Intelligence to the Accounting Field

2.1 Accounting process automation

In the context of artificial intelligence, repetitive, basic traditional financial accounting work will be replaced. The popularity of financial software and the application of artificial intelligence technology in the field of accounting have made the traditional accounting process automated, and a large number of basic accounting personnel will face transformation. Under the background of artificial intelligence, the demand for compound accounting talents in the society for business integration has surged, and this new change in the accounting field has put forward new requirements for accounting talents.



2.2 Accounting service sharing

With the rapid development of artificial intelligence, a large number of accounting business clusters, accounting operations tend to be intelligent, and the popularity of financial software and the rapid development of internet technology have also provided favorable conditions for the construction of financial shared service centers. The establishment of the financial shared service centers reengineered the financial organization and financial processes of the enterprise, realized the sharing of accounting services, and also promoted the transformation of the financial functions.

2.3 Intelligent decision analysis

The application of artificial intelligence in the field of accounting makes financial information presented in the form of big data. The financial shared service center uses its powerful data storage capabilities and computing power to intelligently analyze the business data and financial data of the enterprise, which provides strong support for the company's strategic decision-making, business decision-making and financial decision-making.

3. Problems in Accounting Professional Practice Teaching under the Background of Artificial Intelligence

The development of artificial intelligence has brought tremendous changes to the accounting field, and it has also put forward a series of new requirements for accounting professional education. However, the current accounting professional education in higher education institutions has made the accounting practice teaching still unable to meet the new demand of intelligent accounting talents in the context of artificial intelligence. It is embodied in the following four aspects:

3.1 Accounting practice teaching content is difficult to meet the needs of accounting development under the background of artificial intelligence

At present, most of the accounting professional practice teaching content of colleges and universities is based on traditional accounting requirements, but less reflects the need of accounting development under the background of artificial intelligence. The lack of appropriateness of teaching content makes the student's knowledge structure not connected with the development requirements of artificial intelligence and big data, which is not conducive to stimulating students' learning potential, and it is difficult to meet the accounting development needs under the background of artificial intelligence.

3.2 Accounting practice teaching environment is difficult to adapt to the changes of the enterprise's intelligent financial environment

At present, the infrastructure conditions of accounting practice teaching in colleges and universities are relatively backward, the equipment update is not timely, and the simulation of practical teaching environment is not high. Most of them can only meet the conventional teaching, and cannot achieve the interface with the accounting practice environment under the background of artificial intelligence development. It is also difficult to deal with the call, mining and analysis of a large number of unstructured data, resulting in the practice teaching environment can not adapt to the requirements of accounting practice teaching in the context of artificial intelligence.

3.3 The accounting practice teaching staff is difficult to meet the requirements of intelligent accounting personnel training

The existing accounting practice teaching staff has insufficient practical experience and lack of intelligent teaching experience. The popularity of intelligent teaching software is not high, and the ability of teachers to use it for data analysis and processing is not strong. The teacher's practical teaching method is out of line with the enterprise's intelligent financial environment, and the industry's frontier problems are insufficiently integrated to meet the training requirements of artificial intelligence accounting talents.

3.4 Accounting practice teaching evaluation system is difficult to meet the needs of intelligent teaching assessment

The current accounting practice teaching assessment mainly adopts the form of test papers and experimental reports, but the assessment form still lacks diversity, and the assessment of students' practical ability and innovation ability is insufficient. Although the evaluation reflects a certain process, it lacks effective dynamic real-time monitoring for students' process learning. The real-time evaluation of assessment and evaluation is insufficient, so it is difficult to meet the needs of intelligent teaching assessment.

4. Reconstruction of Accounting Practice Teaching System under the Background of Artificial Intelligence

4.1 Reconstructing Accounting Practice Teaching Content Based on Artificial Intelligence Background

The intelligent development has made great changes in the traditional financial processing mode, business process and job responsibilities. This makes the current enterprise accounting staff need to have the knowledge structure of traditional accounting perfection, and must have the learning potential to deal with the changes of intelligent financial development. Therefore, this paper is based on the cultivation of accounting professional ability, closely meets the needs of intelligent development for the ability of accounting personnel, and sets the third-order progressive practical teaching content of "professional basic practice, professional deepening practice, and comprehensive subject practice". It also integrates the practical courses related to intelligent financial development with the practice development to solve the problem of low compliance of practical teaching content in the process of accounting talent training.

4.1.1 Professional basic practice teaching content

In the context of artificial intelligence, accounting-type accounting talents are gradually transforming into decision-making management talents. Although the basic accounting business processing process is gradually automated and intelligent, accounting professionals still need to have a solid professional foundation based on the needs of decision analysis. In order to meet the intelligent and networked accounting needs and enhance students' basic ability of independent thinking, logical thinking, and independent learning, colleges and universities should set up financial accounting network training, financial management network training, financial analysis network training, intelligent tax reporting network training and other training content in the professional practice teaching content module.

4.1.2 Professional deepening practical teaching content

In the context of artificial intelligence, the demand for professionals in the group's finance and shared finance has increased dramatically. The accounting practice teaching carried out by higher education institutions should be deepened on the basis of the basic practical teaching content, and the professional deepening of practical teaching content should be increased. The professional deepening practice teaching module focuses on the professional ability of students' comprehensive practical operation ability, special business processing ability, solidarity and cooperation ability, plan analysis ability, etc., and should set up financial sharing center practice, comprehensive budget practice, group financial management and control practice, industry accounting network training and other training content.

4.1.3 Subject comprehensive practice teaching content

Under the background of artificial intelligence, accounting talents should change from traditional accounting-based talents to compound professionals. Accounting talents must not only understand finance, but also understand the company's business and become a financial person who understands business. Under the social demand of business finance integration, the accounting professional

education of higher education institutions should also increase the comprehensive practical teaching module of the disciplines, and cultivate students' comprehensive financial processing ability, planning decision-making ability, organizational coordination ability, career development ability and innovation ability, and set up the training content of the comprehensive business of accounting and business circles, ERP sandbox comprehensive training, graduation internship, innovation and entrepreneurship practice and others.

4.2 Constructing Accounting Practice Teaching Environment Based on Artificial Intelligence Background

Under the trend of big data, intelligence and financial sharing, in order to comply with the urgent requirements of financial transformation, this paper docks the demand of financial posts, simulates the intelligent financial environment of enterprises, and constructs a networked and simulated accounting practice teaching environment. Through the establishment of the third-order progressive accounting professional network practice teaching platform of "basic ability training, advanced ability improvement, and comprehensive ability development", the real financial operation environment of the enterprise is simulated, and the zero-distance connection between the practical teaching environment and the intelligent financial environment is realized. The construction of the practical teaching platform solves the problem of insufficient simulation of the practical environment in the process of training applied talents. Through the construction of the practical teaching environment, the enterprise financial environment simulation, business process simulation and simulation of practical teaching content are realized, and the evaluation and evaluation are intelligitized by means of network means.

4.2.1 Basic ability training network practice platform

The basic ability training network practice platform focuses on the cultivation of students' basic abilities. In this practice platform, colleges and universities should establish basic practical teaching content through the establishment of a networked basic practice platform to cultivate students' basic practical ability. The platform is mainly composed of financial accounting network practice platform, cost accounting network practice platform, financial management network practice platform, financial analysis network practice platform, intelligent online tax reporting practice platform and other network platforms.

4.2.2 Advanced Capability Improvement Network Practice Platform

The advanced capability enhancement network practice platform focuses on the development of students' professional competence. In this practice platform, colleges and universities should establish professional practice teaching content through the establishment of a networked professional practice platform to cultivate students' professional practice ability. The platform is mainly composed of bank accounting network practice platform, commodity circulation industry network practice platform, tourism accounting practice network practice platform, foreign trade accounting network practice platform and other network platforms.

4.2.3 Comprehensive capability development network practice platform

The comprehensive capacity development network practice platform focuses on the cultivation of students' comprehensive ability. In this practice platform, colleges and universities should develop comprehensive practical teaching content and build students' comprehensive practical ability by setting up a networked comprehensive practice platform. In addition to the school's original educational network management system platform, the platform also includes online platforms such as the accounting business circle network practice platform, the ERP sand table simulation practice platform, and the alumni state internship platform.

4.3 Constructing Accounting Practice Teaching Staff based on Artificial Intelligence Background

In the context of intelligence, enterprises have rich experience in intelligence, and the construction of accounting practice teaching staff should be included in the enterprises. The schools and the enterprises should jointly carry out practical teaching, and the construction concept is "double-directed, dual-construction". "Double-directed orientation" is guided by the cultivation of double-teacher-type practical teachers. For one thing, it encourages outstanding full-time teachers to participate in the post practice in industrial enterprises with financial intelligence background, and for another thing, it absorbs industry experts with financial intelligence background to participate in practical teaching. Improve the practical level of teachers and enrich the teachers' intelligent teaching experience; "dual-construction" means implementing the school-enterprise dual-building faculty and collaborative education to solve the problem of insufficient teaching experience of traditional teachers.

4.4 Designing Accounting Practice Teaching Evaluation System based on Artificial Intelligence Background

Combined with the requirements for the assessment of accounting talents with intelligent development, this paper is based on the "third-order progressive" practical teaching content, reforms the existing practice teaching evaluation system, and implements the "diversified and real-time" assessment. "Diversification" means diversification of assessment forms, which means that the form of practical teaching assessment adopts team presentation, group report, research report and other forms of assessment. "Real-time" means real-time assessment of the assessment process, which means using the network practice teaching platform. Real-time monitoring of the learning process is realized, so that the teacher can grasp the learning dynamics of the students in a timely manner and conduct practical operation guidance in a targeted manner.

5. Conclusion

The rapid development of artificial intelligence in the field of accounting has led to tremendous changes in the field of accounting. In this context, the changes in the demand for accounting talents in the society will inevitably require the accounting professional teaching to keep pace with the times and cultivate new accounting talents that meet the requirements of artificial intelligence development. As a higher education institution that cultivates accounting talents, it must be changed in time. The concept of accounting education integrates the new requirements of artificial intelligence into accounting professional education, reforms the traditional accounting practice teaching system, and explores a new mode of accounting practice teaching.

Acknowledgments

Fund: This paper is the phased research result of the 2019 Shandong Vocational Education Teaching Reform Research Project "The Reform and Exploration of the "Four-in-one, Third-order Progressive" Practical Teaching in the Accounting Profession under the Background of Intelligence (No. 2019314)".

References

- [1] Qin RS 2015 The development trend of the accounting industry in the era of "Internet +" *The Chinese Certified Public Accountant* **12** 20-4
- [2] Wang JC and Su Y 2017 Artificial intelligence and accounting model change *Communication of Finance and Accounting* **22** 41-3
- [3] Han XD and Yu HY 2018 The exploration and practice of intelligent finance *Finance & Accounting* **17** 11-3
- [4] Pan SY 2016 Discussion on the transformation, upgrading and future development of accounting under new technology *Friends of Accounting* **23** 18-20
- [5] Shang SZ, Chen JY, Dai HJ and Luo Y 2018 Discussion on the Status of Financial Accounting Courses in Accounting Majors in Applied Accounting Age *Finance and Accounting Monthly* **05** 132-6