Journal of Economics and Public Finance
ISSN 2377-1038 (Print) ISSN 2377-1046 (Online)
Vol. 10, No. 4, 2024
www.scholink.org/ojs/index.php/jepf

Original Paper

Analysis of Accounting and Finance Teaching Reform Based on the Big Data Background

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Received: September 6, 2024 Accepted: October 3, 2024 Online Published: October 9, 2024

doi:10.22158/jepf.v10n4p85 URL: http://dx.doi.org/10.22158/jepf.v10n4p85

Abstract

Under the push of the big data tide, the finance and accounting field is undergoing an unprecedented transformation. The reform of big data and accounting professional talent cultivation urgently needs to be accelerated, and vocational colleges, as an important platform for cultivating high-level skilled talents, are particularly important. This paper aims to explore the current situation, challenges and reform strategies of big data and accounting professional talent cultivation in vocational colleges in the era of big data, with the hope of providing useful reference for relevant educational practices.

Keywords

Big Data, Higher Vocational Colleges, Accounting Major, Teaching, Reform

1. Introduction

In the vocational training of our country, the major of big data and accounting in higher vocational colleges plays a vital role, and has sent a large number of excellent big data and accounting professionals for the society. However, with the rapid economic growth and the increasing complexity of the accounting profession, the teaching of big data and accounting in higher vocational colleges is facing unprecedented challenges. Traditional teaching methods have been difficult to meet the needs of work, we need to pay more attention to the practice and practical work closely combined with the teaching mode. In order to improve the teaching level and promote the application of practical results, the teaching of big data and finance in higher vocational colleges should keep pace with The Times and keep up with the pace of the development of The Times. In order to adapt to the changing needs of the workplace, this paper discusses the current situation and challenges of the training of big data and accounting professionals in higher vocational colleges, and studies how to improve the teaching level and practical application effect of big data and accounting majors in higher vocational colleges.

2. Big Data Overview

Big data has become a major driver of social and economic growth, leveraging the concepts of network technology and data analytics. Through the use of big data for information mining, in order to obtain richer information, to achieve a close correlation between things. As a result, such cooperation helps to enhance the competitiveness of enterprises, enabling them to more accurately understand the market positioning, analyze customer needs and drive product innovation. Big data has profoundly changed the way people communicate, work and live, and has had a significant impact on social management, medical care, education and other fields. Not only does it drive innovation and efficiency, but it also creates new governance and ethical challenges such as privacy.

With the wide application of technologies such as cloud computing, Internet and artificial intelligence, the industrial Internet has become a rising trend, which has led to major changes in enterprise management models. Driven by intelligent connectivity, efficient collaboration and rapid response, corporate finance departments are rapidly transforming, with many companies taking the lead in applying new technologies to their financial management models. This has led to a change in the responsibilities of financial personnel and further promoted the role transformation of financial personnel. In 2021, the Department of Education released the latest Professional Directory of Vocational Education (2021), the original "accounting major" in higher vocational colleges was renamed "Big Data and Accounting Major". In 2021, higher education institutions began to enroll students majoring in "Big Data and accounting", but as of now, the national professional teaching standard of "Big Data and accounting" has not been officially promulgated. Through the integration of production and education, we discussed the formulation method of teaching standards for big data and accounting major in higher vocational colleges, which will provide scientific basis for the teaching of Big Data and Accounting major and promote professional upgrading and digital reform. Higher vocational colleges need to clarify the training direction of finance and accounting talents, design professional curriculum framework, develop teaching materials, implement teaching, and conduct teaching supervision and evaluation, which are of great significance to guide and standardize the training of finance and accounting talents, and train more high-quality technical talents with excellent big data and accounting professional skills for the society.

3. Integration Trend of Big Data and Accounting Profession

3.1 Big Data Promotes the Innovation and Development of the Accounting Industry

The impact of big data on the accounting industry is far-reaching and extensive. The application of big data technology has changed the way and process of traditional financial management, and significantly improved the efficiency and quality of work. Through big data analysis, accountants can make more informed decisions and discover more business problems, thus effectively assisting enterprises. It reduces the trouble and error caused by manual operation in the process of data processing, and helps to improve the efficiency of data acquisition and processing. Big data is also

driving innovation and development in the accounting industry. With the continuous emergence of big data, the financial field is gradually exploring new service models and business categories to provide enterprises with more comprehensive and professional support, such as financial sharing services and financial consultants. The rise of big data has brought broader development opportunities and more complex challenges to the finance industry, which helps finance and accounting professionals to dig deeper into data and improve work efficiency. The financial field has broad business prospects and great growth potential. The emergence of big data has put forward higher requirements for the professional quality and skill level of finance and accounting personnel, so finance and accounting personnel need to constantly learn and update their knowledge and skills to adapt to the development needs of the era of big data.

3.2 Big Data Puts forward Higher Requirements for the Professional Quality and Skill Level of Finance and Accounting Personnel

With the deep integration of big data technology and finance and accounting, the demand for big data talents in the financial field has undergone earth-shaking changes. At present, the financial field requires accounting talents to have the ability of data analysis and information processing, while the traditional accounting major focuses on cultivating students' financial accounting and financial management skills. First, more emphasis should now be placed on students' data analysis and processing skills. It is crucial to learn the basic principles and technologies of big data analysis, and it is necessary to master the skills of using big data tools for data analysis and mining. Second, you need to have the ability to process big data and extract effective information from it, with solid programming skills and data processing capabilities. In order to solve real-world problems and drive innovation and progress in the field of finance, interdisciplinary knowledge and innovative thinking are necessary in order to use rich information. In order to cultivate more finance professionals with data analysis skills, universities and vocational training institutions are adjusting the teaching content and curriculum of finance majors to incorporate more courses related to big data and strengthen practical teaching.

4. Analysis of Current Situation of Finance and Accounting Teaching in Higher Vocational Colleges in the Era of Big Data

4.1 Failure to Understand the Needs of the Enterprise, the Goal of Talent Training is not Clear

Under the background of big data era, higher vocational colleges should cultivate a group of high-level comprehensive financial and accounting talents. These talents need to be proficient in financial and accounting expertise, proficient in the use of information technology, and have the ability to have a holistic sense and innovative thinking. The emergence of new technology, new ideas and new skills has made the need for talents more urgent, which is the reason for this phenomenon. However, due to the mismatch between the training objectives of finance and accounting courses in many higher vocational colleges and the employment needs of enterprises, it is difficult for graduates to meet the actual needs of enterprises. In the talent training goals of some higher vocational colleges, more emphasis is placed

on the cultivation of traditional financial skills and accounting ability, but the lack of digital curriculum Settings, and fail to cultivate students' innovative thinking and digital technology application ability. In the development of talent training program, we do not fully understand the needs of enterprises for accounting talents, and do not carry out in-depth investigation in time, which leads to the generation of this problem.

4.2 Teachers Lack of Information Literacy and Innovative Thinking

In today's era of big data, students need to master data technology for data analysis and decision-making, while traditional financial education focuses more on cultivating students' financial accounting ability. Teachers need to adjust their teaching strategies constantly, get rid of the traditional teaching mode, and adapt to the changes of the present era. At present, some teachers have a solid knowledge foundation in the academic field, but there are certain deficiencies in the application of digital technology, and they also lack rich business practical experience. Although some newly recruited young teachers lack teaching and enterprise practice experience, they have a strong ability to accept new concepts and a solid theoretical foundation. At the same time, they are eager to learn deeply, explore the knowledge of big data and intelligent artificial fields, and have innovative thinking. In short, both experienced educators and new teachers should take the initiative to adapt to the development needs of the era of big data to improve the level of teaching. In order to promote the teaching reform of higher vocational colleges, we should give full play to our own advantages, establish the concept of lifelong learning, learn from each other and make progress together, and constantly improve the professional level and information literacy of teachers, so as to make positive contributions to the cause of education.

4.3 Outdated and Backward Teaching Methods Fail to Stimulate Students' Enthusiasm for Learning

At present, the teaching methods of higher vocational colleges are outdated and backward in some aspects. There are some problems in the course planning of finance and accounting in higher vocational colleges, for example, there are some duplicate contents between basic finance courses and other subjects. Although the names of primary financial accounting courses are different, the actual content is similar, covering the basic principles of accounting and accounting content, resulting in the lack of learning motivation of students and the decline of learning efficiency, thus affecting the teaching effect. At the same time, these courses pay more attention to theory rather than practical operation, and lack the integration of real business environment, resulting in students feeling boring and monotonous learning, which does not meet the needs of today's big data era. Although some higher vocational colleges have accounting practice courses, due to the short practice time, outdated equipment, slow computer and other factors, the practice effect is not satisfactory. The practical operation skills of the students during the school have not been effectively improved, resulting in the inability to quickly adapt to the relevant job requirements after graduation. At the same time, there is a certain gap between the equipment and facilities of the school and the actual working environment of the enterprise. Many teachers widely use multimedia technology in the teaching process, although the update speed is slow,

but the accounting teaching method is relatively monotonous, teaching materials mainly come from the Internet. Under the traditional teaching mode, students play the role of passive receivers in the classroom, teachers dominate the teaching process and impart theoretical knowledge to students, and students lack the opportunity to participate actively. Teachers fail to implement differentiated teaching according to students' academic level, resulting in a lack of understanding of students' knowledge mastery level, relatively single knowledge framework, and failure to stimulate students' learning enthusiasm and creative thinking. If the application of modern science and technology is not fully integrated in the teaching process, but only rely on the traditional case teaching method, because the case content is relatively old, it may affect the learning effect of students.

4.4 Data Information Sharing is Popular, and the Professional Curriculum System Needs to be Updated

Since higher education institutions began to enroll students majoring in "Big Data and accounting" in 2021, relevant institutions have adjusted the major, including the professional curriculum system and other aspects have made corresponding improvements. However, in the era of digital economy, universities have not fully and scientifically investigated and refined the core professional abilities of big data accounting talents. They have mainly made minor adjustments rather than a comprehensive curriculum reform, which is the current situation. With the continuous progress and evolution of science and technology, the responsibilities of accounting personnel are constantly changing. Emerging technologies, such as big data and cloud algorithms, bring new challenges to traditional finance work, which requires a higher level of professional skills, digital skills, creative skills and collaborative skills. However, these changes have also led to the need for accountants to adapt to the changing workplace environment. First, when cultivating big data and accounting talents, it is not only necessary to ensure that they have solid professional skills, but also to adapt them to the development of the digital economy. To this end, it is necessary to strengthen their ability to apply big data technology and solve practical financial problems. The popularity of the Internet and big data has spawned the emergence of many new technologies and new ideas, which has triggered profound changes in business models and management methods, and the economic behavior of enterprises has also shown a more diversified trend. Secondly, with the popularization of digital platforms, economic information and data are gradually moving towards a "borderless" state, and the phenomenon of sharing is increasingly significant, so creativity to solve new problems has become particularly critical. This shows that financial and accounting personnel need to have excellent cooperation ability in order to improve work efficiency. In addition, security risks have also increased with the popularization of data and information sharing. While strengthening the awareness of digital security and information security and the importance of education, we should pay attention to the protection of personal privacy while enjoying the convenience brought by data and information sharing.

5. Reform Measures of Finance and Accounting Teaching in Higher Vocational Colleges under the Background of Big Data

5.1 Optimize the Curriculum and Strengthen the Training of Big Data Skills

In the era of big data, higher vocational education needs to focus on the training of big data and accounting professionals, which should start from the curriculum. In order to meet the needs of future careers, it is necessary to strengthen the training of big data skills and optimize the curriculum to ensure that students have the corresponding ability. Higher vocational colleges should add courses related to big data to meet the teaching needs of data and finance majors in higher vocational colleges and help students better adapt to the development trend of the big data era. In the curriculum of finance and accounting, courses involving big data should be added, such as data analysis, data mining and big data technology, so as to enrich the subject content. By studying these courses, students can lay a solid foundation for their future career development and master the fundamental theories and technologies of big data. In order to promote the integration of courses of different disciplines, higher vocational colleges should break the traditional disciplinary boundaries. For example, cross-courses can be set up, such as big data and financial management, and the application of big data in the financial field, so that students can learn professional knowledge of finance and accounting and understand the practical application of big data in the field of finance and accounting. This will help improve students' comprehensive ability and practical ability. Therefore, the application of big data needs to cover multidisciplinary knowledge and technology, and the integration between big data and the finance profession must be strengthened. Higher vocational colleges should adopt the teaching model of case teaching and project-based learning to promote students to understand and master the integration of big data and financial accounting more deeply. Through the introduction of concrete cases and engineering practices in the process of solving specific problems, students can learn and apply big data technology and financial expertise, thereby enhancing their comprehensive application capabilities.

5.2 Carry out Teacher Professional Ability Training, and Build a High-level Information Teaching Team

Build a high-level professional teaching team. The comprehensive ability of teachers directly affects the overall teaching results of the subject. In order to build an excellent teacher team, higher vocational colleges need to take effective and feasible measures to strengthen the construction of the teacher team, so as to promote the smooth implementation of the informatization teaching reform of the practical training course of finance and accounting. In order to attract excellent finance and accounting teachers with rich teaching experience and high information literacy to join the teaching staff, colleges and universities should increase the investment in teachers' salary and welfare. Current finance and accounting teachers should attend regular training courses to continuously learn the latest theoretical knowledge and skills, so as to help them better understand the concepts and methods of information-based teaching, so as to use scientific and technological means to teach more effectively. In addition, during the winter and summer holidays, teachers can be arranged to practice in enterprises,

so that teachers can personally feel the knowledge and skills required for practical financial work, and timely adjust the teaching direction and strategies according to these experiences, so that students can learn more practical knowledge. Teachers can learn from each other, inherit successful teaching experience, and promote the innovation and development of information-based teaching. Finally, schools can also set up a special platform for teachers to interact with each other to encourage teachers to actively share the latest teaching experience.

5.3 Strive to Deepen School-enterprise Cooperation, and Promote the 1+X Certificate System

In higher vocational education, field teaching is of great significance, because students' practical skills can be effectively cultivated through practical operation. This is an essential part. On the one hand, higher vocational colleges should take the initiative to carry out academic cooperation and set up practice bases inside and outside the school. Provide more practical opportunities for students. Students can conduct simulation practice at the school's practice base to gain an in-depth understanding of the processes and norms of corporate accounting work. In the off-campus training base, students can participate in the actual work of enterprises and understand the business conditions of enterprises and the real needs of accounting work. Schools can cooperate with enterprises to invite enterprise experts to teach or hold lectures to enrich students' knowledge and expose them to more practical educational content. On the other hand, higher vocational colleges should take the initiative to promote the 1+X certification system to enhance students' workplace skills and employability and enhance their competitiveness. After receiving the diploma, students are encouraged to choose the direction of further study according to their individual interests. In order to obtain multiple vocational certifications, students may consider taking vocational skills assessment exams in different fields to plan their personal career development more effectively. In order to expand students' future career opportunities, this initiative can assess students' level of expertise in a specific field. In the field of big data and accounting, students can consider obtaining relevant qualifications, such as data analyst, data processing engineer, etc. By participating in training and exams in data analysis and mathematics, students can better improve themselves. To be competitive in the workplace, you must constantly develop and upgrade your professional skills. It can help students improve their practical ability and vocational skills, and combine engineering technology with theoretical knowledge. In the practical stage, the school can arrange students to participate in the actual work tasks of the enterprise. For future career development, students can improve their professional skills by participating in internship projects, learning from teachers, etc., so as to lay a solid foundation in practice.

5.4 Improve the Teaching Quality Monitoring and Evaluation Mechanism

The importance of ensuring school-enterprise cooperation in cultivating students' level is self-evident, so the monitoring and evaluation mechanism of teaching quality must be improved. In order to establish a comprehensive, scientific and reasonable teaching quality supervision and evaluation system, schools should increase the strength of staffing and make efforts in all aspects. In order to ensure the comprehensive and systematic supervision of teaching quality, the primary task of higher vocational

colleges is to establish a perfect monitoring system. In the process of supervising classroom teaching, we need to pay attention to many aspects, including practical teaching, curriculum design and so on. At the same time, we should pay close attention to students' academic status and feedback, find problems in time and take measures to improve them. Secondly, strengthen the evaluation of practical teaching links. Practical operation is of great significance in the teaching of big data and finance and accounting, and is one of the key links of school-enterprise cooperation in cultivating talents. In order to ensure the quality and effect of practical teaching, it is necessary to establish the corresponding evaluation standards and rules and regulations, clarify the goal and mission of practical teaching, and supervise the whole process of practical teaching. Teachers should find the difficulties in the classroom in time, and carry out regular teaching inspection and evaluation. Professionals such as business representatives and field experts can be invited to participate in teaching evaluation activities to jointly explore ways and means to improve teaching quality.

6. Conclusions

In the era of big data, higher vocational colleges should keep up with the trend of The Times, use big data technology to support teaching, change the traditional teaching mode, help students acquire knowledge more effectively, and improve the teaching effect. In order to better adapt to and meet the challenges and changes in the field of finance, teachers in higher vocational colleges can establish intelligent teaching platform, integrate teaching resources of finance and accounting, pay attention to practical teaching, cultivate students' ability of finance and accounting data analysis and technology application, and improve teaching methods. This is of great significance for promoting the development of higher vocational finance and accounting education and cultivating high-quality finance and accounting talents.

Acknowledgements

Foundation project: 2022 Guangdong Provincial Youth Innovative Talent Project for Higher Education Institutions: "A Study on the Performance Warranty Mechanism for M&A and Restructuring of Listed Companies in China" (Approval No. 2022WQNCX290)

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