Research on Innovative Models of Accounting Professional Teaching in the Era of Big Data

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Abstract: With the continuous development and application of big data technology, accounting teaching is facing unprecedented opportunities and challenges. This article first analyzes the current situation of accounting teaching in the era of big data and points out the problems existing in traditional teaching models. Then, innovative teaching concepts for accounting majors in the era of big data were proposed, including data-driven teaching concepts, the importance of personalized learning, and interdisciplinary integrated teaching models. Furthermore, this article constructs an innovative teaching model for accounting majors in the era of big data, including innovative teaching objectives, innovative teaching objectives, innovative teaching content, innovative teaching methods, and innovative teaching evaluation. Finally, this article summarizes the innovative teaching models of accounting majors in the era of big data.

1. Introduction

With the rapid advancement of information technology, a considerable volume of data has been generated, stored, and transmitted, marking the era of big data. This era presents abundant information resources and new opportunities for professional teaching across various fields, while also posing significant challenges. As a discipline closely associated with data, traditional accounting teaching methods are no longer sufficient to meet the development demands of modern society. Consequently, innovating accounting professional education in the era of big data has become an urgent issue to be addressed[1].

2. Analysis of the Current Situation of Accounting Professional Teaching in the Era of Two Big Data

2.1 The Impact of Big Data on Accounting Majors

The advent of the big data era has significantly influenced the accounting profession. Firstly, it has furnished the accounting field with abundant data resources, resulting in more precise and efficient accounting information processing and analysis. Accounting personnel can now rapidly acquire and manage various financial data, enhancing the accuracy and timeliness of corporate decision-making. Moreover, big data technology has introduced new methods and techniques to
accounting, auditing, risk management, and other areas, thereby boosting the overall competitiveness of the accounting profession.

Nonetheless, the big data era has also posed several challenges to the accounting profession. Firstly, dealing with the accuracy and completeness of data, which is abundant and derived from various sources, has emerged as a crucial issue. Secondly, as technologies like cloud computing and blockchain continue to evolve, the accounting field must nurture talents capable of processing and analyzing big data. Nonetheless, there are existing limitations in applying big data to contemporary accounting education, such as an inadequate supply of diverse data sources and outdated data analysis methods\(^2\).

Moreover, the traditional accounting teaching model has, to a certain extent, restricted the growth of the accounting profession. The current model overwhelmingly focuses on theoretical instruction, neglecting practicality, which makes it challenging for students to promptly adapt to practical work. Furthermore, the teaching method is monotonous, and interaction between educators and students is insufficient, making it hard for students to fully harness their enthusiasm and ingenuity. Consequently, in the era of big data, the accounting major's education urgently requires innovative reforms to cater to the needs of societal development.

### 2.2 Problems in Traditional Teaching Models

In the big data era, numerous issues arise in the conventional accounting teaching method, which hinder the progression of the accounting profession. Firstly, this traditional model disproportionately prioritizes theoretical instruction, undermining practicality. Accounting education commonly accentuates fundamental knowledge and theoretical frameworks, while disregarding the development of practical. This predicament impedes students from translating their learned knowledge into practical applications upon entering the workforce after graduation, consequently influencing the overall competitiveness of the accounting profession.

Secondly, the teaching method is lackluster and interactivity between educators and students is scant. Inventional teaching models involve teachers delivering lectures while students merely listen, resulting in a dull and static classroom atmosphere. This unidirectional instructional approach fails to ignite students' enthusiasm for learning, thereby curtailing their initiative and creativity. Furthermore, due to constraints in teaching resources, educators struggle to provide customized, differentiated instruction tailored to the unique needs of each student\(^3\).

Moreover, there are issues related to the construction of the teaching team under the traditional teaching method. On one hand, the limited number of educators leads to high workloads, which in turn affects the quality of teaching. On the other hand, some teachers lack expertise in big data, making it challenging for them to cater to the teaching needs of accounting majors in the current era.

Lastly, the teaching evaluation system is inadequate. Conventional teaching assessment primarily focuses on examination results, ignoring students' process performance and overall quality. This assessment method can easily lead to students excessively focusing on scores and neglecting the development of practical skills. Furthermore, the limited evaluation index makes it challenging to comprehensively reflect the accounting professional competence of students.

### 3. Innovative Ideas in Accounting Teaching in the Era of Three Big Data

#### 3.1 Data driven teaching philosophy

In the era of big data, accounting education needs to discard traditional teaching concepts and actively embrace data-driven teaching ideas. The data-driven teaching approach implies that
teaching activities should fully rely on abundant data resources and provide a basis for teaching decision-making through data analysis and mining. Specifically, educators should adjust teaching content, methods, and evaluation systems based on data analysis results to achieve teaching objectives.

The data-driven teaching philosophy requires educators to focus on students' learning process and outcomes, fully utilize big data technology to collect and analyze student learning data, such as learning habits, interests, and outcomes. Through these data, educators can more accurately understand students' learning needs and difficulties, and thus develop more targeted teaching plans and strategies. The data-driven teaching philosophy necessitates educators to concentrate on updating and optimizing teaching content. In the era of big data, the knowledge and skills in the accounting field are rapidly updating. Educators need to adjust their teaching content in a timely manner based on data analysis results, add new knowledge points and skill training to meet the demand for accounting talents in society. Moreover, the data-driven teaching philosophy also requires educators to pay attention to the reform of teaching methods and evaluation. Educators should use diversified teaching methods such as project-driven and case teaching based on data analysis results to stimulate students' interest in learning and improve their participation. In terms of teaching evaluation, educators should focus on developing students' comprehensive abilities, such as practical and innovative abilities, from both process evaluation and outcome evaluation. The data-driven teaching philosophy requires educators to have the ability to process and analyze big data and be proficient in using big data technology for teaching research and practice. Therefore, educators need to continuously learn and improve their big data skills to meet the needs of accounting education in the new era[4].

3.2 The importance of personalized learning

In the big data era, personalized learning has become increasingly significant. It entails offering customized teaching resources and learning paths based on the individual needs, interests, and strengths of students. This approach enhances learning effectiveness and interest, fostering innovative and practical abilities in students.

Personalized learning caters to students' individual needs. In the big data era, students can access a wealth of learning resources, but not all of them are suitable for them. By adopting personalized learning, teachers can provide customized learning resources and paths for students based on their learning habits, interests, and strengths, thus improving their learning outcomes. Personalized learning helps develop students' innovative and practical abilities. In the big data era, the accounting field requires talents with these abilities. By using personalized learning, students can independently choose learning content and methods based on their own needs and interests, stimulating their interest in learning and nurturing their innovative and practical abilities. Furthermore, personalized learning can enhance the teaching effectiveness of teachers. In the big data era, teachers can utilize big data technology to analyze students' learning data, understand their learning needs and difficulties, and adjust teaching methods and strategies to improve teaching effectiveness. Personalized learning helps cultivate students' lifelong learning abilities. In the big data era, knowledge updates rapidly, and the accounting field is constantly evolving. By using personalized learning, students can develop their lifelong learning abilities to adapt to the ever-changing social needs[5].

3.3 Interdisciplinary integrated teaching mode

In the context of the big data era, the teaching of accounting majors needs to abandon the traditional single subject teaching mode and shift towards interdisciplinary integration teaching
mode. The interdisciplinary integration teaching model refers to the organic integration of accounting majors with other related disciplines, cultivating accounting talents with interdisciplinary knowledge systems and comprehensive qualities.

The interdisciplinary integrated teaching model helps to broaden students' knowledge horizons. In the era of big data, the knowledge in the field of accounting is no longer limited to accounting itself, but closely linked to other related disciplines such as economics, management, and information technology. Through interdisciplinary integration, students can better understand the knowledge system in the field of accounting and improve their overall quality[6].

The interdisciplinary integrated teaching model helps to cultivate students' innovative and practical abilities. In the era of big data, the field of accounting requires talents with innovative and practical abilities. Through interdisciplinary integration, students can be exposed to more knowledge and skills, thereby stimulating their interest in learning and cultivating their innovative and practical abilities.

The interdisciplinary integrated teaching model helps to improve the teaching effectiveness of teachers. In the era of big data, the knowledge and skills in the field of accounting are updating rapidly, and teachers need to possess interdisciplinary knowledge and skills. Through interdisciplinary integration, teachers can improve their teaching abilities and better meet the learning needs of students.

The interdisciplinary integrated teaching model helps to cultivate students' lifelong learning abilities. In the era of big data, knowledge updates rapidly, and the knowledge and skills in the field of accounting are also constantly changing. Through interdisciplinary integration, students can cultivate their lifelong learning abilities to adapt to the constantly changing social needs.


4.1 Innovation of teaching objectives

Innovating teaching objectives is a crucial aspect of accounting profession teaching innovation in the big data era. The innovation of teaching objectives entails shifting from traditional teaching objectives to new ones that adapt to the big data era's context[7].

Innovating teaching objectives requires accounting major teaching to concentrate on developing students' practical abilities. In the big data era, the accounting field needs talents with practical abilities. Innovating teaching objectives requires the teaching of accounting majors to move from traditional theoretical instruction to practical teaching, focusing on developing students' practical operational abilities and practical experience. Innovating teaching objectives requires accounting major teaching to focus on cultivating students' innovation abilities and interdisciplinary literacy. In the big data era, the accounting field needs talents with innovative abilities and interdisciplinary literacy. Innovating teaching objectives requires the teaching of accounting majors to shift from traditional knowledge transmission to the development of innovative abilities, focusing on cultivating students' interdisciplinary knowledge and skills. Innovating teaching objectives requires accounting major teaching to focus on cultivating students' lifelong learning ability. In the big data era, knowledge updates rapidly, and the accounting field is constantly evolving. Innovating teaching objectives requires the teaching of accounting majors to shift from traditional knowledge transmission to lifelong learning ability cultivation, focusing on cultivating students' autonomous learning and lifelong learning abilities. Innovating teaching objectives requires accounting major teaching to focus on cultivating students' professional ethics and qualities. In the big data era, the accounting profession needs talents with professional ethics and qualities. Innovating teaching objectives requires the teaching of accounting majors to shift from traditional knowledge transmission to the cultivation of professional ethics and qualities, with a focus on cultivating
students' professional spirit and qualities.

4.2 Innovation of teaching content

Innovating teaching content necessitates accounting major teaching to keep pace with the times, pay attention to the latest developments and trends in the accounting field, and integrate new technologies, methods, and concepts into the teaching content.

Firstly, innovative teaching content requires accounting majors to focus on the integration of theory and practice. In the big data era, accounting teaching should shift from traditional theoretical instruction to practical teaching, increasing relevant knowledge such as empirical analysis and data mining, and enhancing students' practical operational abilities. Secondly, innovative teaching content requires accounting major teaching to focus on cultivating students' interdisciplinary knowledge system. In the big data era, accounting knowledge is no longer limited to accounting itself but is closely connected to other related disciplines such as economics, management, and information technology. Therefore, the teaching of accounting majors should focus on cultivating interdisciplinary knowledge systems and improving the comprehensive quality of students. Additionally, innovative teaching content requires accounting major teaching to focus on cultivating students' professional ethics and professional qualities. In the big data era, the accounting profession requires talents with professional ethics and qualities. Therefore, the teaching of accounting majors should focus on the cultivation of professional ethics and professional qualities, and improve the professional spirit and professional qualities of students.[8]

4.3 Innovation of teaching methods

Innovating teaching methods necessitates the accounting profession to abandon traditional methods and adopt diversified and personalized methods to stimulate students' interest in learning and enhance their participation.

Innovating teaching methods requires the use of diversified methods such as project-based and case-based approaches in accounting major teaching. In the big data era, accounting knowledge and skills are rapidly updating. Adopting diversified methods can stimulate students' interest in learning and improve their participation. Innovative teaching methods require accounting majors to pay attention to students' personalized needs. In the big data era, students can access a large number of learning resources, but not all resources are suitable for them. Therefore, accounting major teaching should pay attention to students' personalized needs, provide customized teaching resources and learning paths to improve students' learning effectiveness. Additionally, innovative teaching methods require the accounting profession to adopt a combination of process evaluation and outcome evaluation in its teaching. In the big data era, accounting teaching should focus on the cultivation of students' comprehensive abilities, such as practical and innovative abilities, from both process evaluation and outcome evaluation. Innovating teaching methods requires accounting education to focus on the interaction between teachers and students. In the big data era, interactive teaching methods should be adopted in accounting education, and good interaction should be maintained between teachers and students to improve teaching effectiveness[9].

4.4 Innovation in teaching evaluation

Innovating teaching evaluation necessitates that accounting professional teaching evaluation shift from traditional methods to diversified and personalized evaluation methods.

Innovating teaching evaluation requires that accounting professional teaching evaluation emphasizes a combination of process evaluation and outcome evaluation. In the big data era,
accounting teaching should be conducted from two aspects: process evaluation and outcome evaluation, comprehensively understanding students' learning status, and emphasizing the cultivation of their comprehensive abilities, such as practical and innovative abilities.

Innovating teaching evaluation requires accounting professional teaching evaluation to focus on students' personalized needs. In the big data era, students can access a large number of learning resources, but not all resources are suitable for them. Therefore, the evaluation of accounting teaching should focus on students' personalized needs, provide customized teaching resources and learning paths, and improve students' learning effectiveness.

Additionally, innovative teaching evaluation requires the use of diversified evaluation methods in the teaching evaluation of accounting majors. In the big data era, the evaluation of accounting teaching should adopt diversified evaluation methods, such as project evaluation and case evaluation, to improve the accuracy and objectivity of the evaluation[10].

5. Conclusion

In the big data era, accounting education encounters numerous challenges and opportunities. To meet the needs of society, accounting profession teaching requires comprehensive innovation. In its future development, accounting major teaching will keep pace with the times, continuously optimizing teaching objectives, enriching teaching content, innovating teaching methods, improving the teaching evaluation system, strengthening teacher team construction, and cultivating accounting talents with practical abilities, innovative abilities, and interdisciplinary literacy.

References