Research on Accounting Teaching and Practice under the Background of"The Era of Big Data,Intelligence, Mobile Internet,and Cloud Computing"

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Abstract: Under the background of"the Era of Big Data,Intelligence,Mobile Internet,and Cloud Computing",new business environments and business models continue to emerge,and the mismatch is gradually exposed between enterprises'demand for inter-disciplinary financial personnel with management,strategy and business knowledge and the training mode of accounting personnel focusing on theoretical teaching.The rapid development of emerging technologies forces the reform of accounting education.Through analyzing the main problems of current accounting education,this paper points out that the training of accounting talents is divorced from practical needs.This paper puts forward the two-step strategy of improving accounting teaching under the background of"the Era of Big Data,Intelligence,Mobile Internet,and Cloud Computing".To a certain extent,this topic serves the implementation of the national strategy of rejuvenating the country through science and education.
Keywords: "Big Data;Intelligence;Mobile Internet;and Cloud Computing";Accounting teaching;Training of inter-disciplinary talents

1. The Demand for Accounting Talents in Enterprises under the Background of"the Era of Big Data,Intelligence,Mobile Internet,and Cloud Computing"

Under the background of"the Era of Big Data,Intelligence,Mobile Internet,and Cloud Computing",accounting work has undergone great changes:financial cloud,shared services and financial intelligent robots have liberated accounting work from tedious and single document review and preparation of settlement voucher,and the demand for basic positions has been greatly reduced.Enterprises are more in need of multi-inter-disciplinary financial personnel with management,strategy and business knowledge.

When Deloitte predicts the trend and application of financial technology in the future,it points out that new technologies such as automation and intelligence will become the normal scene of financial information services.For financial personnel,cross-departmental communication will be greatly increased,and the financial department needs to be transformed.In the future,accounting positions can be divided into three types:financial accounting positions focusing on the use of information technology,management accounting positions focusing on internal management of enterprises and strategic management accounting positions leading the overall financial work.All these positions require accountants to master certain information technology application capabilities,correlation analysis and predictive analysis capabilities on the basis of existing professional knowledge,as well as the ability to lead and manage the overall financial work on the basis of the company's overall financial organizational structure.

2. Existing Problems in Current Accounting Education

This paper analyzes the problems of accounting education in colleges and universities,which can be divided into the following three aspects:the limitation of teaching technology,the single teaching mode and the mixed arrangement of courses.

2.1 The limited teaching technology leads to the lack of educational resources

The lack of educational resources in colleges and universities is one of the reasons why students generally lack job experience. The shortage of educational funds and the limited technical level of teachers restrict the improvement of teaching technology in colleges and universities.Teaching technology cannot keep up with the demand of the information age,which directly affects the training of accounting professionals.

2.2 The single traditional teaching mode makes practical teaching become formalistic

The practice of accounting teaching should meet the needs of accounting posts in the society,but the single classroom teaching mode in college teaching is difficult to break the teaching barriers,and the traditional teaching easily leads to accounting teaching being limited to dull theoretical knowledge.In practical courses,it is difficult for universities to replicate the enterprise operation mode. The single practical course explanation mode mixes practical training courses with theoretical courses,which cannot play the role that practical teaching should play.

2.3 The cumbersome curriculum makes the construction of accounting talents imprecise

There are still some problems in accounting teaching in colleges and universities,such as unreasonable course arrangement and tedious and imprecise teaching plans.The Improper arrangement of teaching plans can lead to students'difficulty in mastering a wide range of courses,or duplicate and overlapping learning content in different courses can lead to the dilemma of learning but not being precise in talent cultivation.

3. The"Two-step"Strategy of Improving Accounting Teaching and Practice under the Background of"the Era of Big Data,Intelligence,Mobile Internet,and Cloud Computing"

3.1 The first step:introducing TPACK theory to improve teachers'informationalized teaching ability

3.1.1 Basic content of TPACK model

TPACK is defined as a knowledge synthesis that integrates information technology into teaching.It consists of three core elements:Technical Knowledge(TK),Pedagogical Knowledge(PK),and Content Knowledge(CK).Although the three elements of knowledge are independent of each other,they also combine and influence each other.

3.1.2 Accounting Teaching and Practice Reform Based on TPACK Theory

Through the integration of Technical Knowledge(TK)and Content Knowledge(CK),Technical Knowledge(TK)and Pedagogical Knowledge(PK),and the overall integration of Content Knowledge(CK)and curriculum teaching,a student-centered smart classroom teaching model is constructed to promote the comprehensive improvement of teachers'comprehensive quality,professional level,and innovation ability.

3.1.2.1 The integration of Technical Knowledge(TK)and Content Knowledge(CK)

Firstly,the teaching content should conform to the development of The Times and be expanded in a timely manner.Secondly,subject knowledge should be modularized and taught in conjunction with thematic experiments.In addition,by dividing levels through intelligent preschool testing,we can understand students'level of knowledge acceptance and teach them in accordance with their aptitude.

3.1.2.2 The integration of Technical Knowledge(TK)and Pedagogical Knowledge(PK)

According to the teaching content of accounting major and the current level of teaching informatization,"diversified and multi-level"teaching strategies and methods are adopted to realize the diversified development of principle knowledge from offline learning to online learning,mobile learning,blended learning and other teaching modes,and from learning only in class to learning anytime and anywhere,which fully cultivate students'thinking and ability of interpersonal communication,analysis and problem solving.

We take the principle and application of ERP as an example,integrate information technology into the teaching,provide detailed explanations from three stages:pre class,during class,and post class.Before the class starts,we should conduct a pre class homework test and plan teaching priorities.In teaching,teachers use ERP software to demonstrate usage methods to classmates,students complete accounting preparation through group collaboration to enhance practical skills.At the end of each experiment,students will summarize the problems they have encountered to deepen their understanding of the theory and operation of ERP.

3.1.2.3 The overall integration of Technical Knowledge(TK)and accounting course teaching

In the teaching process,it is necessary to grasp the relationship between various elements of TPACK in general,and make full use of emerging information technology in teaching design,teaching implementation and teaching evaluation.Under the overall idea of TPACK,teaching platforms such as Chaoxing MOOC and flipped classroom can be used to realize students'effective use of teaching resources and information resources.Let students study self-test and complete homework through the cloud platform.After

class,teachers should also record and evaluate the process teaching resources such as students'experimental results and practical training experience in time.

In the assessment of final grades,in addition to assessing students'practical ability in enterprise work,enterprise simulation cases can also be set up to test students'cognition and understanding of the workflow of enterprise positions,and the training reports should be uploaded.

3.2 Introduce a practical teaching model to help students flexibly apply theoretical knowledge to practice

Colleges and universities can strengthen school-enterprise cooperation and build a"modern apprenticeship"practice model to alleviate the problem of information asymmetry in school-enterprise business processing.At the same time,practical teaching models such as sand table simulation and financial practice platform can be introduced to cultivate high-quality comprehensive accounting talents who"understand business and know technology"in line with the background of"the Era of Big Data,Intelligence,Mobile Internet,and Cloud Computing".

3.2.1 Deepen school-enterprise cooperation

Under the background of"the Era of Big Data,Intelligence,Mobile Internet,and Cloud Computing",we should strengthen the cooperation between schools and enterprises,jointly build practice bases with enterprises,transport students to relevant units for internship to practice the theoretical knowledge learned in colleges and universities,effectively master financial professional skills,and make up for the shortcomings of school learning.The mode can promote the reform of talent training mode of schools and reduce operating costs of enterprises.It is a win-win innovative mode of accounting talent training.

3.2.2 Expand Off-campus Practice Base

In addition to conventional practice units such as traditional companies,colleges and universities can also expand more off-campus practical training bases,including accounting firms,financial sector companies,service sector companies,financial institutions,public institutions,etc.,to further actively explore the effective combination paths of off-campus internship and student employment,which cover diversified enterprises in all aspects,and make students obtain multi-level practice opportunities.

3.2.3 Build a training platform system

For example,simulating the real financial environment of enterprises,proxy accounting studio projects,and enterprise financial shared service projects and other projects provide students with online learning and training conditions,make them exposure to the real financial and accounting business environment,help students master accounting professional knowledge and skills,fully understand the operation of various links such as research and development,procurement,production,and sales of enterprises,and deepen the understanding of students majoring in accounting for"the integration of business and finance".

4. Future Prospects for Accounting Education

With the rapid development of artificial intelligence and automation technologies,accounting education in the future may focus more on developing students'data analysis and data science capabilities.Students will learn how to effectively process and analyze big data in order to better understand the financial situation of the enterprise and make informed decisions.The application of virtual reality and augmented reality technology may change the traditional teaching methods of accounting education.Students can experience real accounting scenarios through virtual reality to improve their practical ability and ability to deal with complex problems.Augmented reality technology can also provide richer learning resources,such as interactive simulation cases and Virtual Laboratory.

References:

[1]Xinxin Chen.The Dilemma and Countermeasures of Secondary Vocational Accounting Teaching under the Background of"The Era of Big Data,Intelligence,Mobile Internet,and Cloud Computing"[J].Chinese Agricultural Accounting,2023,33(17):101-103.

[2]Yuzhen Wang.Analysis on Practical Teaching of Accounting Major under the Background of"The Era of Big Data,Intelligence,-Mobile Internet,and Cloud Computing"[J].China Management Informationization,2022,25(04):55-57.