Exploration and Practice of The Teaching Reform of "Big Data + Accounting" Major in Higher Vocational Colleges in The AI Era

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Abstract
In the era of "big wisdom moves to the cloud", higher vocational education, which takes regional economic development as its own responsibility, is faced with the challenges brought about by changes in the professional work model and content of "big data + accounting". This study analyzes the current situation and problems of the accounting major curriculum system in higher vocational colleges. Higher vocational colleges should keep up with the pace of the times, adhere to student orientation, strengthen the exploration and practice of training models, and ultimately realize "big data + The "seamless connection" between accounting" professional talent training and the needs of economic and social development provides a strong guarantee for talent training.

Keywords
Big Data + Accounting, Teaching Reform, Higher Vocational Colleges

1. Introduction

Overturned, and the business model is constantly innovating, which has a profound impact on the enterprise management mode. In the era of "great wisdom moving the cloud", the higher vocational education, which serves the regional economic development as its own responsibility, faces the challenges brought by the professional working mode and content change of "big data + accounting".before one, Digital new technologies, represented by "big data, artificial intelligence, mobile Internet, cloud computing, blockchain and the Internet", will promote reform and innovation in all walks of life, The name of the new major published in the Catalogue of Vocational Education Majors (2021) is visible, The traditional accounting major has been renamed as "Big Data + Accounting", The revision of the policy releases that the design of talent training programs must start from the real needs of the industrial end, The core of talent training lies in the implementation of the curriculum system, Based on the curriculum system structure of the Accounting Professional Teaching Standards of Higher Vocational Schools issued by the Ministry of Education, Through a comprehensive investigation of the teaching status of school accounting courses, To ze the causes of the problem, On this basis, develop a targeted optimization scheme, Pointing out the direction for the continuous promotion of teaching reform, To achieve the continuous improvement of accounting teaching quality in schools, In the path to enhance the composite ability of accounting students [1]. Discuss the professional curriculum system of "big data + accounting" in higher vocational colleges that meets the actual needs. It has become urgent to

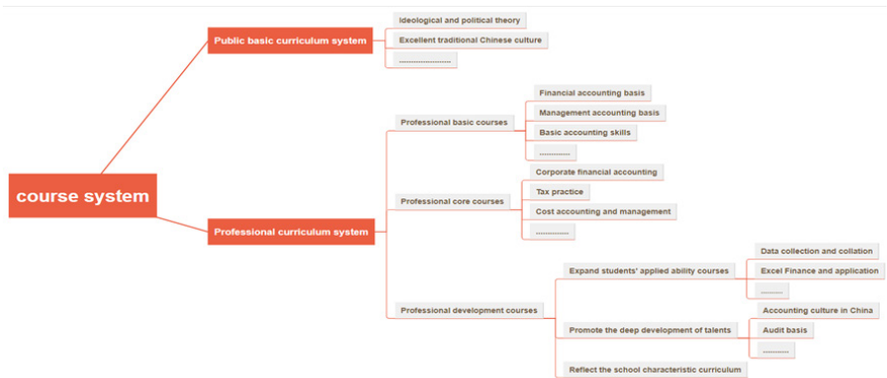
reform the original traditional "big data + accounting" professional talent training mode and cultivate "big data + accounting" professional talents that can meet the needs of modern enterprises.

2. Analysis of the current situation of the existing curriculum system

At present, the relevant research includes the following aspects: Li Yu and Huang Junjie (2019) believes that to realize diversified teaching and cultivate compound and intelligent accounting talents; Xu Qian (2018) builds an innovative system of accounting talent ability training through the reform of classroom teaching methods, innovative professional courses and other educational means. Ni Yinzhu (2019) constructs a "multi-level, direction-oriented and embedded" talent training mode. Dong Hongjie (2018) explored the construction of the "point, line and face" talent training mode with the framework of "three, four and five years". The relevant research focuses on the following two aspects: First, under the technology of "great wisdom moving cloud objects", the working mode and content of the accounting profession have changed greatly. The traditional accounting work and personnel will be faced with new challenges, and the transformation of the work of accounting personnel from basic accounting to intelligent management is the general trend. Second, we should change the original concept and mode of the professional talent training, adapt to the needs of The Times, reposition the goal of talent training, and add new technology courses, compound courses and practical courses to adapt to the intelligent development, so as to broaden the cross-professional three-dimensional knowledge structure of students.

In line with the Teaching Standards of Accounting Major in Higher Vocational Schools issued by the Ministry of Education (see the figure below), the reconstructed curriculum system structure mainly includes public basic courses and professional courses, and the professional courses are divided into professional basic courses, professional core courses and professional expansion courses. Professional basic courses are generally set up in 6~8 courses. Including financial laws and economic regulations and accounting professional ethics, economic principles, financial and financial basis, statistical basis, economic law basis, financial accounting basis, management accounting basis, accounting basic skills, cashier business operation, etc. Professional core courses are generally set up in 6~8 courses. Including enterprise financial accounting, cost accounting and management, tax payment practice, accounting information system application, enterprise financial management, enterprise internal control, accounting system design, enterprise financial analysis, etc. The school can adjust 1-2 courses appropriately according to the actual situation.

Professional development courses generally include three categories, one is the courses to expand students' application ability, such as data collection and collation, EXCEL for financial application, ERP sand table simulation training, financial application writing, accounting English, etc.; the second is the courses to promote the deep development of talents, such as Chinese accounting culture, audit foundation and practice, management accounting practice, industry accounting comparison, enterprise management, marketing; and the third is the courses reflecting the school characteristics.



3. Current situation and problem analysis of accounting professional curriculum system in higher vocational colleges

As the main position to serve the regional economy and train the applied talents in urgent need, higher vocational colleges must conform to the development and requirements of The Times. At present, the training goal of "big data + accounting" professionals in most higher vocational colleges has not completely kept up with the pace of The Times, and there is a certain gap with the needs of modern enterprises, which is mainly reflected in the following aspects.

First, higher vocational colleges do not offer enough professional practice courses to meet the needs of the AI era. At present, the proportion of professional practice courses in higher vocational colleges is relatively high, but they tend to be the traditional manual bookkeeping practice courses such as weak adaptability. The professional education of "big data + accounting" in the era of AI must have matching practice courses. In the era of "great wisdom moving cloud", modern enterprise management has entered a new stage of informatization, the integration of software and hardware is accelerating, the traditional production mode is gradually overturned, and the business model is constantly innovative, which has a profound impact on the enterprise management mode. The processing of financial information is no longer carried out according to the traditional accounting work mode. For enterprises that expect to improve efficiency, save time and achieve good economic benefits, it is more necessary for enterprise financial personnel to skillfully apply advanced information means for business accounting.

Second, the higher vocational colleges lack the training courses of "big data + accounting" professionals in the AI era, and the curriculum lacks of information new technology content. Lack of technical courses such as data analysis, such as the design of industry and financial integration, financial sharing, introduction to the smart cloud, financial data analysis and visualization application, RPA financial robot, and financial application of blockchain technology, etc. At present, some higher vocational colleges still take the basic accounting of the financial software such as Yonyou or Kingdee, as the main standard allocation and learning content of information teaching. New technology contents, such as data statistical analysis, cloud financial application, and financial sharing, are relatively lacking in the curriculum, so students lack the training and practice of financial data collection, analysis, and decision-making ability under the new technology environment.

Third, the integration of "1 + X" certificate related courses is not high. On January 24,2019, the national vocational education reform plan clearly put forward to improve the competitiveness of higher vocational col-

lege graduates employment, employment contradiction, through "the last kilometer" of employment, higher vocational colleges should open "1 + X" certificate courses, the "1 + X" certificate of higher vocational colleges and curriculum system combination degree is not high, test temporary counseling more.

Fourth, the teachers' teaching ability is not adaptable to the big data "big data + accounting" professional courses in the AI era, and the teaching methods and means are backward, and the teachers need to be strengthened. Higher vocational colleges teachers generally exist the problem of lack of practical experience, with the innovation of intelligent information technology, if the higher vocational colleges teachers did not participate in large data intelligent course training, constantly update their professional knowledge, will face although the school curriculum system is perfect, but not to the ground, and eventually will become a traditional class information course. Influenced by the traditional accounting professional education, higher vocational colleges in-service accounting professional teachers in financial theory strength, but for new technology, new resources, new platform of learning and application of insufficient, lead to teaching activities is given priority to with traditional teaching methods, not only affect the students' interest in learning, and teaching effect is difficult to achieve expectations.

Fifth, the teaching resources are single, and the construction of the resource platform needs to be strengthened. The application of various teaching resources plays an important role in the development of teaching and learning activities, and in the improvement of students' learning interest and independent learning ability. The construction of teaching resources can be shared by schools and enterprises to realize the sharing of course resources and meet the effective needs of different levels. At present, the construction of teaching resources in some colleges and universities is mainly completed by the course teachers, and the lack of resource content in the simulation industry restricts the development of teaching activities to a certain extent.

4. Construction and implementation of "big data + accounting" professional training mode

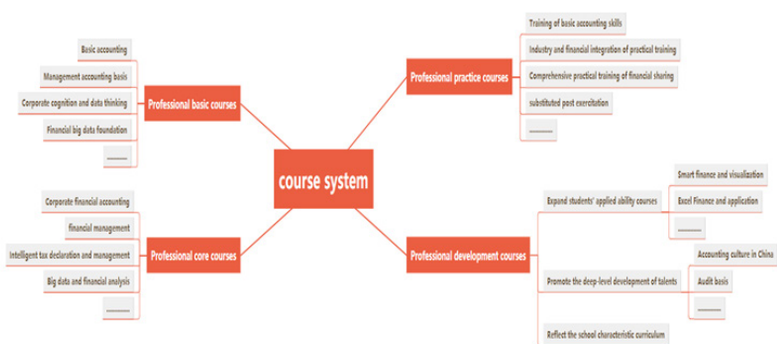
The demand of enterprises is the action direction of higher vocational colleges. Whether the teaching of professional courses can meet the needs of enterprises is the continuous effort direction of higher vocational colleges.

4.1. Course System of "Big Data + Accounting"

In the early stage, the course objectives, teaching contents and teaching methods of "big Data + accounting" majors in higher vocational colleges under the background of AI were explored and studied. Based on the preliminary research basis, this paper tries to design the course system of "big data + accounting" under the background of AI. This paper, according to the retention, merger, new, cancel four aspects to adjust the original curriculum system, namely to keep the original conform to the needs of enterprise talent demand, employment for clear curriculum, merge some job demand change, skills, overlapping content, cross courses, add some new forms, new technology, new career need post skills, cancel knowledge skills out, does not conform to the needs of the enterprise course. Under the technology of "big wisdom and cloud transfer", the professional work mode and content of "big data + accounting" have changed greatly. Therefore, the training of intelligent "big data + accounting" professionals should pay more attention to expanding students' cross-professional three-dimensional knowledge structure. First, the professional basic curriculum setting should

be "fine". Specifically, a large number of basic accounting will be replaced by intelligent robots, requiring students to understand the basic principles and basic methods. Accounting professional courses can be appropriately reduced, and the basic courses should be streamlined; second, the professional extension curriculum should be "deep". For many non-quantitative, complex financial management work requiring analysis and judgment according to the developing and changing external environment, the professional extension curriculum should be "deep", such as financial analysis, financial decision, enterprise internal control management, tax planning, management accounting practice and other related courses to cultivate students' high-level financial management ability; third, professional development courses should be "increased"."Big data + accounting" professionals if you don't understand "big wisdom cloud" technology, is difficult to adapt to the needs of modern enterprises, this requirement in terms of professional development curriculum to "increase", such as IT class information technology courses: big data analysis, artificial intelligence, cloud computing, Internet technology, Internet technology, etc., combined with information technology and can be applied to "big data + accounting" professional work, to meet the needs of contemporary enterprises.

According to the professional curriculum standards of the Ministry of Education, the courses of "big data + accounting" in this study are as follows (the figure below).



(1)Professional basic curriculum setting The basic course of accounting major is the basis of other courses. No matter how the professional curriculum system is reformed, the professional basic course should not be weakened, otherwise the reform of professional curriculum will become the source of no water. According to the current analysis of higher vocational colleges, we keep the traditional professional basic courses, basic accounting, financial regulations and accounting professional ethics, statistics, economic law, management accounting, etc., the new appropriate time demand of professional basic courses, such as enterprise cognition and data thinking, financial data, etc.

(2) Professional core curriculum setting The curriculum system structure of "big data + accounting" major in higher vocational colleges should not only reflect the learning characteristics of higher vocational students, but also meet the practical needs of accounting professionals for the social development in the AI era. On the one hand, specialized courses such as financial accounting, financial management and accounting information system are the bases of financial course system; on the other hand, requiring solid professional foundation training, add intelligent financial courses and improve their operational analysis with financial data, so as to develop students' analysis and prediction decision ability; at the same time, modify the original tax declaration course to include intelligent tax declaration and management; add core courses for big data and financial analysis and python foundation.

(3) Professional practice curriculum setting At present, the development of the financial robot and even replace the accounting foundation jobs, according to the realistic needs of the certificate financing teaching, higher vocational colleges should be combined with accounting career development direction, the development of social related jobs dynamic, job demand, and combined with the "1 + X" certificate optimization of higher vocational colleges "big data + accounting" professional practice course system. We set up the following professional practice courses: basic accounting basic skills training, industrial and financial integration training, financial sharing comprehensive training, on-the-post internship, graduation design, etc.

(4) Professional development curriculum setting The starting point and training objectives and characteristics of the "big data + accounting" majors are different. Major colleges and universities should offer professional expansion courses according to the actual needs of expanding students' application ability, promoting the deep development of talents, and reflecting the characteristic courses of the school. We can set up the following professional development courses: Excel Application in finance, audit foundation, accounting culture, enterprise management, intelligent finance and visualization, RPA financial robot development and application, financial application of blockchain technology, etc.

4.2. Strengthen teacher training and enhance their information-based teaching ability.

(1) Teacher training. The application of "great intelligent cloud-moving objects" technology has realized the deep integration of industry and finance. In the whole process of the operation, the demand for the basic accounting skills of the "big data + accounting" professionals will be further reduced, and the basic "big data + accounting" professionals should develop in the direction of rule analysis, process design and process optimization. The cultivation of "big data + accounting" professionals in higher vocational college intelligence not only requires financial mentors, but also requires corporate mentors who are proficient in business, and even corporate mentors who understand business need to be placed in a more important position. We need to establish a dual mentor system (industry mentor and "big data + accounting" professional mentor), supplemented by information technology (big data, artificial intelligence, mobile Internet, cloud technology, Internet of Things) as tools, to cultivate complex intelligent "big data + accounting" professionals who understand business, finance and technology. In terms of teacher training, it is realized through "going out" and "introducing" teachers of teachers in enterprises. On the one hand, the school establishes an effective mechanism to encourage teachers to study deeply in enterprises, guide teachers to participate in various skills training, and increase the support for teachers to take temporary posts in enterprises. On the other hand, experienced financial personnel are invited to give part-time teaching, so that students can more directly understand the business process and work content of the enterprise. In addition, through the teaching and research exchanges between the school teachers and the personnel of the enterprises outside the school, it also provides a broad space for the formulation of talent training plans, the construction of curriculum system, the improvement of teaching content and methods, and the cooperation between the schools and enterprises.

(2) Cultivate and improve teachers' information teaching ability. Strengthen teacher training, and improve teachers' ability to master and use all kinds of financial cloud platforms and big data analysis. Change the traditional teaching mode, through the introduction of information teaching technology, combining mixed teaching method, flipped classroom teaching method, task-driven teaching method and other means, which can not only stimulate students' interest in learning, but also improve the teaching efficiency and effect.

4.3. Construction of teaching resources and platforms

First of all, an intelligent resource platform for financial course is built, covering online and offline micro-courses, MOOCs, quality courses, resource databases, etc.to give students richer learning forms and content. In addition to direct purchase, we can also develop by ourselves: according with the characteristics of professional courses, animation video, simulation and virtual training, test bank and other digital resources, so as to improve students' interest in learning and let students realize ubiquitous learning.

Secondly, through the cooperation between schools and enterprises, teaching resources are jointly developed: using enterprise data to build simulation laboratories for calculation and analysis drills, so that students can directly participate in it, and realize the seamless connection between school and enterprise.

4.4. Assessment and evaluation of the "big data + accounting" professional talent training mode

In order to better test the quality of "big data + accounting" professional talent training in higher vocational colleges, a multi-party talent assessment and evaluation mechanism is established to realize the multi-party linkage of internship enterprises, vocational training institutions and software companies, and jointly carry out multi-dimensional assessment and evaluation of training talents. The assessment content mainly focuses on students' professional knowledge, the application of information technology, and the ability to solve practical business problems. In addition, it also includes the examination of moral quality and comprehensive quality. The assessment methods are flexible and diverse, not just limited to the examination test, and the evaluation focuses on the students' ability to solve practical problems of enterprises. The assessment is carried out in the form of skill display, case analysis report, certificate assessment and so on, to achieve the objective evaluation of the effect of intelligent talent training in higher vocational colleges.

5. Conclusion

In the era of "great intelligence moving cloud objects", the emergence of new information technologies such as artificial intelligence and big data not only promotes the digital and intelligent transformation of enterprises, but also accelerates the upgrading of the talent training mode of colleges and universities. The reform of "big data + accounting" professional talent curriculum system is imminent. For higher vocational colleges serving the local economy, the training of "big data + accounting" professionals relies on the deep integration of modern information technology and professional education and teaching of accounting majors, and the use of the school-enterprise cooperative education mechanism, which will provide a strong guarantee for talent training. Higher vocational colleges should keep up with the pace of The Times, adhere to the student-oriented, increase the exploration and practice of the training mode, and finally realize the "seamless connection" between the "big data + accounting" professional talent training and the needs of economic and social development.

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