

# Research on the main professional ability training scheme of higher vocational accounting talents from the perspective of artificial intelligence

-- from the perspective of data analysis of enterprise talent demand in Sichuan and Chongqing

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**Abstract:** under the background of the rapid development of digital intelligence technology, the construction and development of accounting specialty should connect the old with the new, introduce new technology and new connotation, and cultivate new talents. The construction of accounting major in vocational colleges should cultivate new digital intelligent financial talents who have big data thinking, data processing, analysis and application ability, and can be engaged in financial accounting and auxiliary decision support. Based on this, this paper analyzes the main professional abilities of accounting talents from the perspective of enterprise talent demand through offline visits and questionnaires, in order to make beneficial exploration on the cultivation of accounting talents in higher vocational colleges.

**Key words:** artificial intelligence; Higher vocational colleges; Accounting; Professional competence

In September, the Ministry of Education issued a new version of the professional profile of vocational education, including nine contents, such as career orientation, training objectives, and major professional ability requirements. It unified the framework of professional profiles of secondary vocational schools, higher vocational colleges, and higher vocational undergraduate colleges, providing basic guarantee for deepening the reform of education mode and improving the quality of talent training. The new profile pays special attention to adaptability and foresight, closely connects with the “14th five year plan” and the long-term goal of 2035, closely follows the development trend of new generation information technology such as artificial intelligence, 5g, blockchain, etc., serves the national development strategic needs, and promotes the transformation and upgrading of Vocational education. In the new version of the catalogue, some modifications have been made to the accounting major of higher vocational education, such as: the original “professional ability requirements” and “main professional ability” have been adjusted to “main professional ability requirements”; Major professional abilities require the addition of “the ability to use intelligent accounting platform, financial sharing service platform, business and financial integration information system and financial robot for business and financial processing”, etc; The main professional courses and internships have added the courses of “application foundation of big data technology” and “application and development of financial robot”. in this context, during the “14th five year plan” period, when information technology such as “smart mobile cloud zone” is booming, the major of big data and accounting in higher vocational colleges, how to closely connect with new business types and new occupations, and cultivate the major professional abilities of accounting talents that match the development trend of the times and the development trend of the accounting industry, has become an urgent problem to be solved. In order to solve this problem, this paper attempts to conduct research from the perspective of enterprise talent demand data analysis, with the help of offline enterprise interviews, enterprise questionnaires and other methods to deeply analyze the core professional abilities that accounting talents should have, and combined with the analysis of the “questionnaire on what kind of accounting talents enterprises need in the era of artificial intelligence”, on this basis, the paper discusses the accounting work processThe integration of work posts, typical work tasks and enterprise needs, from the aspects of talent training mode, curriculum construction system, school enterprise cooperation mechanism, teacher team construction, practice system construction and so on, puts forward more targeted countermeasures for the implementation plan of cultivating the core professional ability of big data and accounting major. I. Analysis of survey data of employing enterprises

In order to more comprehensively explore the main professional abilities of accounting talents in higher vocational colleges, a questionnaire about what kind of accounting talents enterprises need in the era of artificial intelligence was designed. The questionnaire star platform was used to collect the questionnaire data of 313 enterprises in Sichuan and Chongqing. At the same time, the necessary offline field research was carried out, and the interview method was used to make the results more comprehensive and targeted. The questionnaire involves 16 questions, such as the enterprise field, scale, the type of accounting personnel demand, the problems of college graduates, the quality and ability of accounting personnel recruited, and the requirements for academic certificates. The analysis is as follows:

## 1 Analysis of future demand for accounting talents

According to the results of this survey, the demand for accounting talents in the future of enterprises obviously focuses on big data and intelligent accounting (85.3%), accounting informatization (82.43%), internal control (78.91%), tax management (77.76%), etc. Enterprises' demand for big data and intelligent accounting accounts for the highest proportion, reflecting the sensitivity and attention of enterprises to information technology. In the future, enterprises will prefer new accounting talents with information technology literacy and mastering information systems and new technologies; The demand of enterprises for internal control reflects the demand of enterprises for management accounting talents; The tendency for tax management talents is mainly due to the use of the national gold tax system. Especially with

the launch of the fourth phase of the gold tax, more data of enterprises will be mastered by the tax bureau, and the monitoring also shows a comprehensive and three-dimensional trend. The state should realize the transformation from “tax by ticket” to “tax by number” classification and precise supervision, which urges enterprises to deal with potential tax risks, It is urgent and necessary to strengthen the direction of professional prevention and control, which strengthens the demand of enterprises for professional tax management talents.

## 2 Analysis of problems existing in new college graduates majoring in accounting

The performance of new graduates in enterprise work reflects the training effect of the school to a certain extent. Designing a topic specifically for this problem will help colleges and universities make adaptive adjustments in the follow-up teaching and make the talents cultivated by colleges and universities more meet the needs of the society. According to the survey enterprises, the poor ability of new college graduates to use modern information technology (82.11%) is the biggest problem;

Secondly, poor practical ability (79.87%), unsound professional knowledge (77.96%) and poor communication ability (376.36%).

## 3 Analysis on the quality and ability demand of accounting talents

The accounting work of enterprises has strict, meticulous, confidential, professional and other requirements, and the business involves a wide range. The requirements of enterprises for accountants not only pay attention to their professional knowledge, but also pay more attention to their professional ethics, ethics and communication and coordination ability, which has been verified in this survey. When recruiting accounting talents, enterprises pay the most attention to students’ communication and coordination ability (78.59%), followed by teamwork (75.4%), self-learning (73.16%), and practical operation ability (71.88%).

Through offline visits to enterprises, when communicating with HR, it is found that enterprises subjectively believe that basic skills (including practical operation ability) are the pass line and the basis for participating in interviews or employment, but enterprises pay more attention to basic qualities beyond professional knowledge such as communication, team and self-learning. Combined with the particularity of the accounting profession, we should pay more attention to the cultivation of students’ humanistic and moral qualities, such as team consciousness, communication and expression, self-learning, and put quality education through the whole process of talent cultivation, so as to improve students’ employment adaptability and help students’ sustainable development. Analysis of the minimum requirements of enterprises for financial job seekers

After the cancellation of the accounting qualification certificate, when enterprises recruit accounting graduates, they virtually take the primary accountant qualification certificate as the entry standard. The survey found that 34.19% of enterprises require graduates to have primary accounting titles, 26.2% of enterprises require enterprise practical experience, 15.65% of enterprises require skilled use of financial software, and 12.46% of enterprises require 1-3 years of work experience. From the perspective of enterprises, there is nothing wrong with it; At the school level, students should be encouraged to participate in the examination of primary accounting titles in daily teaching. At the same time, in order to make up for the lack of work experience of students, it is necessary to strengthen school enterprise cooperation, hire enterprise tutors to teach, do it according to the actual accounts, further deepen the deep integration of production and education, and actively organize students’ on-the-job practice in teaching, so as to cultivate students’ practical ability, Increase work experience and improve employment adaptability.

## 4 Practical analysis of accounting courses

Enterprise demand is the action direction of higher vocational colleges. Whether the teaching of professional courses can meet the needs of enterprises is the direction of continuous efforts of higher vocational colleges. This research on the practicability of courses is for this purpose. The survey results show that the practical ranking of accounting courses in enterprises is as follows: Basic Accounting (87.54%), accounting software application (85.3%), financial regulations and accounting professional ethics (82.11%), intelligent finance and Taxation (79.87%), financial accounting (77.32%), the application of Excel in financial management (75.08%), Fundamentals of computer (72.84%), and financial management (62.94%), Marketing (61.66%), financial statement analysis (61.66%), management (60.7%). According to the survey results, the traditional professional courses are still ranked high, accounting and tax related business are basic financial work, with the highest practicability; The practicability of courses such as accounting software application and intelligent finance and taxation is about 80%, reflecting the increasing demand of employers for new accounting talents. 66. Analysis of additional courses for accounting major

The research on the needs of enterprises can provide reference for the curriculum reform of higher vocational colleges. In order to adapt to the development of new technology and cultivate high-quality compound accounting talents, the employers believe that courses need to be opened. Among them, Internet Finance (78.91%) ranked first, indicating that enterprises have strong interest in investment; Other recognized courses were SME Investment (76.04%), information system and data technology (73.8%), financial robot (71.88%), etc. Analysis of major professional abilities of Accountants

Based on the above analysis of the data captured by enterprises and the questionnaire survey of enterprises, the main professional abilities required by current and future accounting personnel are divided into four categories: comprehensive quality ability, professional accounting ability, practical ability, data analysis ability and auxiliary decision-making ability.

Comprehensive quality ability the comprehensive quality ability mainly includes the ability of communication and coordination, the ability of analyzing and solving problems, the ability of logical judgment, the ability of computer, the ability of learning and the ability to withstand pressure. The finance department needs to communicate with other departments, so the ability of communication and coordination

ranks first. Secondly, in view of the strong professionalism of finance, the ability to analyze and solve problems is also very important.

In addition to the traditional accounting, cashier, audit and other necessary abilities, the ability to analyze and make decisions on financial statements and the ability to use financial related software have also attracted much attention. In general, under the background of artificial intelligence and big data, the ability of data analysis, decision-making and informatization is one of the important abilities that financial personnel must have.

According to the questionnaire survey of enterprises, 79.87% of enterprises think that the practical ability of college graduates is poor, and 76.36% of enterprises think that the communication ability is poor, indicating that enterprises value the practical ability and communication ability of graduates. 7 III. training plan for major professional abilities of accounting talents

Based on the above analysis, the core professional ability training scheme of Higher Vocational Accounting Talents under the background of artificial intelligence is formulated as follows:

#### 1. Innovative talent training mode of collaborative education

With the direction of smart financial accounting of small and medium-sized enterprises, the post demand of financial big data and the improvement of vocational skills, and the main line of continuous improvement of students' learning ability, we will further promote the combination of production and education, school enterprise cooperation, and jointly formulate training plans, develop educational resources, jointly develop training projects, and jointly assess the quality of training and teaching with industry companies. The course teaching content, teaching methods and students' education and training assessment methods are reconstructed. 8. Build an intelligent financial training process oriented to the cultivation of practical skills, realize the docking of specialty and industry chain, course content and professional standards, teaching process and production process, and establish a talent training mode of production and education integration and collaborative education.

#### 2. Constructing the curriculum system and teaching mode of the integration of production and education

Pay more attention to the cultivation of students' vocational education application ability and innovation and entrepreneurship ability, integrate professional basic courses, main courses, core courses, professional skills application and practical training courses, and form application-oriented courses or course modules that highlight the cultivation of practical ability. According to the needs of the industry and enterprises served by the specialty, carry out curriculum reform, build curriculum system, adjust curriculum structure, promote the docking of curriculum content and professional standards, and build a curriculum suitable for the integration and innovation of industry and education. 9. Implement the heuristic, cooperative and project-based teaching mode guided by solving practical problems and centered on students with industry enterprises. Reform the content, methods and means of practical teaching, take the technological innovation projects of industrial enterprises as an important carrier for the cultivation of applied talents, and take the front-line needs of industrial enterprises as the source of graduation design topics. 103. establish an on campus and off campus experimental practice base integrating production and education

According to the requirements of the unity of knowledge and practice, and according to the real technology and process of intelligent finance of the industry and enterprises served by the accounting major in higher vocational colleges, the knowledge education system and training practice environment are constructed. Through the introduction of enterprise financial digital management platform, a practical teaching base and talent training base with the functions of enterprise project construction, teaching and R & D and the integration of school enterprise and industry university research will be built. Build a number of high-level off campus internship and training bases to send students to the front line of enterprises to engage in the work related to the implementation of financial software. Students with excellent performance will be recommended to enter the internship enterprises, and establish a seamless talent delivery system from on campus comprehensive practice and enterprise internship to recommended employment. At the same time, we will create an intelligent financial practice on campus, introduce real accounting of enterprises, establish a school enterprise cooperation real account and accounting practice center, undertake the business in Sichuan and Chongqing and the whole country, serve the society and enterprises, and truly move enterprises into the campus. 124. build a platform for local industry university research cooperation

Integrate into the local economic and social development of Sichuan and Chongqing, create a platform for local industry university research cooperation, deepen and expand strategic cooperation with enterprises, innovate the mode of industry education integration and docking implementation mechanism, build an enterprise intelligent financial application center in the Sichuan Chongqing urban economic circle, and promote the transformation and industrialization of scientific and technological achievements through the construction of an intelligent big data industry college. Carry out horizontal research with industry enterprises served by the Institute of industry, and actively explore new ways of radiation, diffusion and industrialization of advanced technology. Build industry university research platforms such as intelligent accounting agent enterprise service center and intelligent financial consulting enterprise service center. 136. build a platform to serve local innovation and Entrepreneurship

Relying on the resources of in-depth cooperative enterprises, training courses on innovation and entrepreneurship related to intelligent fiscal and taxation services, financial information services, enterprise accounting consulting, and agency accounting are opened to encourage students to carry out relevant innovation and entrepreneurship activities. By introducing enterprise resources and ecological partners, incubate a number of innovation and entrepreneurship projects that serve the application of enterprise intelligent finance, and create a distinctive innovation and entrepreneurship platform. fourteen

## 4 Summary

To sum up, the rapid development of new technologies such as Dazhi mobile cloud zone has put forward higher requirements for the selection and training of accounting students, requiring students majoring in big data and accounting not only to master the professional knowledge of accounting discipline, skilled operation of financial software, data collection and screening and basic accounting skills, but also to have corresponding professional ethics. Professional abilities such as lifelong learning ability, written expression ability and team communication and cooperation ability. Based on the development of new technology and the new requirements of industry enterprises for students' major professional abilities, colleges and universities need to build a training program for major professional abilities of students majoring in big data and accounting from the aspects of talent training mode, curriculum system and teaching mode, and practical training platform, which can meet the major ability needs of employment units for graduates of this major, Improve the ability of big data and accounting students to adapt to economic and social development.

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