The practical dilemma and reform path of university-enterprise collaborative education for Auditing major in the Big Data Era

Feng Hua  
School of Accountancy, Shan Dong Women’ University, Jinan, China  
e-mail: fh86526718@126.com

Abstract. Based on the demand of applied audit talents in the Big Data Era, the paper puts forward the reform path of university-enterprise collaborative education mode for Auditing major through the analysis of the practical dilemma of the mode. By continuously deepening the connotation and extension of university-enterprise cooperation, the government, enterprises and universities can achieve all-round and high-quality cooperation in professional construction, personnel training and other aspects.

1. Introduction

The Big Data technology is a new product in the development of the Internet, which is gradually infiltrating into various fields. As an authentication activity of data analysis, audit can ideally match the characteristics of Big Data technology to process data quickly and accurately, and improve the efficiency and quality of audit. But at present, the cultivation of audit talents in universities is far behind the needs of the development of data-based audit practice, which puts forward new challenges to the cultivation of audit talents. On this background, through the reform of university-enterprise collaborative education mode, the introduction of enterprise's advanced Big Data audit technology and audit mode, to meet the needs of audit technology and practice development for the training of new audit talents, is an effective path for the reform of the training of application-oriented talents in auditing at this stage. Universities must truly combine the needs of enterprises with the mode of talent cultivation, realize the organic connection of industrial chain and talent cultivation chain, and achieve the deep integration and collaborative development of both sides, so as to cultivate the application-oriented audit talents needed by the society in the Big Data Era.

2. The practical dilemma of university-enterprise collaborative education model under the background of the Big Data Era

2.1 The practical dilemma at the macro level

From the perspective of social macro level, enterprises and industry associations do not play a due role in university-enterprise collaborative education as the gathering place of audit talents. On the one hand, China's industry associations have not been established for a long time, for example, the CICPA(Chinese Institute of Certified Public Accountants was established in 1988, and the CACFO (China Association of Chief Financial Officers) was established in 1990. The management mechanism of these associations is unperfect, and the functions and positioning in serving enterprises
and society are not clear. Some industry associations are dependent on government departments, and not independent enough to fully participate in the development of university-enterprise collaborative education. On the other hand, the enthusiasm of enterprises and industry associations to participate in university-enterprise collaboration is not enough. Because there is no clear role that enterprises and industry associations should play in the process of university-enterprise collaborative development in China's policies, enterprises and industry associations have a weak sense of participation, do not give full play to their bridge and link role in promoting university-enterprise cooperation, leading to the existing university-enterprise cooperation is mainly the spontaneous behavior of both sides, leading to the university-enterprise collaborative education in form.

2.2 The practical dilemma at the micro level
From the micro level, the practical dilemma of university-enterprise collaborative education mode are mainly reflected in the curriculum system, practice environment, teaching staff and evaluation methods.

2.2.1 Insufficient suitability of curriculum system. In the Big Data Era, social and economic structure and development mode are constantly adjusted and changed, the Big Data, financial sharing and intelligent robots are widely used, information technology and the internet gradually penetrate into various professional fields, and the operation mode characterized by the Big Data and cloud computing has changed the production, sales, investment and other links of the traditional industry, making the production process, working method and communication mode Great changes have taken place, and the information reconstruction industry model will become the mainstream of future development, which also puts forward new requirements for the reform of professional curriculum system in universities. At present, the curriculum system of universities lags behind the development of industrial enterprise practice, and lack practical courses related to the forefront of the industry, lack effective docking between theoretical teaching and social practice, and disconnect from the current development trend of information technology, resulting in the lack of practical ability and innovation ability of students, unable to meet the needs of application-oriented talents in the Big Data Era.

2.2.2 Insufficient simulation degree of practical environment. Compared with the development of audit practice, many universities are lagging behind in information construction, slow in updating practice teaching platform, low in virtual simulation degree or slow in updating and upgrading of professional practice training, poor in resource openness and sharing, which leads to the difficulty in ensuring the effectiveness of practice teaching after employment, enterprises need to spend a lot of human and material costs for pre job training, which can not achieve “zero distance docking”.

2.2.3 Low coordination of teaching staff. At present, the level of university-enterprise cooperation is shallow and the quality is not high, Practical teacher staff construction is relatively weak, part-time teachers in enterprises and full-time teachers in universities are independent, lack of effective collaborative management, resulting in poor matching between practical teaching and enterprise needs, lack of integration of cutting-edge problems in the industry, unsatisfactory effect of collaborative education, and unable to meet the needs of students to adapt to future professional posts.

2.2.4 Lack of diversification of evaluation methods. The existing evaluation methods of practical teaching are relatively single, most of which are final examinations, but less of which are course papers, research reports, experimental tests, oral defense and other methods. At the same time, most of the evaluation focuses on the results rather than the process, which makes it difficult to form a comprehensive, dynamic and objective evaluation of students, to effectively play the role of the evaluation mechanism in stimulating and guiding students, and is not conducive to the improvement of students' comprehensive quality.

Based on the above analysis, the paper puts forward the reform path of university-enterprise collaborative education mode in the Big Data Era, and puts forward reform measures from two
perspectives of industry enterprise level and university level, so as to realize the all-round and high-quality coordination of university-enterprise in professional construction, talent training and other aspects.

3. The reform path of university-enterprise collaborative education mode in the Big Data Era

3.1 Reform path at the macro level
At present, most of the industry associations in our country implement the industry self-management mode under the supervision of the government. The relevant government departments should issue documents to further clarify the functions and positioning of the industry associations in serving the personnel training of colleges and universities, and formulate effective measures to promote the industry associations to actively participate in the professional construction and personnel training. We will vigorously promote and encourage industry associations, enterprises and universities to cooperate in education, increase the sense of participation of enterprises and industry associations in personnel training, give full play to their role as bridges and ties in promoting university-enterprise cooperation, and encourage industry associations and enterprise experts to enter the university. In addition, the government, industrial enterprises and universities should make joint efforts and coordinated development, guarantee the rights and obligations of cooperation between the universities and enterprises from the system, determine the guarantee mechanism for the implementation of the university-enterprise collaborative education mode, guarantee the improvement and development of the university-enterprise collaborative education mode, and make the university-enterprise collaborative education mode truly implemented.

3.2 Reform path at the micro level
As a micro subject in the process of university-enterprise collaborative education, the reform path is mainly reflected in the determination of talent training objectives, the reconstruction of curriculum system, the construction of practical teaching environment, the construction of teaching staff, and the reform of assessment and evaluation system.

3.2.1 Determine the training objectives for auditing major through university-enterprise collaboration.
In order to meet the needs of new technology, new business form and new mode for new audit talents, universities and enterprises should work together to determine the training objectives of application-oriented audit talents -- to cultivate students with humanistic quality, scientific spirit, integrity quality, innovation and entrepreneurship awareness and social responsibility, to train senior application-oriented professionals who have basic knowledge, ability and quality in economy, management, law and audit, etc. familiar with auditing, accounting standards and relevant economic laws and regulations, master modern auditing theories, methods and means, especially data-based auditing technology in the Internet environment, have strong audit practice operation ability, and can engage in auditing, tax and management consulting work in accounting firms.

3.2.2 Restructure the modular curriculum system of "docking needs and classified training" through university-enterprise collaboration. Based on the development of Big Data technology, universities should highlight the needs of talent training to serve enterprises, society and government, and reconstruct the modular curriculum system of "docking needs and classified training ". Taking the Auditing major of one university as an example, the restructured curriculum system is divided into three training directions: one is the direction of internal audit, which serving the needs of enterprises for internal audit talents, focusing on cultivating students' adaptability to the development of the Big Data era and data-based audit ability; the other is the direction of social audit, which serving the needs of society for application-oriented audit talents, focusing on cultivating students ;the third is the direction of government audit, which serving the needs of government audit and supervision for audit talents, focusing on cultivating students' dialectical thinking ability, audit independence and prudence.
3.2.3 Build "simulation and virtualization" practice teaching environment through university-enterprise collaboration. Based on the development of Big Data technology, universities should set up a practice teaching environment based on the professional requirements and occupational environment of enterprises, and fully integrate the needs of society for the development of data based audit technology talents, and build a modern and professional simulation laboratory based on "Internet +" together with enterprises. "Simulation" refers to the introduction of mainstream software currently used by enterprises to simulate the business process of enterprises, and cultivate students' professional analysis ability, professional judgment ability and professional insight; "virtualization" refers to the construction of virtual simulation practice platform to simulate the real professional environment, so that students can have the ability to graduate and work, and reduce or shorten the period of talent training of enterprises to realize the “zero-distance-docking” between talent training and enterprise demand.

3.2.4 Build a teaching staff of "cross border integration and double-qualified teacher Education" through university-enterprise collaboration. On the one hand, according to the requirements of data-based audit personnel training for the quality of teachers, teachers in universities play their advantages in theoretical knowledge and teaching experience, and are responsible for the teaching of theory docking courses; while teachers in enterprise are responsible for the teaching of practice docking courses in terms of practical skills, and the two are integrated to learn from each other. On the other hand, the universities and enterprises jointly cultivate a “double-qualified" teaching staff with both theoretical knowledge and practical skills by means of in-depth cooperation, such as the practice of teachers in the enterprise, the business training of enterprise personnel in universities, and the cooperation of teaching and scientific research among universities and enterprise personnel.

3.2.5 Design the assessment and evaluation system of "market-orientation and process incentive" through university-enterprise collaboration. In order to design the assessment and evaluation system of "market-oriented and process incentive", we must take the market demand for audit talents as the assessment and evaluation guide, introduce the assessment and evaluation system of enterprises into the teaching assessment process, and jointly evaluate the quality of talent training by enterprises and universities; through the design of the assessment and evaluation system of combination of static and dynamic, process and result assessment, we can conduct the assessment and evaluation in the following aspects: In the process of evaluation, we should strengthen process evaluation and learning motivation, highlight the importance of learning process to personnel training, and encourage teachers to adopt assessment methods such as research reports, course papers, case analysis, scheme design, which can comprehensively examine students' application ability.

4. Conclusion

Based on the characteristics of the development of the Big Data Era, and guided by the social demand for application-oriented audit talents, the paper analyzes the current dilemma of the university-enterprise collaborative education mode from the macro level and the micro level, and then puts forward the reform path of the school enterprise collaborative education mode. In the future research process, we should continue to explore the reform of school enterprise collaborative education mode in different industries and regions.

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