

# Study on Development Countermeasures of Accounting Major Industry-Education Integration based New Business: Taking LNSF University as an Example

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**Abstract:** The emergence of the digital economy has brought about a shift in the traditional approach to talent development in the business sector. To align with the demands of the digital economy's evolution, a new paradigm of business has arisen. Industry-education integration stands as a pivotal endeavor to foster the harmonious growth of the economy and society, optimizing the structure of talent cultivation within the realm of new business science. It serves as the preferred method for universities to produce high-level applied professionals required by society. In this paper, we investigate the present situation and challenges related to industry-education integration in accounting programs at LNSF University within the context of new business science. We present strategies and recommendations for the advancement of industry-education integration in accounting programs, focusing on five key aspects: talent development objectives, curriculum design, teaching methodologies, faculty composition, and forms of school-enterprise collaboration. The aim is to provide insights for the reform of industry-education integration in accounting programs at applied undergraduate institutions. This paper offers valuable reference points for the ongoing transformation of teaching and learning within accounting programs at applied undergraduate universities.

**Keywords:** New Business; Combination of Industry and Education; Accounting Major

## 1. Introduction

With the influence and penetration of the six emerging technologies of "Great Wisdom moving cloud Area" on all walks of life,

China's business landscape has witnessed a transformative overhaul and innovation. The emergence of novel corporate entities and business paradigms has catalyzed the reconfiguration and adaptation of the contemporary business talent development framework. In the current era, there is a growing and pressing need for enterprise financial sharing and business innovation. This necessitates a significant transformation and enhancement of the functions, working approaches, business processing methods, and operational mechanisms within the domain of enterprise financial management. The establishment of new business disciplines presents diverse challenges to conventional finance and accounting services. Application-focused undergraduate institutions are committed to serving their local communities, with a clear emphasis on education's value to society that exhibits distinct industrial and regional features. To address the requirements of the digital economy's growth, there is an immediate necessity to cultivate a cohort of fresh business talents. Economic progress is intricately linked with the presence of proficient, application-focused finance and accounting professionals. The undergraduate colleges are the main force to train high-level finance and accounting talents, and the combination of production and education is an important measure for application-oriented undergraduate colleges to train finance and accounting talents needed by the society. Building upon prior research findings and aligning with my field of expertise, this paper utilizes the finance and accounting program at LNSF University as a case study to explore the countermeasures for promoting industry-education integration in applied undergraduate institutions within the context

of the new business landscape.

Currently, both domestic and international scholars have engaged in extensive deliberations regarding the research on talent development within the framework of industry-education integration. From the perspective of enterprises, Emilio Bellini and other scholars [1] of Politecnica di Milano used structural equation model to test the data collected from enterprises, and found that past cooperation experience can benefit the cooperation between universities and industry, and held that enterprises should develop strategic capabilities to promote benefits. Mutual trust between enterprises and schools is the main driving force for tangible returns. Dang et al of the University of Sydney [2] argue that knowledge transfer between industry and academia is an important activity that should be promoted by government policies and incentives. Through investigation and analysis of some universities in Australia, scholars found that most schools transfer knowledge of industry-education integration through formal channels (such as research centers, contract research, etc.) and informal channels (such as internships, industry lectures, industry training programs, etc.). Scholars such as Freitas and Verspagen [3] have determined, through their research and investigations, that achieving the objectives of both higher education institutions and businesses requires enhancements in the technical objectives and organizational structure of the integration between these two entities. Scholar Kari Laine [4] believes that universities should promote the combination of industry and education, the docking of majors and industries according to their own characteristics, and provide learning and training platforms and more real internship opportunities for talent training. In China, scholar Zhu Haitao [5] believes that the combination of production and education is not only a teaching concept, but also an education strategy, which is beneficial to improving the comprehensive strength of talents, realizing high-quality teaching, and cultivating application-oriented talents suitable for social and economic development. He Jijie [6] believes that the combination of production and education should be improved from two aspects: one is to optimize the integrated teaching mode of production and

education; the other is to build a complete and independent platform for combination of production and education. Zhao Haiyan and Yu LAN [7] firmly believe that the fusion of industry and education represents a novel educational approach and an essential choice for nurturing talent in the field of finance and accounting at applied undergraduate colleges and universities. At the same time, they build a talent training system for the combination of industry and education in finance and accounting majors from three aspects: curriculum system, teaching methods and security mechanism. Song Jun, Jin Daiping et al. [8] believe that the new business discipline and the combination of industry and education are mutually supportive and interrelated in connotation, and the new business discipline needs to fully rely on the combination of industry and education, which can also effectively promote the training of new business talents. Zhang Sainan [9] believes that the combination of industry and education is an inevitable requirement for deepening education reform and promoting the supply of human resources in China to adapt to industrial development. He analyzes the problems existing in the combination of industry and education from the perspectives of the government, universities and industrial enterprises, and puts forward corresponding countermeasures from these three levels. Scholars Hong Tao and Wang Xiaonan [10] conducted an evaluation of the current competitiveness of industry-education combination in local colleges and universities by utilizing a SWOT analysis, and believed that the core competitiveness of the integration of industry and education in local colleges and universities should be improved from the three levels of government, schools and enterprises. In general, the domestic and international academic communities predominantly focus on researching the evolution, essence, and developmental approaches within the realm of industry-education integration. This effort has enriched the associated theories, delved into numerous models of industry-education integration, and yielded fairly substantial research outcomes. The existing researches at home and abroad have certain reference value for the study of this paper. This paper will start from a rarely mentioned object, namely the finance and accounting major of LNSF

University, an application-oriented undergraduate, to analyze and examine strategies to promote industry-education integration within the context of the emerging business landscape.

## **2. Analysis of the Current Situation and Problems of the Integration of Industry and Education in Finance and Accounting Major of LNSF University**

### **2.1 LNSF University**

LNSF University is one of the first pilot universities of general undergraduate transformation in Guangdong Province. It is a normal college in western Guangdong Province. It has nearly 30,000 full-time undergraduates and 23 secondary colleges. In recent years, LNSF College has proactively aligned itself with the requirements of national and local economic and social advancement. It has been a catalyst for industry-education integration and contributed to the high-quality development of the local economy.

After continuous exploration and research, LNSF University has made a series of achievements in talent training, including building an industrial college with enterprises, deepening the integration of production and education, collaborative education and enhancing students' innovative employability through the diversified educational mode of "professional college+Industrial College"; Exchange and discussion with enterprises and signed school-enterprise cooperation agreement, advocate for the synergy between industry and education as well as the implementation of school-enterprise "dual" education, aiming to establish a mutually beneficial and win-win scenario for both educational institutions and businesses; Jointly build an "industry-university-research cooperation base" with enterprises, actively pioneering a comprehensive model for industry-education integration, fostering all-encompassing collaboration between industry, education, and research. This approach harnesses the strengths of both academic institutions and businesses throughout the talent development process, ultimately achieving synergistic advantages and facilitating the sharing of resources.

The development of LNSF University has made remarkable achievements. But in the

process of talent training, there are also some problems. To enhance the quality of education, refine the institution's unique characteristics, and cultivate practical talents tailored to meet industry demands, this paper conducts an in-depth investigation, using the finance and accounting major as a case study, and comprehensively analyzes the reform and practice of finance and accounting professional talent training mode.

### **2.2 Introduction to Finance and Accounting**

At present, the accounting majors of LNSF University are all located in the business School, including the Financial Accounting education major, Financial Management major and Financial management major (ACCA Innovative Experimental Class).

Adhering to the concept of "gathering elites and spreading business Road", the School of Business is committed to cultivating application-oriented new business talents with "thick foundation, wide caliber, strong moral character, strong ability and responsibility" and is committed to building a business school with distinctive characteristics of "based in West Guangdong, docking the Free trade Port, facing the Greater Bay Area and integrating domestic and foreign". It has trained thousands of students for more than 10 years, and has sent a large number of financial and accounting professionals who have contributed to the local industry, thereby establishing a notable reputation within the community.

### **2.3 Achievements of Integration of Industry and Education in Finance and Accounting Major of LNSF University**

The integration of production and education is an advanced concept. The progress of industry-education integration in the domain of finance and accounting within the framework of the new business landscape primarily manifests in the formulation of curriculum system, the construction of teaching system, teaching conditions, teaching staff, and the depth of school-enterprise cooperation.

#### **2.3.1 Curriculum system**

Curriculum system is a set of interrelated courses in order to attain the desired objective of talent training. The curriculum system is the carrier to achieve the training goal and the key to guarantee and enhance the educational

quality, which requires the curriculum of the school to be closely set around the training goal. According to the support of graduation requirements for training objectives and the corresponding relationship matrix between courses and graduation requirements in the training program for finance and accounting professionals of LNSF University, it can be seen that the correlation degree between graduation requirements and training objectives is medium or strong, and each course is associated with 3-8 graduation requirements.

### 2.3.2 Teaching system

Based on the in-depth and practical "gender two-oriented" school-running orientation, the school fully implements the school's strategic deployment of "thriving Business" and is committed to the construction of "new business", creating an open teaching system based on on-campus classroom teaching and supplemented by off-campus base practice. Relying on the "Provincial Economic and Management Experimental Teaching Demonstration Center", a new business "1+3+N" practical teaching system has been formed, which is composed of a skill training system, a ability training system and a "multi-wheel drive" practical ability improvement system "1+3+N" (means a provincial economic and management teaching demonstration center, three categories of bases and a number of practical training competitions). According to the college's responsible person, the new business "1+3+N" practical teaching system has effectively solved the three major teaching difficulties: first, it has improved the experimental hardware and software facilities, and increased the proportion of experimental practical training courses; The second is to coordinate the basic professional courses of the whole school and integrate the professional practice skills of the whole school; The third is to build a "multi-wheel drive" three-dimensional and multi-level practical teaching system.

### 2.3.3 Teaching conditions

The college has Guangdong experimental teaching demonstration Center platform, Guangdong Province model teacher education practice base, financial accounting education (normal), financial management majors have good teaching conditions, has formed a "manual simulation experiment - professional

comprehensive simulation experiment - cross-professional comprehensive practical training - off-campus professional practice" and other complete practical teaching system. As a national key training base for vocational education teachers, the Department of Accounting has undertaken more than 10 periods of national and provincial training for backbone accounting computerization teachers in secondary vocational schools, and has undertaken all kinds of financial and tax practice training for tax systems and enterprises and public institutions all year round.

### 2.3.4 Teachers

The Department of Accounting has 14 full-time teachers, including 3 master supervisors, 2 professors, 8 associate professors, 1 lecturer and 3 teaching assistants. The title structure, age structure, degree structure and college structure satisfy the requirements for teaching and progress. Over 71% of our total teaching staff hold senior titles, and 93% of our teachers have attained doctoral and master's degrees. Many teachers have overseas study experience.

### 2.3.5 School-enterprise cooperation

The combination of industry and education represents the profound advancement of school-enterprise collaboration, and this partnership between educational institutions and businesses is the essential prerequisite for industry-education integration. The ability of school-enterprise cooperation to adapt to economic and social development is the only way for economic globalization and industrial transformation and upgrading, which is widely recognized by the business and education circles, and is also the only way for higher education institutions around the country to innovate talent training models and reform systems and mechanisms under the new business background. At present, LNSF University has carried out school-enterprise cooperation with many enterprises such as Zhanjiang Agricultural Reclamation Construction Group Co., LTD., Zhanjiang Audit Bureau and Zhanjiang Yuexi Accounting Firm Co., LTD. The school has conducted exchanges and discussions with enterprises, conducted in-depth discussions on the specific forms of school-enterprise cooperation and other issues concerning personnel training programs, broadened the path of professional

personnel training of the school, provided more internship and employment opportunities for business students, and provided high-quality accounting professionals for government departments and enterprises to promote the organic combination of professional training and social services. Effective collaboration between educational institutions and businesses facilitates the amalgamation of theory and practice, thereby advancing the high-quality development of accounting personnel training.<sup>3</sup> Problems existing in the integration and development of the finance and accounting major of LNSF University under the background of new business

### **3.1 Lack of Courses Related to Big Data and Intelligence**

In recent years, the innovation in the new generation of information technology, exemplified by big data, cloud computing, and artificial intelligence and so on has accelerated the iteration, which has not only promoted social development and transformation, but also made the traditional financial industry suffer a certain impact, and what accountants have to do is no longer simply processing vouchers, accounting, tax declaration... In addition to the original data collection and processing, modern accounting needs to master the ability of data analysis, so as to predict risks for enterprises and provide investment decisions. Facing the challenge of new technology, accountants need to strengthen the knowledge reserve of computer and information technology, expand professional knowledge, train the ability of data analysis and macro market vision.

The course types of finance and accounting major in LNSF University mainly include public course, general education course, subject professional course, teacher education course (unique to finance and accounting education major), comprehensive practice course and cross-professional course.

Taking financial and accounting education as an example, there are 98 courses in five categories. Among the 98 courses, there are just five courses closely associated with the new generation of information technology, including "Basic Computer Application 1.", "Basic Computer Application 2", "Frontier of Computer Science", "Big Data Technology and

Application", and "EXCEL Application in Economic Management". Courses related to big data and intelligence only account for 5% of the total number of courses. In general, there is a lack of courses related to big data and intelligence, which is not conducive to cultivating finance and accounting talents with new skills and adapting to the development of information technology.

### **3.2 Traditional Teaching Conditions and Methods**

Teaching conditions include software teaching conditions and hardware teaching conditions, "software" mainly refers to the construction of teachers and curriculum construction, "hardware" mainly refers to teaching equipment and teaching resources. The teaching places of finance and accounting major are mainly classrooms and training rooms, and the professional equipment of the training room is sound, but the related financial software is updated slowly, and there are many mistakes in the comprehensive practical training of students. The teaching method is mainly teachers' teaching throughout the whole class, students' participation is relatively low, and the teaching conditions and methods of finance and accounting are relatively traditional, which is out of touch with the needs of the new era environment.

### **3.3 The Student Coverage of the Production-Education Integration Project is Not Complete, and the Depth of School-Enterprise Cooperation is Not Enough**

The internship of students majoring in financial accounting education is mainly arranged in secondary vocational schools, and the internship content mainly includes class teacher work and teaching work. Students lack the opportunity to carry out professional practice in enterprises, which is not conducive to the real combination of accounting knowledge theory and practice, and is not conducive to cultivating "double-qualified" accounting teachers. Internship constitutes a highly crucial component of practical education. The purpose of internship is to let students better understand the nature, content and application of their major in production practice. However, in fact, the resources

available for school-enterprise collaboration are constrained, given the considerable number of finance and accounting students, so it is impossible to arrange all students to study in enterprises. It is difficult for companies to show students during the internship process.

#### **4. Suggestions on the Model of Integrating Production and Education in Finance and Accounting under the Background of New Business**

##### **4.1 Adjust Talent Training Objectives through Professional Demand Research**

In the context of the emerging business landscape, defining the appropriate training objectives is the foremost step in determining the type of finance and accounting talents that should be nurtured in applied colleges and universities. In the digital age, new technologies are updated and iterated quickly, so the school should carry out regular research on professional needs and adjust the training objectives for finance and accounting majors should be aligned with the requirements of the market and businesses. Adhering to the concept of all-round development of students, we train high-level financial and accounting talents for the positions required by enterprises, and ensure that students can be competent for their jobs after employment. LNSF University's finance and accounting major should, according to the school's idea of deepening "strengthening normal education, strengthening science and technology, and thriving business", accurately connect with local industrial development needs, face the "new business form and new technology" within the context of the evolving business landscape, it is essential to define the knowledge, skills, and achievements expected of applied finance and accounting professionals. This involves fostering interdisciplinary integration within finance and accounting programs and actively developing a training model that integrates industry and education. The ultimate objective is to achieve seamless industry-education integration throughout the entire professional training cycle.

##### **4.2 Enhance the Curriculum Framework.**

The curriculum serves as not only the foundation for nurturing talent within

educational institutions but also as the assurance of quality talent development. It plays a pivotal role in supporting the economic advancement of the surrounding region. According to past experience, the curriculum system of the school is basically set by the school independently, without the participation of local governments and industrial enterprises. To optimize the curriculum, first of all, we should adopt an open approach to education, aligning with the goal of fostering industry-education integration. It is imperative to continually enhance the curriculum design methodology, enabling local governments and key industry stakeholders to contribute to the curriculum system development. This collaboration aims to improve the alignment between the courses offered and the evolving needs of industrial development. In light of the new business landscape, the courses of finance and accounting major should reflect the cutting-edge and times, and introduce new technologies into the curriculum in a timely manner. Increase courses related to "big data and intelligence", such as: financial sharing and intelligent finance, intelligent accounting basis, big data financial decision-making, Excel advanced data analysis, etc., through such courses, students can cultivate their data processing and analysis abilities, and learn to use new technologies to promote the integration of industry and financial information.

##### **4.3 Innovative Classroom Teaching Methods, Emphasizing Theory and Practice**

"Teaching should highlight innovation, teaching methods should exemplify advanced approaches and foster interactivity. They should actively encourage the seamless integration of modern information technology into the teaching process while guiding students toward inquiry-based and personalized learning experiences." In the evolving landscape of new business, the progression of the finance and accounting major demands the cultivation of students' strong theoretical understanding of accounting, with an increased emphasis on honing their practical skills. To nurture high-quality, applied finance and accounting professionals, a balanced approach is essential, encompassing both theoretical and practical teaching. Enhance conventional teaching

techniques, increase the proportion of practical teaching, attach importance to the application of theoretical knowledge in practical work scenarios, integrate the standards of accounting talents and the employment standards of enterprises in the process of practical teaching, and strengthen students' vocational awareness. Improve the conditions of accounting practical training on campus, timely update and upgrade the software and hardware of practical training, cooperate with local governments, enterprises and industry associations to build and share practice bases, and expand off-campus practice bases.

#### **4.4 Mutual Recruitment of Teachers from Schools and Enterprises to Cultivate a High-Level "Double-Qualified and Double-Capable" Teacher Team**

The profound integration of industry and education places elevated demands on educators. They should possess not only teaching skills but also practical expertise. Cultivating "double qualified and double capable" teachers is a crucial assurance for the harmonious blend of theoretical instruction and hands-on training. By fostering collaborative employment arrangements involving both educational institutions and businesses, college educators are incentivized to engage in ongoing education and training for accounting professionals within enterprises, participate in related professional work, learn the operation and management mode of enterprises, offer suggestions for enterprises, solve practical difficulties, and exercise themselves through these opportunities, so that they can get closer to the "double teacher and double ability" teacher team; Employ industry elites to join the school as part-time teachers, introduce industry rules and development insider for teachers, promote the school teaching and industry development closely, the knowledge system can be updated in a timely manner, broaden the horizon of teachers and students, and participate in the preparation of professional textbooks and curriculum development, promote the accurate training of professional talents required by the enterprise to achieve the goal.

#### **4.5 Enhance Industry-education Integration by Establishing an Accounting Studio through Collaborative Efforts between**

#### **Educational Institutions and Enterprises.**

The main service object of the bookkeeping company is small and medium-sized micro enterprises, mainly providing bookkeeping business, including bookkeeping, tax declaration and related industrial and commercial, tax and other services. The accounting agency studio jointly built by the school and enterprises serve as a platform for the integration of industry and education, which can provide finance and accounting students with the learning and practice opportunities of actual accounting processing in real enterprises, and realize the seamless connection between accounting theory teaching and accounting practice training. Through the joint construction, operation and management of the studio by the school and enterprise, the "double subject" education is realized, and the training mode is adopted, which is the alternations of learning and training, the integration of theory and practice, the teaching of the school and enterprise double tutors, and the learning of the student's dual identity. The objectives and contents of students' practical training are set according to the requirements of accounting positions in enterprises, and the practical teaching requirements of the accounting curriculum system are combined with the method of combining theory and practice to create a real accounting working environment and workflow. All the businesses that students contact are real business of enterprises. All operational processes and the utilization of financial software are executed in accordance with the real circumstances of enterprises. This approach enables students to experience genuine accounting and tax declaration practices during their time in school and equips them for actual employment opportunities before graduation, facilitating a profound integration of industry and education.

#### **5. Conclusions**

In the context of new business, this paper takes the finance and accounting major of LNSF University as the research object, investigates the curriculum setup, teaching system, teaching conditions, teaching staff and school-enterprise cooperation of this major, and finds that there is room for optimization in the course construction, teaching conditions,

methodologies, and the extent of collaboration between educational institutions and businesses in this particular major. Building on this foundation, the author presents five recommendations for advancing industry-education integration within the finance and accounting major, drawing from research on professional demands, adjustment of talent training objectives, optimization of curriculum system setting, innovation of classroom teaching methods, emphasis on theory and practice, mutual recruitment of teachers from schools and enterprises, training of high-level "double teachers and double abilities" teachers, and deepening the integration of production and education through school-enterprise co-construction of accounting agency studios. It is hoped that the suggestions put forward can contribute to the development of the combination of industry and education in finance and accounting and other majors. We hope that applied undergraduate institutions will persist in their dedication to advancing industry-education integration and continue to nurture a greater number of high-quality, high-level applied professionals.

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