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Research on the Dilemma and Optimization Path of the Construction of Industry-Education Integration Accounting Major Course Group from the Perspective of Digital Empowerment

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Abstract: Nowadays, the importance of digital empowerment and industry-education integration in accounting education is self-evident. This paper analyzes the current situation and focuses on the dilemmas faced in the construction of industry-education integration accounting major course groups, such as the disconnection between industry demands and professional education, and the lack of systematization in industry-education integration courses. In response to these dilemmas, this paper proposes corresponding optimization paths, including target integration, and course group reconstruction. Finally, future research directions and trends are recommended.

Keywords: Digital empowerment; Industry-education integration; Accounting major course group

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1. Introduction

With the rapid development of information technology, digital empowerment has become an important force driving the transformation and upgrading of various industries [1]. In the field of finance and accounting education, digital empowerment has not only changed traditional accounting methods but also promoted the intelligent development of various aspects such as financial management, auditing, and taxation. Meanwhile, as an effective way to improve education quality and promote student employment, industry-education integration is increasingly being applied in finance and accounting education [2].

Industry-education integration strengthens the cooperation between schools and enterprises, incorporates industry demands into teaching content, and enables students to engage with real-world work scenarios during their learning process, thereby cultivating high-quality finance and accounting talents that better meet market demands [3]. Therefore, from the perspective of digital empowerment, exploring the construction of an industry-education integration accounting major course group is of great significance for enhancing the quality

of finance and accounting education and promoting innovation and development in the industry [4].

2. Current situations and dilemmas of the construction of industry-education integration accounting major course group from the perspective of digital empowerment

2.1. Disconnect between accounting education and actual enterprise needs

From the perspective of digital empowerment, the construction of an industry-education integration accounting major course group faces significant dilemmas, among which the disconnect between actual enterprise needs and professional education is particularly prominent [5]. With the rapid development of information technology, enterprises' skill requirements for finance and accounting personnel have expanded beyond traditional accounting tasks to focus more on data analysis, intelligent application, and comprehensive management capabilities [6]. However, the current curriculum design for accounting majors often remains stuck in the traditional training model for accounting professionals, failing to keep pace with the digital transformation of industries, resulting in graduates struggling to quickly adapt to actual enterprise needs [7].

Therefore, the construction of an industry-education integration accounting major course group requires thorough research into actual enterprise needs, close alignment with industry development frontiers, optimization of curriculum design and teaching content, and strengthening of practical teaching components. The goal is to cultivate "ethically and technically proficient" digital finance and accounting talents, effectively mitigating the disconnect between actual enterprise needs and professional education.

2.2. Lack of systematization in industry-education integration accounting major courses

2.2.1. Fragmented course design

Currently, many universities tend to focus excessively on the independence and completeness of individual courses when constructing an industry-education integration accounting major course group, neglecting the intrinsic connections and logical relationships between courses [8]. This fragmented approach to course design makes it difficult for students to form a complete knowledge system during the learning process and to effectively link the content they have learned, thereby affecting their overall grasp and application ability of professional knowledge and skills [9].

2.2.2. Lack of systematization in knowledge and skills

One of the goals of constructing an industry-education integration accounting major course group is to provide students with systematic professional knowledge and skills. However, due to the lack of correlation between courses, after completing a series of courses, students often only grasp scattered knowledge points or skill points without being able to form a systematic knowledge structure and skill system. This not only affects students' learning outcomes but also limits their future development potential and competitiveness in the workplace [10].

2.3. Lagging application of digital technology

The application of digital technology in industry-education integration is significantly lagging, resulting in difficulties for curriculum systems and teaching content to adapt to the demands of the digital economy era. Many courses are still dominated by traditional systems, focusing on the teaching of basic theories and skills,

and lacking deep integration and application of digital technology, which leads to insufficient competitiveness for students in the job market [11].

The digital technology application capabilities of the teaching staff are also a constraining factor. Many teachers lack the awareness and ability to integrate digital technology into teaching, and there is relatively insufficient specialized training and support for teachers, limiting the extensive application and innovative development of digital technology in teaching [12].

3.Optimization path of accounting course group under the perspective of digital empowerment

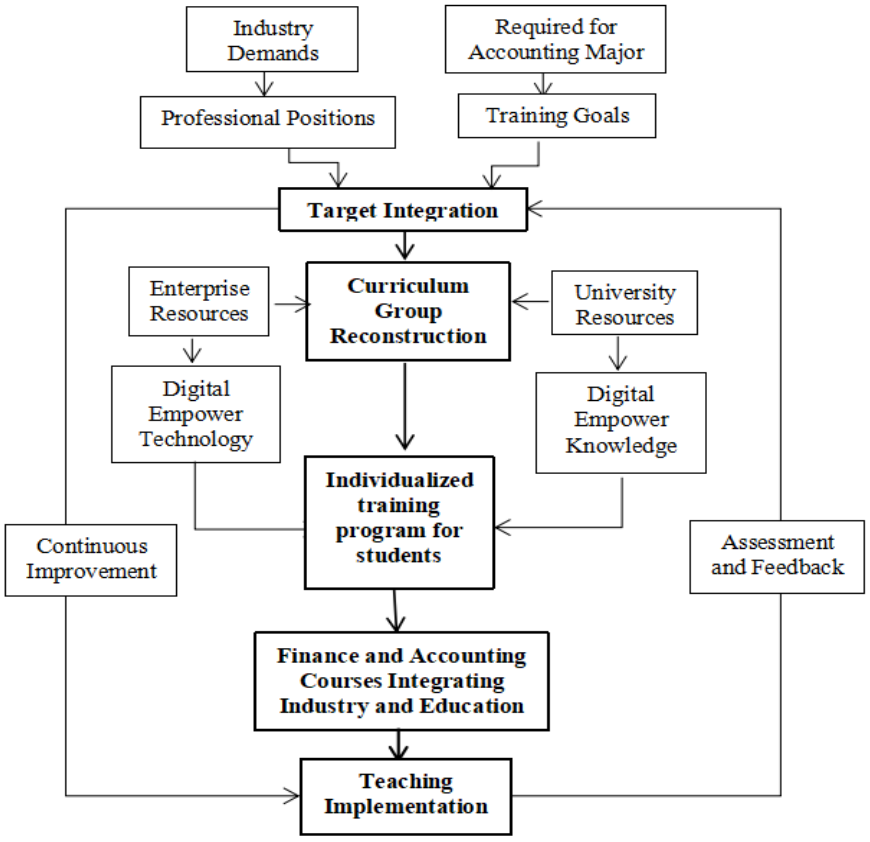

Figure 1. Optimization path of industry-education integration accounting major course group from the perspective of digital empowerment

3.1. Goal integration

In today's rapidly changing business environment, gaining a deep understanding of industry needs, especially current industry hot spots and development trends, is crucial for accounting education [13]. This includes focusing on the application of emerging technologies such as artificial intelligence and big data in the field of accounting, as well as the demand for cross-border financial management capabilities in the context of globalization. Based on these insights, accounting education needs to flexibly adjust its teaching goals to ensure that the talents it cultivates not only have solid theoretical knowledge but also possess practical skills and professional expertise, thereby seamlessly aligning with industry demands [14].

To achieve this goal, accounting education must adopt a series of specific measures. In curriculum design, apart from traditional courses such as financial accounting, cost accounting, and financial management, frontier courses such as data analysis, information system applications, and international financial reporting standards should be added to cover the new skills and knowledge points required by the industry [15].

3.2. Curriculum group reconstruction

Under the clear guidance of overall objectives, the reconstruction of the curriculum group enters its core implementation stage. The key task at this stage lies in integrating two core resources: enterprise resources and school resources. Enterprise resources, at the forefront of practice and application, focus on the introduction and continuous improvement of digital empowerment technologies. This means that enterprises introduce the latest digital technologies, tools, and methods into the education system, constantly enhancing the practicality and advancement of technology to ensure that what students learn is closely connected to actual industry demands.

Meanwhile, school resources focus on the accumulation and teaching of knowledge that empowers teaching. This covers traditional teaching theories, methods, and continuously updated disciplinary knowledge systems. By optimizing teaching content and innovating teaching methods, schools are committed to providing students with systematic and in-depth professional knowledge education, laying a solid theoretical foundation for their career development.

3.3. Application of digital technology in personalized training programs

3.3.1. Building a digital teaching resource platform

Utilize cloud computing and big data technology to build a digital teaching resource platform that integrates course resources, teaching tools, learning assessments, and more. The platform can achieve centralized management and on-demand allocation of teaching resources, improving resource utilization efficiency. Through the platform, teachers can easily access and share high-quality teaching resources, while students can access learning materials anytime and anywhere, enabling personalized learning.

3.3.2. Intelligent recommendation and personalized teaching

Apply big data analysis technology to comprehensively analyze students' learning behavior, interest preferences, and ability levels, and provide personalized learning paths and resource recommendations for students. The intelligent teaching system can dynamically adjust teaching content and difficulty based on students' learning progress and feedback, achieving individualized teaching.

3.4. Design and implementation of industry-education integration accounting major course group

3.4.1. Course standards for the course group

<table>
<tr><td></td><td colspan="4">Course category</td><td rowspan="5">Digital empowerment</td></tr>
<tr><td>Industry standard</td><td>General literacy courses</td><td>Professional theory courses</td><td>Professional practice courses</td><td>Graduation internship</td></tr>
<tr><td>Industry standard 1</td><td rowspan="3">Professionalism Infiltration-Vocational indoctrination</td><td rowspan="3">Professionalism Internalization - professional awareness, including professional knowledge, professional culture, professional logic, professional norms, etc</td><td rowspan="3">Professionalism Practice -professional skills</td><td rowspan="3">Extension -Creating a real workplace</td></tr>
<tr><td>Industry standard 2</td></tr>
<tr><td>.....</td></tr>
</table>

Figure 2. Curriculum alignment with industry standards and its roles

For the development of the accounting major course group, as shown in **Figure 2**, there is a deep alignment between industry standards and course characteristics in the accounting major. Leveraging digital technology, it permeates, internalizes, practices, and extends its influence throughout the entire process of talent cultivation.

General education courses serve as the starting point, highlighting their importance in basic education. They not only impart knowledge but also nurture students' professional mindset through general education, laying a solid foundation for their future career planning and development. Subsequently, professional theory courses deepen students' understanding of their profession, covering accounting professional knowledge, occupational culture, logic, norms, etc., aiming to construct a comprehensive professional knowledge system and internalize it, forming a deep understanding and recognition of the profession. In the practical course stage of the accounting major, the focus shifts to the cultivation of practical skills, converting theoretical knowledge into practical operational abilities through hands-on practice and enhancing students' professional literacy and practical skills. The graduation internship, as the final stage, allows students to practice in a real workplace environment, comprehensively testing their learned knowledge and skills, adjusting and enhancing their professional abilities, and better adapting to their future careers.

3.4.2. Teaching implementation of industry-education integration accounting major courses

The teaching implementation of industry-education integration accounting major courses mainly involves three aspects: clarifying teaching objectives and positioning, optimizing course structure and content, and innovating teaching methods and means.

For clarifying teaching objectives and positioning, the teaching objectives of industry-education integration accounting courses should closely align with industry demands, aiming to cultivate high-quality skilled talents that meet market requirements. By deeply analyzing industry development trends and corporate hiring standards, determine the course's teaching content, methods, and evaluation criteria. Emphasis is placed on cultivating students' practical abilities and innovative spirit. Through real or simulated professional scenarios, students learn by doing and do by learning, mastering the skills and knowledge required for actual work.

For optimizing course structure and content, a modular curriculum system is constructed based on the needs of industry-education integration. Each module corresponds to a typical work task or position capability requirement in the industry. Through modular teaching, the relevance and effectiveness of teaching content are

achieved. Course content is promptly updated to incorporate the latest industry technologies, processes, and standards into teaching. By collaborating with enterprises, jointly develop textbooks, case studies, and training projects to ensure the forefront and practicality of teaching content.

For innovating teaching methods and means, a project-based teaching method is adopted, using real enterprise projects as carriers to allow students to learn knowledge and skills in the process of completing projects. Through team collaboration, problem-solving, and presentation of results, students' comprehensive abilities and professional literacy are cultivated. Combine the advantages of online and offline teaching to conduct blended learning. Utilize digital teaching resource platforms to provide rich learning materials and interactive tools; simultaneously, through offline training and discussions, deepen students' understanding and application of knowledge.

3.5. Assessment feedback and continuous improvement

3.5.1. Assessment feedback

Assessment feedback is conducted in terms of course objective achievement, mastery of theoretical knowledge, practical ability, and overall quality. In terms of course objective achievement, methods such as exams, assignments, and classroom performance are used to evaluate students' understanding of fundamental accounting theories. For the mastery of theoretical knowledge, similar methods are employed to assess students' grasp of basic accounting theories. Practical ability is evaluated through practical training courses, business internships, and project practices, assessing students' ability to apply theoretical knowledge to practical work. Comprehensive quality, including teamwork skills, communication skills, and problem-solving abilities, is assessed through group projects, case studies, and other formats. For the effectiveness of industry-education integration, feedback is primarily gathered from two aspects: enterprise feedback and student satisfaction. We collect evaluations from cooperating enterprises on interning students to understand their performance in practical work. Student satisfaction is gathered through surveys and other methods to collect feedback on the curriculum cluster of industry-education integration, including course content, teaching methods, practical opportunities, etc.

3.5.2. Continuous improvement

In response to identified issues, subsequent improvements will mainly focus on optimizing course content and refining teaching methods. In optimizing course content, we will strengthen practical teaching, increase the proportion of training and business internships, and ensure the integration of theoretical knowledge with practice. We will introduce the latest policies and technologies to timely update course content, enabling students to acquire cutting-edge knowledge and skills. We will integrate curriculum cluster resources to form a systematic and complete knowledge system. In refining teaching methods, we will combine online and offline resources, adopt flexible and diverse teaching methods, and enhance students' interest and enthusiasm in learning. We will introduce real-world cases to deepen students' understanding and application abilities.

4. Conclusion and prospect

Under the perspective of digital empowerment, the construction of industry-education integration curriculum clusters for accounting majors indeed faces numerous challenges, such as the mismatch between course content and industry demands, lagging teaching methods, and inadequate cultivation of students' practical

abilities. However, through a series of optimization paths, including goal integration, curriculum cluster reconstruction, the application of digital technology in personalized training programs, and the design and implementation of an industry-education integrated accounting curriculum, we can effectively alleviate these issues and promote the transformation and upgrading of accounting education.

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Disclosure statement

The author declares no conflict of interest.

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