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Reform Pathways for Integrating Digital Skills Training into Business Administration Courses in Higher Education

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Abstract: Against the backdrop of digital transformation, the market's demand for digital skills among business administration professionals has significantly increased. Currently, business administration courses in colleges and universities face issues such as the lack of digital content, outdated teaching methods, and imperfect evaluation systems, resulting in trained talents being unable to meet enterprise needs. This paper begins with three core modules: curriculum system reconstruction, teaching method innovation, and practical platform construction. It constructs an evaluation system that encompasses target outcomes, process methods, and participant satisfaction, and verifies the reform effects through teaching cases.

Keywords: Digital skills training; Business administration courses; Teaching reform; College talent training

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1. Introduction

With the rapid development of the digital economy, enterprises' operation and management models are gradually shifting towards digitalization and intelligence, placing specific requirements on business administration professionals in skills such as data analysis, digital tool application, and digital decision-making. As the main institutions for cultivating business administration talents, colleges and universities still take traditional management theories as the core of their curriculum systems, with scattered digital teaching content and weak practical links. This makes it necessary for students to spend a long time adapting to the digital working environment of enterprises after graduation. Exploring the teaching reform path of integrating digital skills training into business administration courses in colleges and universities can not only improve the overall quality of talent training and narrow the gap between educational status and actual industrial needs, but also promote the business administration discipline to adapt to the development trend of the times. It is an important measure for colleges and universities to achieve the goal of cultivating applied talents.

2. Construction of core modules for integrating digital skills training into business administration courses in colleges and universities

2.1. Curriculum system reconstruction module

Taking "theory + skills + application" as the core elements, this module reconstructs the content of business administration

courses to achieve in-depth integration of digital skills and professional knowledge. In the basic course dimension, courses such as Fundamentals of Business Data Analysis and Application of Digital Management Tools are added to explain basic methods of data collection, cleaning, and visual analysis, as well as the operating principles of digital management systems such as ERP and CRM, laying a foundational framework for students' digital skills. In the professional course category, digital improvement of current course content is carried out: integrating digital marketing scenarios into Marketing to explain feasible methods of social media data analysis and user portrait construction; adding chapters on financial big data analysis to Financial Management to teach practical skills for cost control and risk prediction through data models; introducing content related to digital supply chain management into Operations Management to analyze digital implementation paths for intelligent scheduling and inventory optimization. Meanwhile, interdisciplinary elective courses such as Management Science and Big Data Algorithms are set up to enhance students' ability to solve management problems with algorithmic thinking, constructing a three-level digital curriculum system covering "foundation - major - extension" [1].

2.2. Teaching method innovation module

Through diversified teaching methods, this module breaks through the traditional "teacher imparts knowledge + students listen to lectures" model and fully stimulates students' enthusiasm for active learning of digital skills. Project-based teaching is adopted, relying on actual enterprise digital management projects—such as "optimizing product marketing strategies based on user behavior data" and "designing digital enterprise inventory management solutions"—to guide students to complete project demand analysis, data collection, plan formulation, and result presentation in groups. This allows students to master digital tools and methods in practical operations. Flipped classroom teaching is implemented: before class, digital learning resources such as data analysis tool operation videos and digital management case videos are released through online platforms, enabling students to conduct independent learning and complete preview tasks. During class time, the focus is on problem discussion and practical skill operation. Teachers provide guidance on difficulties encountered by students during preview and organize students to carry out digital tool application drills, thereby enhancing the pertinence and effectiveness of classroom teaching.

2.3. Practical platform construction module

Through the collaborative operation of a "campus + off-campus" dual-platform model, this module creates practical scenarios for students' digital skills, realizing the transformation from "learning" to "application." In terms of the on-campus practical platform, a digital business administration laboratory is built, equipped with professional data analysis software, enterprise-level digital management systems, and a digital sandbox for simulating enterprise operations. Students can conduct practical training such as data processing, system operation, and digital decision-making in the laboratory. In the field of off-campus practical platforms, university-enterprise cooperation bases are established with enterprises. Mature enterprises in the process of digital transformation, such as e-commerce enterprises, internet technology companies, and digital manufacturing enterprises, are selected as practical units. Students are arranged to participate in practical work in the digital departments of these enterprises, such as assisting in the statistics and analysis of market data, participating in the planning of digital marketing activities, and tracking the daily operation and maintenance of enterprise ERP systems, so as to improve their ability to apply digital skills in real work scenarios [2].

3. Construction of an evaluation system for integrating digital skills training into business administration courses in colleges and universities

3.1. Target outcome evaluation system

This system defines specific evaluation indicators for digital skills training from three dimensions, knowledge, skills, and application, to verify the achievement of teaching reform goals. In the knowledge dimension, students' mastery of digital

management theories and methods is assessed. Through course exams, theoretical defenses, and other approaches, their understanding of business data analysis principles, digital management system logic, and digital decision-making models is measured, with a passing standard of no less than 80 points in theoretical knowledge assessments. The skills dimension focuses on digital tool application capabilities, evaluated through practical operation assessments: in the Fundamentals of Business Data Analysis course, students are required to complete data cleaning and visual report production within a specified time; in the Application of Digital Management Tools course, their proficiency in ERP system operations, such as the accuracy of bill of materials creation and production order issuance, is tested, with a skill assessment pass rate requirement of over 90%. From the application dimension, students' ability to solve practical problems using digital skills is evaluated. Through project outcome reviews, practical report defenses, and other means, the feasibility and innovation of the enterprise digital project plans completed by students are analyzed. Evaluation criteria include the completeness of plan logic, sufficiency of data support, and effectiveness of problem-solving, with no less than 30% of total projects required to be excellent.

3.2. Process and method evaluation system

This system evaluates curriculum design, teaching implementation, resource guarantee, and other aspects during the teaching reform process to ensure the scientificity and standardization of the reform. For curriculum design evaluation, emphasis is placed on the rationality of digital course content. Through expert reviews, peer evaluations, and other methods, it is verified whether the curriculum system covers key digital skills, whether the content aligns with enterprise needs, and whether it conforms to students' cognitive characteristics. Teaching implementation evaluation focuses on the effectiveness of teaching methods. Through classroom observations, student interviews, and other approaches, the organization of project-based teaching and flipped classrooms is assessed, such as students' participation enthusiasm, the pertinence of teacher guidance, and the authenticity and operational convenience of virtual simulation teaching scenarios, with a requirement that no less than 85% of students actively participate in class. Resource guarantee evaluation examines the supporting capabilities of practical platforms and teaching teams. It also assesses the integrity of equipment and frequency of software updates in on-campus digital laboratories, the quantity of projects provided by off-campus practical bases, the intensity of enterprise guidance, and the qualification of teachers' digital teaching capabilities, ensuring that various resources fully meet the actual needs of digital skills training.

3.3. Participation and satisfaction evaluation system

Starting from three subjects, students, teachers, and enterprises, this system collects feedback on teaching reform to measure the degree of recognition and satisfaction with the reform. Student satisfaction is evaluated through questionnaires and focus groups to understand students' opinions on digital course content, teaching methods, and practical arrangements. Evaluation indicators include course interest, skill practicality, and learning gains, with a target of no less than 85% overall student satisfaction. Teacher satisfaction is assessed through interviews and self-evaluation reports to collect teachers' views on digital teaching resources, training support, and university-enterprise cooperation mechanisms, evaluating the convenience and enthusiasm of teachers in conducting digital teaching, with a requirement of over 80% teacher satisfaction. Enterprise satisfaction evaluation targets enterprises participating in university-enterprise cooperation. Through enterprise surveys, employer feedback, and other means, in-depth understanding of enterprises' recognition of interns' digital skills is obtained, and suggestions from enterprises on college talent training are collected. The goal is to increase target enterprises' satisfaction with graduates' digital skills to 80% and maintain stable enterprise cooperation willingness [3].

3.4. Continuous improvement and feedback mechanism

A closed-loop continuous improvement mechanism is established to ensure dynamic optimization of teaching reform based on evaluation results. Results from each evaluation system are regularly summarized to form evaluation reports,

based on which in-depth analysis of problems in the reform process is conducted, such as outdated digital course content, disconnection between practical projects and actual enterprise needs, and lack of pertinence in teachers' digital training. Targeted improvement measures are formulated for these problems: in terms of course content, curriculum chapters are adjusted each semester in conjunction with industry digital development trends, adding cutting-edge digital management content; in practical projects, a real-time updated practical project library is jointly developed with enterprises to ensure projects keep pace with actual enterprise needs; in teacher training, specialized training courses are designed based on teachers' skill gaps, for example, advanced Python data analysis training for teachers with weak data analysis capabilities. After the implementation of improvement measures in teaching practice, their effects are tracked, and the effectiveness of improvements is verified through re-evaluation, constructing a cycle of "evaluation - analysis - improvement - re-evaluation" to promote continuous optimization of digital skills training, as shown in **Table 1**.

Table 1. Evaluation system for integrating digital skills training into business administration courses in colleges and universities

Evaluation Dimension	Evaluation Content	Evaluation Methods	Core Indicator Requirements
Target Outcome Evaluation	Knowledge mastery (understanding of digital theories), skill level (tool application ability), and application ability (problem-solving)	Course exams, practical assessments, project reviews	Theoretical assessment ≥ 80 points; skill pass rate ≥ 90%
Process and Method Evaluation	Rationality of curriculum design, effectiveness of teaching methods, and sufficiency of resource guarantee	Expert reviews, classroom observations, teacher interviews	Classroom participation rate ≥ 85%
Participation and Satisfaction Evaluation	Student satisfaction (courses and learning gains), teacher satisfaction (teaching support), enterprise satisfaction (talent quality)	Questionnaires, enterprise surveys, focus groups	Overall satisfaction ≥ 80%
Continuous Improvement Evaluation	Accuracy of problem identification, pertinence of improvement measures, and effectiveness of implementation	Evaluation report analysis, improvement effect tracking	100% implementation rate of improvement measures

4. Teaching case analysis of integrating digital skills training into business administration courses in colleges and universities

4.1. Digital teaching case of marketing course

In the Marketing course, project-based teaching activities are carried out with "digital marketing strategy formulation" as the core. Initially, teachers introduce the actual and real needs of enterprises, clearly defining the project task as "designing a social media marketing plan for a fast-moving consumer goods brand and optimizing the strategy based on user data." After students are divided into groups, they first learn how to use social media data collection tools through online platforms and independently complete the data collection and analysis of industry-competitor products. In class, teachers guide students to use SPSS software to conduct visual analysis of users' age, consumption habits, and interaction data, and construct user profile characteristics. Then, each group designs marketing content and delivery plans based on the analysis results, uses digital tools to simulate the effect of delivery, and predicts the conversion rate of the plan. Finally, enterprise marketing managers are invited to participate in the project defense session to evaluate and analyze the feasibility of the plan, and students optimize and improve the plan according to the feedback [4].

4.2. Digital practice case of financial management course

In the Financial Management course, practical teaching activities of "enterprise financial digital management and control" are carried out relying on the on-campus digital laboratory. Equipped with the SAP ERP teaching system, the laboratory requires students to complete a series of digital financial operations in the role of enterprise financial department staff. First, students need to enter the enterprise's multi-business data, such as procurement, production, and sales, into the system to understand and learn the linkage logic between financial data and business data. Then, students use the financial analysis module in the system to generate visual reports of balance sheets and income statements, and analyze the enterprise's profitability and solvency through data models.

5. Conclusion

Carrying out teaching reform by integrating digital skills training into business administration courses in colleges and universities is an inevitable choice to adapt to the development trend of the digital economy and improve the level of talent training. Colleges and universities should continuously pay attention to the specific situation of enterprises' digital transformation, promptly update course content and teaching methods, strengthen the depth and breadth of university-enterprise cooperation, enhance teachers' ability to carry out digital teaching, promote the in-depth advancement of the digital reform of business administration courses, cultivate more high-level management talents who meet the requirements of the digital age for society, and promote the high-quality development of the digital economy.

Disclosure statement

The author declares no conflict of interest.

References

[1] Xu Y, Lou D, 2024, Teaching Research on Integrating Ideological and Political Elements Into Business English Reading Courses. Journal of Contemporary Educational Research, 8(4): 101–107.

[2] Fulgence K, Katherine, 2015, Assessing the Status of Entrepreneurship Education Courses in Higher Learning Institutions. Education and Training, 57(2): 239–258.

[3] Sandoval-Almazan R, Romero-Romero A, Rodriguez E, 2013, Social Networks in Higher Education: The Business Administration and Informatics' Students. IEEE, 2013: 254–259.

[4] Sibiryaev A, 2022, Digital Transformation of the Higher Education in the Public Administration System: Personnel Aspect. Management and Business Administration, 3: 47–53.