

Mechanisms and Optimisation Pathways for Aligning Course-based Ideological and Political Education with Job Requirements in the Context of Industry-Education Integration

-- Taking the Credit Practices course and banking credit positions as an example

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Abstract: This study examines the Credit Practices course within the Financial Technology Applications programme at higher vocational institutions and its alignment with banking credit roles. It focuses on addressing the mismatch between ideological and political education within the curriculum and job requirements under the framework of industry-education integration. Through literature analysis and job role research, it reveals current challenges including outdated teaching content, insufficient synergy between industry-education integration and ideological and political education, and a singular evaluation mechanism. Aligned with banking sector requirements for professional competence and ethical conduct, the paper proposes optimisation pathways including establishing collaborative industry-academia mechanisms, deepening teaching system reforms, innovating multi-dimensional assessment frameworks, and developing digitalised teaching materials. These recommendations aim to cultivate high-calibre financial professionals with 'integrity and technical proficiency, empowered by digital intelligence', thereby advancing precise alignment between higher vocational education and industrial demands through theoretical reference and practical paradigms.

Keywords: Industry-education Integration, Curriculum-based Ideological-political Education, Job Requirement Alignment, Credit Practice Courses, Bank Credit Positions.

1. Introduction

The 2025 National Vocational Education Work Conference has identified deepening industry-education integration and enhancing core institutional capabilities as central tasks, providing crucial guidance for higher vocational institutions to advance collaborative education with enterprises and strengthen practical teaching systems [1]. Against this backdrop, how to adhere to the principles of vocational education-namely its professional orientation, job-specific focus, and emphasis on skill development-while implementing the fundamental task of fostering virtue and cultivating talent through systematic reforms of key teaching elements (such as programmes, curricula, textbooks, teaching staff, and practical training) has become an urgent issue for the substantive development of higher vocational education.

To better serve national strategies, integrate into regional development, drive industrial upgrading, and support the construction of a modernised economic system alongside higher-quality employment, higher vocational education must continuously deepen industry-education integration and comprehensively advance the development of ideological and political education within curricula. This approach will guide the sustainable development of higher vocational education. It should be recognised that the core of industry-education integration lies in establishing a long-term mechanism for deep mutual embedding between industry and education. This manifests specifically through strengthening school-enterprise cooperation to build high-quality teaching platforms for students, thereby promoting precise alignment

between the education chain and the industrial chain. Concurrently, industry-education integration provides a vital vehicle for implementing ideological and political education within curricula. By organically integrating corporate recruitment standards into course frameworks, it achieves a synthesis of political relevance with academic rigour, and theoretical depth with practical application. This represents not merely an innovation in traditional teaching models, but a contemporary upgrade to talent cultivation approaches.

The financial sector, characterised by capital intensity, high risk, and strong externalities, imposes heightened demands on practitioners' compliance awareness and professional ethics. Current policy imperatives-serving the real economy, mitigating financial risks, and adhering to fintech ethics-further accentuate the need for enhanced financial talent competencies. To this end, this paper examines the Credit Practices course within the FinTech Application programme at higher vocational institutions and banking credit positions. Based on field research, it constructs a three-dimensional analytical framework- 'job competency requirements, course module restructuring, and digital integration of ideological and political elements'-to systematically explore the challenges and optimisation pathways in aligning course-based ideological education with job demands within industry-education integration. This aims to provide theoretical references and practical solutions for resolving the "moral-technical disconnect" in higher vocational education and innovating financial talent cultivation models for the digital era.

2. Current State of Teaching and Curriculum Alignment with Job Requirements

The alignment between teaching in higher vocational financial programmes and banking job requirements remains problematic, manifesting in five key aspects:

2.1. Disconnect between Teaching Content and Job Requirements

The financial sector currently navigates dual pressures of digital transformation and stringent regulation, with credit operations undergoing continuous restructuring. Traditional curricula struggle to keep pace with these shifts, notably failing to integrate emerging knowledge modules such as fintech tool applications, data-driven risk control models, and digital compliance processes. Teaching standards lag behind industry benchmarks, and educators lack sufficient awareness of the latest responsibilities within financial institutions. This results in a mismatch between teaching content and actual job requirements, with professional education still overemphasising theoretical knowledge transmission and lacking effective integration with frontline workplace practice. Teaching formats remain predominantly traditional classroom-based, featuring limited teaching scenarios that struggle to align with enterprises' real business operations in digital environments. Consequently, there exists a discrepancy between the skills graduates acquire and the competencies demanded by job roles.

2.2. Insufficient Integration between Ideological Education in Curriculum and Industry-Education Integration

Existing research often treats ideological and political education within curricula and industry-education integration as separate research directions. The former focuses on theoretical teaching levels, while the latter centres on practical models, with limited systematic research combining both. On one hand, the content of ideological and political education within curricula often lacking close integration with actual financial job roles. On the other hand, competencies such as professional ethics and compliance awareness require cultivation through real-world business operations. However, the delineation of responsibilities between corporate mentors and academic staff remains ambiguous. Particularly within the context of financial digital transformation, new ideological and political elements-such as technological ethics and data privacy protection-prove difficult to integrate into internship and practical training components^[2]. This hinders the achievement of the 'cultivating both virtue and skills' objective, underscoring the urgent need to establish an integrated teaching model.

2.3. Inadequate Industry Support and Policy Safeguards

Industry-education integration in finance faces challenges including insufficient policy incentives and low corporate engagement. Supporting policies in taxation, finance, and related areas remain underdeveloped, hindering deeper collaboration. Current partnerships often remain superficial-limited to shared training facilities and internship placements-with financial institutions under-engaged in curriculum design, textbook development, and joint faculty training^[3].

Furthermore, the financial sector's stringent requirements for data security and confidentiality limit student access to core business processes. Effectively utilising corporate resources within compliance frameworks thus presents a practical bottleneck hindering deeper industry-education integration.

2.4. Monolithic Teaching Evaluation Mechanisms Impede Effectiveness Assessment

Current course-based ideological and political education evaluations predominantly rely on in-class performance within the university, lacking multi-dimensional feedback from corporate partners. Competencies emphasised in banking credit roles-such as compliance awareness, risk responsibility, and client communication-require assessment through multiple dimensions including corporate supervision and client evaluations. However, the absence of joint university-enterprise evaluation mechanisms makes it challenging to assess the effectiveness of course-based ideological and political education^[4]. For instance, students' adherence to credit confidentiality agreements during internships, their ability to manage conflicts of interest, service attitudes, and teamwork efficiency are not incorporated into a comprehensive and objective evaluation system. This not only impedes the institution's precise assessment of teaching outcomes but also constrains enterprises' ability to identify and cultivate promising talent.

2.5. Insufficient Teaching Support Resources

The development of supporting teaching resources lags behind, particularly in the absence of textbooks integrating vocational skills with ideological and political education. Traditional textbooks struggle to keep pace with financial industry developments and policy updates, and a significant amount of ideological and political content remains poorly integrated into teaching knowledge points and practical skills. Particularly within the context of industry-education integration, the absence of modular teaching materials co-developed with financial institutions-which reflect authentic business processes and ideological content-hinders the coordinated advancement of professional ethics education and skills development.

3. Job Requirement Survey

To gain deeper insight into frontline banking recruitment standards, our research team conducted structured interviews between March and June 2024 with credit line personnel at a secondary branch of a joint-stock bank (name withheld per confidentiality agreement). The sample comprised 120 junior client managers, 30 mid-level business supervisors, and 5 senior branch managers. The research focused on the current state of moral hazards among banking practitioners, the status of professional ethics education within the context of fintech and digital transformation, and the alignment between ideological and political education in university curricula and job requirements.

3.1. Training Provision for Bank Staff

The in-service training system at the surveyed bank encompasses three dimensions: operational competency, fintech application, and professional ethics.

3.1.1. Business and Digital Transformation Training

Business training is tiered according to seniority: New

recruits receive training focused on corporate culture, organisational structure, foundational business products, operational skills, and basic applications of digital transformation and fintech. Specialised business training and practical fintech tool training are provided for personnel in distinct job sequences such as marketing, product development, operations, and risk assessment. Middle management training centres on team leadership and digital process management capabilities. Senior management training centres on strategic planning, cultural development, driving digital transformation strategies, and organisational management capabilities.

3.1.2. Professional Ethics and Conduct Training

Professional ethics and conduct training is delivered in tandem with business training, achieving comprehensive coverage across all employee tiers through high-frequency, ad-hoc sessions. This encompasses both classroom-based instruction and online learning formats. Training content centres on employee conduct guidelines (including standardisation of daily workflows and clarification of behavioural standards), ethical application of fintech (e.g., data privacy protection, algorithmic fairness), anti-money laundering risk identification and prevention (covering customer identification, suspicious transaction monitoring, large transaction reporting), and risk compliance (such as enhancing compliance awareness in approval processes and post-loan management, alongside cautionary case studies involving technology-enabled violations). Particular emphasis was placed on the application of fintech in anti-money laundering monitoring, customer due diligence, and risk early warning systems. This aimed to enhance staff capabilities in identifying and mitigating financial risks through technological means, thereby embedding a compliance culture, technological ethics awareness, and a sense of responsibility into employees' professional practices.

3.2. Primary Causes of Credit Risk

Investigations reveal that employee ethical lapses and weak ethical awareness during digital transformation are key drivers of credit risk. Manifestations include insider trading, non-compliant operations, disclosure of client privacy, and misuse of fintech and data. Such conduct may result in financial losses, reputational damage, or even legal liability for banks. Data analysis reveals that moral hazard in credit positions can be categorized into three types: interest-driven violations (e.g., misappropriation of client funds, accounting for 35.9%), responsibility-avoidance misconduct (e.g., falsification of risk assessment reports, accounting for 27.3%), and information abuse offenses (e.g., leaking client privacy or illegally using big data analysis results, accounting for 34.8%). These lead to consequences such as client asset losses, an increase in non-performing loan ratios, and higher client attrition rates, highlighting the urgency of integrating professional ethics education with practical job training.

3.3. Professional Competency Requirements for Banking Staff

Interviews revealed that credit officers prioritise the following professional competencies: risk responsibility awareness, compliance and ethical self-awareness, and moral consciousness in team collaboration. Risk responsibility awareness requires credit officers to deeply recognise the high-risk nature of lending operations, maintain a sense of reverence for 'lifelong accountability for risks', adhere to

compliance boundaries, refrain from relaxing pre-loan investigations due to performance pressure, and persist in regular post-loan monitoring of corporate operations. Compliance and ethical awareness constitute a comprehensive requirement: on one hand, upholding integrity in client service by truthfully disclosing critical information, not concealing risks, and rejecting unreasonable client demands; on the other hand, adhering to principles of fairness, transparency, and privacy protection when employing financial technologies such as big data and artificial intelligence for client assessment and service delivery, thereby preventing technological misuse and algorithmic discrimination. Ethical awareness in teamwork demands truthful feedback and no concealment of issues when collaborating with other departments, alongside proactive accountability to prevent operational delays or oversight of risks.

These competencies must be cultivated through real-world business practice, requiring employees to master professional skills, become proficient with relevant fintech tools, and, crucially, develop a robust professional ethics framework. The survey findings provide clear direction for aligning university curriculum-based ideological education with specific job requirements.

4. Exploring Optimisation Pathways

As the primary cultivators of applied talent for the financial sector, higher vocational institutions urgently need to achieve precise alignment with corporate talent demands, establishing a talent development system that integrates career orientation, job suitability, and skill advancement. Based on field research into the talent requirements for credit positions at a commercial bank, this study addresses dimensions including innovation in industry-education integration mechanisms, optimisation of teaching systems, innovation in multi-dimensional evaluation frameworks, and upgrading of teaching materials. It deeply integrates the value guidance of professional ethics education with the cultivation of practical professional competencies. Leveraging new-generation information technologies such as artificial intelligence, virtual reality, and digital twins as driving engines, it systematically integrates all elements of education and teaching to explore matching mechanisms and reform pathways for optimising the alignment between higher vocational education and industry job requirements.

4.1. Innovating Industry-Education Integration Mechanisms

Higher vocational institutions should collaborate with financial institutions to establish industry-education integration consortia, developing diversified data repositories, online course platforms, virtual simulation training environments, and corporate internship bases while strengthening resource and policy safeguards. For instance, institutions and enterprises may jointly invest in establishing training bases and upgrading teaching equipment, formulating a 'Teaching Resource Co-construction and Sharing Agreement' that clarifies key provisions such as intellectual property rights for jointly developed courses, faculty exchange procedures, and student internship safety responsibilities. Actively engage with local government support policies for industry-academia collaboration (such as tax incentives and project subsidies) to provide multi-

dimensional backing for integration.

Implement the 'Financial Mentor Certification Scheme', establishing clear mentor criteria (e.g., five-plus years of credit industry experience, no disciplinary records, teaching competency). Senior credit specialists, compliance officers or bank executives serve as professional mentors or visiting professors, receiving formal appointments. They focus on teaching modules integrating ideological and political education into courses covering risk compliance, anti-money laundering, and ethical applications of fintech, alongside delivering specialised lectures and seminars.

Concurrently, establish a mechanism for university faculty to undertake secondments within enterprises. This will be implemented through regular on-the-job practical placements, part-time assignments, or in-depth workplace visits, supporting academics' participation in corporate project development. Clear stipulations regarding duration and assessment methods for these placements will be established. Within authentic business contexts, this enables faculty to familiarise themselves with cutting-edge industry technologies, current regulations, and emerging business models, while gaining deep insight into how banks integrate compliance requirements, technological ethics awareness, and professional ethics into employee conduct during digital transformation. This facilitates an accurate grasp of financial institutions' specific expectations regarding the ideological and political qualities of talent. Incorporate outcomes such as university faculty participation in corporate practice, development of integrated teaching resources, and undertaking of university-enterprise collaboration projects into the faculty title evaluation system and performance assessment reward framework. This establishes value orientation recognition and institutional safeguards. Through these measures, the aim is to construct a deeply integrated industry-education ecosystem featuring collaborative university-enterprise linkage, effectively stimulating the initiative of both higher education institutions and enterprises.

4.2. Optimising the Teaching System

The restructuring of the teaching system will establish a theoretical and practical teaching framework closely aligned with banking credit roles, addressing three dimensions: mastery of knowledge and skills, internalisation of professional ethics, and cultivation of professional competence.

4.2.1. Establishing a Teaching Knowledge System that Integrates Job Roles with Courses and Advances Both Ethics and Competence

Taking the course 'Credit Practices' as an example, the university course team will establish a joint teaching preparation mechanism with enterprises. Bank compliance managers will be invited to revise course standards, integrating industry norms and professional competency requirements to define teaching objectives that synergise industry-education integration with course-based ideological education. Content will cover 'the latest banking service standards and professional qualification assessment requirements' and 'professional ethics and competency standards for banking practitioners'^[5], emphasising the connection between theory and practice.

Course content closely aligns with banking credit role requirements, structuring teaching materials around the 'Five Foundational Requirements' for frontline commercial banking positions: fundamental competencies, essential

capabilities, core standards, basic operations, and foundational procedures^[5] while strengthening practical skills in fintech tools, anti-money laundering techniques, and digital risk management. Instruction incorporates role-playing, scenario simulations, case studies, and case discussions. An advanced ideological integration framework is employed: introducing professional ethics education in the initial phase, developing professional competencies and qualities in the deepening phase, and requiring students to practise the social responsibilities of financial practitioners in the culminating phase, thereby underpinning their professional development. Furthermore, new business models may be integrated to cover emerging products such as supply chain finance and technology enterprise lending. This should incorporate ethical considerations and regulatory interpretations of fintech applications, fostering students' understanding of inclusive finance principles and innovative thinking^[6] while guiding their comprehension of financial policy directions.

4.2.2. Establishing a Practical Teaching System

Integrating Virtual and Real-world Elements, and Connecting Internal and External Dimensions

Practical teaching serves as the pivotal link bridging theoretical knowledge with professional competencies and shaping students' professional ethics. Its effective implementation hinges on deep integration between industry and education. Higher education institutions must reform both in-class training and off-campus practice models by establishing internship and training bases that integrate practical teaching, real-world business operations, and technical service functions. Implementing a dual-mentor guidance mechanism, these bases should embed the cultivation of professional ethics, compliance awareness, and vocational skills throughout the entire training process. This aims to nurture applied talents possessing both professional expertise and practical capabilities.

(1) Establishing Industry-Education Integration + Virtual-Physical Blended In-Class Training Environments

In-class training adheres to the principles of 'task-driven positioning and process-oriented guidance'. Leveraging smart classrooms and online course platforms, it constructs realistic scenarios (e.g., simulated banking environments) and integrates simulation business systems (e.g., credit business simulation systems). This creates blended learning environments that combine online and offline, real and virtual, human and artificial intelligence-based interactive learning and practical training. Training content prioritises updating knowledge and skills relevant to frontline corporate roles. It involves developing real-world corporate projects where students, acting as client managers, conduct debt repayment capacity analysis, profitability analysis, and working capital projections for project enterprises. They determine appropriate collateral arrangements and independently draft credit approval reports. Concurrently, integrated virtual-physical work tasks and digital scenarios are designed, with particular emphasis on embedding anti-money laundering monitoring, customer due diligence, and big data-driven credit assessment within simulated operations. This cultivates students' digital literacy, financial acumen, compliance and ethical awareness, and innovative thinking. Through simulated systems, students execute credit ratings, loan approvals, and post-loan management, comprehensively mastering compliance analysis and risk control techniques in credit operations. In-class practical training follows a progressive model of 'theory application → simulated

operation → competency internalisation', laying a solid foundation of job-specific skills for students and serving as crucial preparation for subsequent off-campus internships.

(2) Advancing the 'Mentor-Led, Practical Empowerment' Corporate Internship Model

Leveraging industry-academia integration mechanisms, universities and financial institutions jointly establish off-campus internship bases, providing students with high-calibre practical environments and internship projects. At these bases, students engage in full-cycle credit operations practice, such as conducting pre-loan investigations, document verification, risk assessments, and contract execution under bank mentors' guidance. They also learn to utilise professional risk monitoring and anti-money laundering systems, gaining intuitive understanding of role competencies and operational workflows. Additionally, an enterprise mentor system is introduced, where seasoned practitioners provide one-to-one guidance. Using real-world case studies, this approach reinforces risk responsibility awareness alongside compliance and ethical consciousness^[7]. Mentors offer real-time feedback on issues encountered during internships, helping students rapidly enhance their operational capabilities and professional adaptability, thereby bridging the gap between 'simulated training' and 'practical application'.

Through synergistic integration of in-class practical training and off-campus internship bases, new industry practices, emerging tools, and professional ethics are embedded throughout the practical teaching process. This establishes a teaching system where ideological and political elements develop in tandem with professional competencies, guiding students to deepen their understanding and enhance their capabilities by solving real-world problems, thereby laying a solid foundation for their career development.

4.2.3. Innovation in Diversified Assessment Systems

Establish a multi-dimensional assessment framework that equally values professional competence and ethical standards, moving beyond singular learning outcome evaluations. This expands assessment to encompass vocational skills, workplace discipline and professional conduct, ethical integrity, and social responsibility. Particular emphasis is placed on evaluating students' demonstration of risk awareness, compliance consciousness, ethical self-regulation, and teamwork spirit within both simulated and real-world operational scenarios. Leveraging artificial intelligence, this approach enables diversified, open, and contextualised assessments^[4] to analyse students' specific conduct during professional studies (e.g., risk-compliance awareness in decision-making, ethical considerations when using fintech tools, professional ethos in teamwork, social responsibility in project reports), thereby comprehensively assessing their ideological and political literacy alongside practical problem-solving capabilities.

To achieve comprehensive and dynamic assessment, the system emphasises integrating formative and summative evaluation: student learning portfolios document performance throughout coursework, practical training, and external placements, focusing not only on task completion but also on continuous progress during the learning journey. Simultaneously, it leverages the collaborative role of academic and industry mentors to form a closed-loop educational system: academic staff gain insights into students' ideological development through classroom participation, discussions, and ideological case analyses, providing targeted guidance during extracurricular hours for those exhibiting

value deviations, and issuing comprehensive end-of-term assessments. Industry mentors evaluate student performance during placements, offering real-time guidance and shaping standardised conduct and professional ethics within authentic workplace settings^[8]. Furthermore, the assessment system must possess flexibility, enabling personalised evaluation and feedback tailored to each student's learning trajectory and progress. This approach incentivises continuous self-improvement and facilitates holistic development.

4.2.4. Industry-Academia Collaboration in Digital

Textbook Development

Regarding textbook reform, collaborate with industry-education partnership institutions to develop joint industry-academia textbooks. Actively align with the construction standards for next-generation digital textbooks, guided by professional ethics and financial industry norms. Develop high-quality, innovative industry-academia textbooks based on occupational competency requirements, emphasising the integration of theoretical learning with practical work^[5]. This approach drives the integration of industry and education through teaching materials while advancing course-based ideological and political education, providing robust support and promotion for cultivating students' vocational skills and shaping their professional conduct. Textbooks should possess the following characteristics:

(1) Digital Empowerment, Integration of Vocational and Practical Elements

Within the context of industry-education integration, textbook design centres on vocational relevance and practical application, fully incorporating emerging industry technologies, innovative thinking, and contemporary case studies. Digital textbooks are prioritised to establish intelligent, scenario-based interactive learning models. This manifests as follows: Firstly, complex credit principles and operational workflows are visualised and dynamised through high-definition footage, 3D animations, and process simulations, thereby resolving teaching challenges; Secondly, leveraging AI-powered credit simulation training systems to enable students to practise decision-making across diverse risk scenarios with real-time feedback, achieving 'learning through doing and gaining insight through practice'; Thirdly, dynamically embedding the latest regulatory policies, industry case studies, and fintech tools to ensure teaching content aligns with industry developments. By simulating frontline banking scenarios, the materials emphasise practical application, guiding students to proactively explore and resolve real-world problems, thereby enhancing learning engagement and professional adaptability.

(2) Ideological Guidance, Ethics-Skills-Digital Integration

Centred on ideological and political education within courses, this approach structurally integrates ideological elements into the digital textbook system through contextualised scenarios. Building upon existing practical modules, it prioritises the design of digital platforms including an ideological case repository, ethical decision-making simulations, compliance-focused interactive tasks, and online competency development portfolios. This seamlessly embeds core socialist values, financial ethics, data security, and integrity awareness into learning segments such as business process simulations, risk decision-making, and customer service^[2]. Leveraging the behavioural tracking, process tracing, and intelligent assessment capabilities of digital teaching materials, we achieve dual monitoring and feedback on professional conduct and competency

development. This approach promotes ‘cultivating virtue through skills and guiding conduct through regulations’, fostering financial professionals equipped with both robust technical abilities and high ethical standards.

5. Conclusion

This study addresses the mismatch between ideological and political education in financial curricula and industry demands within the context of industry-education integration. It proposes a four-pronged systemic optimisation pathway: ‘School-Enterprise Collaboration – Teaching Reform – Assessment Innovation – Textbook Upgrading’. Guided by the value of course-based ideological and political education and centred on digital empowerment, this pathway aims to achieve precise, dynamic alignment between talent cultivation and industry needs.

Firstly, innovation in industry-education integration mechanisms and faculty development form the foundation. Establishing university-enterprise consortia, implementing the ‘Financial Mentor Certification Scheme’ and faculty enterprise practice mechanisms provide authentic industrial contexts and teaching resources for course-based ideological and political education.

Secondly, instructional restructuring is pivotal. This involves creating a theoretical teaching framework that integrates job roles with course content while fostering simultaneous development of moral character and professional competence, alongside a practical system that blends virtual and real-world experiences with internal and external connections. Integrating professional ethics and fintech ethics into the full credit process teaching promotes students’ cultivation of both moral integrity and technical skills.

Thirdly, assessment innovation serves as the guiding principle. A multi-dimensional evaluation system emphasising both professional competence and ethical literacy is established. Leveraging artificial intelligence enables contextualised, formative assessment, scientifically evaluating students’ ideological and political literacy alongside their capacity for resolving complex problems.

Finally, textbook advancement serves as the vehicle. Through industry-academia collaboration, digitally enhanced teaching materials should be developed. Employing a dual-design approach – ‘Digital Empowerment Integrating Vocation and Practice’ alongside ‘Ideological Guidance with Virtue-Skill-Digital Orientation’ – enables dynamic content updates, intelligent teaching interactions, and deep ideological integration.

In summary, this study’s exploration of the aforementioned four-dimensional pathways not only provides concrete solutions for the teaching reform of the Credit Practices course but also offers a reference model for advancing the deep integration of industry-education collaboration and

course-based ideological and political education within financial disciplines and other higher vocational programmes. This addresses the new demands for high-calibre technical and skilled personnel in the digital economy era. Moving forward, as technology evolves and industry demands shift, this matching mechanism and pathway must undergo iterative refinement through dynamic practice to sustainably empower the high-quality development of higher vocational education.

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References

- [1] Ministry of Education. Driving New Development in Vocational Education Through Reform: Review of Comprehensive Educational Reform Progress Since the Third Plenary Session of the 20th CPC Central Committee (Part IV) [EB/OL]. http://www.moe.gov.cn/jyb_sy/sy_rdj/rdj_ddesjszqhylyjzghgizsp/202507/t20250725_1199388.html. [2025-07-21].
- [2] People's Bank of China. Ethical Guidelines for Technology in the Financial Sector: JR/T 0258-2022 [S]. 2022.
- [3] China Education Daily Reporter. Demonstrating and Driving Holistic Reform in Vocational Education: Implementing the "New Double High" Initiative to Build a "National Team" of Skills-Oriented Higher Education Institutions [N/OL]. China Education Daily, 2026-01-03 (Page 01) [2026-01-11].
- [4] Zhang Li, Li Fan. Research on Constructing an Evaluation System for Ideological and Political Education in Higher Vocational Courses under the Perspective of Industry-Education Integration [J]. China Vocational and Technical Education, 2023(10): 45-49.
- [5] Wang Yuan, Huang Yun, Jin Ming. Exploring the Integration of Ideological and Political Education into Financial Courses: Taking the "Commercial Bank Management" Course as an Example [J]. Foreign Trade and Economic Cooperation, 2022(11):127-129.
- [6] Tian Xuan. Incorporating Privacy Protection and Algorithmic Fairness into Financial Ethics Standards | Proceedings of National People's Congress and Chinese People's Political Consultative Conference [N/OL]. The Beijing News, 2025-03-04 (p. 05) [2026-01-11].
- [7] Xiao Gang, Liu Xitao, Wang Xing, et al. Research Report on Establishing an Ethical Governance Framework for Fintech [R]. Beijing: China Wealth Management 50 Forum, [2026-01-11].
- [8] Zhao Jinting, Deng Shan. Exploring the Construction and Practice of "Curriculum Ideological and Political Education" in Financial Courses: Taking Commercial Bank Operations and Management as an Example [J]. Higher Vocational Education (Journal of Tianjin Vocational University), 2021, 30(03): 82-86.