# Reform and Optimization: Practical Teaching and Curriculum System Pathways in International Economics and Trade Education

Lelai Shi<sup>1,2,a</sup>, Jun Zhao<sup>1,2,b,\*</sup>, Yujie Yan<sup>1,c</sup>, Jiaqi Yang<sup>1,d</sup>

Abstract: Against the backdrop of profound transformations in the global economic landscape and the rise of emerging industries such as digital trade and cross-border e-commerce, the International Economics and Trade major urgently requires practical teaching reform and curriculum system optimization to cultivate high-quality applied talents adaptable to the new environment. Through literature review and case analysis, this paper systematically examines existing challenges in current pedagogical practices, including weak practical components, redundant course content, insufficient innovation, and lagging industry-education integration. Drawing on the "dual-track simulation" teaching model, collaborative innovation theory, and university-enterprise cooperation mechanisms, the study proposes a three-dimensional linkage reform framework integrating "theory-practice-industry." Recommendations include reconstructing a modular curriculum system, strengthening digital skills training, and deepening collaborative talent development through industry-university-research partnerships. These measures aim to advance the integration of education and practice, offering theoretical and practical insights for the high-quality development of the International Economics and Trade discipline.

**Keywords:** International Economics and Trade; Practical Teaching Reform; Curriculum System Optimization; Dual-Track Simulation; Industry-Education Integration

### 1. Introduction

The global economy is undergoing an unprecedented transformation in a century. Digital technologies are reshaping trade paradigms, with cross-border e-commerce expanding at an annual growth rate exceeding 20% (Ministry of Commerce, 2023), while regional trade agreements such as RCEP and CPTPP accelerate regulatory convergence. Emerging industries demand a paradigm shift in the competencies of international economics and trade professionals—from "single-skilled operators" to "innovative interdisciplinary experts." However, higher education in this field faces a critical "supply-demand mismatch." On one hand, traditional curricula remain dominated by 20th-century staples like International Trade Practices and International Settlement, with coverage of cutting-edge topics such as digital trade and green supply chains below 35%. On the other hand, practical training overly relies on simulation software, trapping students in procedural drills while leaving them ill-equipped to resolve cross-border disputes or navigate international compliance risks [1]. According to the 2023 China Foreign Trade Talent White Paper, over 60% of enterprises criticize graduates for "strong theoretical knowledge but weak practical skills" and "outdated expertise with insufficient innovation," with a talent gap exceeding 6 million in cross-border e-commerce alone. This contradiction underscores the urgency of pedagogical reform. The Ministry of Education's New Liberal Arts Construction Declaration explicitly advocates "strengthening interdisciplinary integration and advancing industry-education collaboration," urging universities to transcend traditional models that "prioritize classroom instruction over practice" and "emphasize knowledge transmission over innovation" [2]. Yet, existing research predominantly focuses on incremental improvements—such as upgrading simulation tools or adding elective courses—while neglecting systematic design across the "teaching objectives-content-industry needs" chain and failing to establish replicable collaborative innovation mechanisms [3]. To address these gaps, this study adopts the "Dual-Track Simulation" pedagogical model and collaborative innovation theory as its framework. By analyzing reform cases in

<sup>&</sup>lt;sup>1</sup>School of Economics, Wuhan Textile University, Wuhan, China

<sup>&</sup>lt;sup>2</sup>Hubei Modern Textile Industry Economic Research Center, Wuhan Textile University, Wuhan, China <sup>a</sup>sll@wtu.edu.cn, <sup>b</sup>2006148@wtu.edu.cn, <sup>c</sup>2109480115@wtu.edu.cn, <sup>d</sup>2309440119@wtu.edu.cn \*Corresponding author

Chinese universities, it explores optimization pathways through a "theory-practice-industry" tripartite linkage, aiming to provide academically rigorous and practically actionable solutions for advancing the quality of international economics and trade education.

### 2. Core Challenges in International Economics and Trade Education

The pedagogy of the International Economics and Trade major currently confronts several systemic challenges that compromise its effectiveness in preparing students for today's globalized economy. First, the curriculum heavily emphasizes theoretical knowledge while lacking robust practical components, leaving graduates ill-equipped to handle real-world trade negotiations or cross-border transactions. Second, course content often fails to keep pace with rapid developments in digital trade, geopolitical shifts, and emerging sustainability standards. Third, traditional teaching methods predominantly rely on lecture-based instruction with insufficient incorporation of case studies, simulation exercises, or industry collaboration. These pedagogical shortcomings manifest in graduates who struggle with practical skills like trade documentation processing, international payment systems navigation, and global supply chain risk assessment. Furthermore, the absence of interdisciplinary integration - particularly with digital technologies and environmental studies - limits students' ability to address complex, contemporary trade challenges. To transform this paradigm, institutions must implement curriculum modernization that balances theory with hands-on practice, integrates cutting-edge trade topics, and employs active learning methodologies through partnerships with trade firms and digital platforms. Such reforms are essential for developing professionals who can navigate the increasingly complex and technology-driven landscape of international commerce.

### 2.1 Practical Teaching Dilemmas

Current practical teaching in International Economics and Trade education remains overly simplistic and homogenized, predominantly relying on classroom-based simulations that lack alignment with real-world trade scenarios. [4] Insufficient exposure to authentic challenges—such as managing currency fluctuations, trade barriers, or contractual disputes in cross-border transactions—leaves students ill-prepared to address complex international trade issues. For instance, traditional pedagogical approaches fail to provide hands-on experience in resolving emerging disputes like digital trade compliance or sustainability-driven supply chain conflicts.

To address these gaps, deepening university-industry collaboration is critical. Integrating real enterprise cases into curricula—through field visits, collaborative projects, and scenario-based simulations—can bridge the theory-practice divide. However, current industry-education integration remains superficial, often limited to short-term internships or guest lectures. A more robust partnership model is needed, such as co-developing specialized courses (e.g., Global E-Commerce Risk Management) or establishing long-term innovation labs aligned with industry needs. This would ensure dynamic synchronization between academic content and evolving sectoral demands, particularly in digital trade and green economy domains.

# 2.2 Curriculum System Obsolescence

The curriculum design for the International Economics and Trade major in many universities exhibits significant obsolescence, particularly manifesting in redundant and overlapping course content that compromises student learning efficiency. [5] For instance, core courses such as International Trade and International Finance suffer from substantial knowledge duplication, while lacking innovative or domain-specific adaptations. Slow updates to curricular content further prevent students from engaging with critical industry transformations, including emerging fields like digital trade and cross-border e-commerce.

To align with the rapid evolution of the global economy, curriculum restructuring is imperative to integrate cutting-edge topics such as digitalization, global governance frameworks, and disruptive technologies (e.g., blockchain, artificial intelligence). This modernization would not only equip students with updated industry knowledge but also cultivate their strategic foresight and adaptive capabilities in navigating dynamic international markets. For example, introducing courses like Data-Driven Trade Analytics or AI Applications in Global Supply Chains could bridge the gap between traditional pedagogy and contemporary industrial demands.

#### 2.3 External Environmental Pressures

The evolving global economic and trade rules impose heightened demands on pedagogical systems. International frameworks such as the Regional Comprehensive Economic Partnership (RCEP) and digital trade agreements are redefining the architecture of global commerce, requiring students to develop stronger global perspectives and in-depth understanding of international policymaking[6]. Universities must urgently update curricula to reflect these trends, ensuring students master next-generation international trade rules.

Concurrently, corporate demands for interdisciplinary talents have escalated. Employers now seek graduates who possess not only foundational economics expertise but also cross-cultural communication skills, proficiency in information technologies, and data analytics capabilities. However, current teaching models—overly reliant on disciplinary silos—fail to cultivate such multifaceted competencies. To address this gap, curriculum design should systematically integrate interdisciplinary content, such as embedding computational social science modules in trade policy courses or offering case studies on AI-driven trade negotiations. This approach would foster professionals adept at both economic theory and technological application, aligning talent development with the "theory-practice-industry" tripartite framework proposed in this study.

# 3. Practical Teaching Reform and Core Pathways for Curriculum System Optimization

# 3.1 Pathways for Practical Teaching Reform

# 3.1.1 "Dual-line Simulation" Teaching Model: Balancing Foundational Operations and Full-Chain Management Capabilities

The primary goal of practical teaching reform is to address the shortcomings of traditional teaching methods, particularly the "emphasis on processes over decision-making," through innovative pedagogical approaches. To this end, the "Dual-line Simulation" teaching model has been proposed, aiming to enhance students' comprehensive competencies through parallel operational pathways.

# a) First Line: Import-Export Technical Simulation

The import-export technical simulation serves as the core component of the "Dual-line Simulation" model, designed to familiarize students with the fundamental operational workflows of international trade. By utilizing international trade simulation platforms (e.g., SimTrade and POCIB), students engage in practical exercises covering all stages from inquiries and contract negotiations to customs declaration and tax refund processes [7]. This phase emphasizes not only the training of foundational skills—such as document preparation and letter of credit review—but also the development of standardized operational proficiency through repetitive practice. Specifically, students are required to integrate simulation software with real-world case studies, enabling them to formulate decisions and execute operations, thereby building practical competencies in international trade.

### b) Second Line: Corporate Business Simulation

Running parallel to technical operations is corporate business simulation, which introduces real enterprise case studies to replicate authentic business scenarios. This approach trains students in team-based collaboration to master cross-border e-commerce product selection, market promotion, and risk management. For example, a university collaborative project with Alibaba International Station requires student teams to design marketing campaigns, logistics solutions, and other tasks within a simulated corporate environment. Through these practices, students not only acquire operational skills but also cultivate strategic thinking and teamwork abilities in multidimensional business contexts.

By linking the two simulation lines, students gain exposure to both foundational operations and the complexities of corporate management, fostering well-rounded professional competencies. The strength of this model lies in its integration of academic theory with enterprise practice, promoting the holistic development of students' capabilities.

# 3.1.2 University-Enterprise Collaboration Mechanism: Embedding Real-World Projects and Building a "Dual-Qualified" Faculty Team

To further enhance the depth and breadth of practical teaching, the university-enterprise collaboration mechanism serves as a critical pathway to align education with industry demands. Unlike traditional internship partnerships, this mechanism emphasizes deep cooperation characterized by

"resource co-construction, process co-management, and outcome co-sharing."

### a) Embedding Real-World Projects

Universities and enterprises jointly establish "industry-academy institutes" to integrate real corporate orders and projects into the curriculum. For example, in a collaborative project between a Shanghai-based university and Ningbo Port Group, students participated in the practical implementation of "RCEP Regional Logistics Optimization." By directly engaging with port data and client demands, students addressed real-world business challenges, cultivating industry-aligned practical skills.

### b) Building a "Dual-Qualified" Faculty Team

The development of a "dual-qualified" faculty team is a collaborative effort between corporate professionals and academic educators, designed to bridge the gap between theoretical knowledge and real-world industry practices. Under this model, corporate mentors, who must comprise at least 30% of the instructional team, bring firsthand industry insights and cutting-edge expertise into the classroom. Meanwhile, university faculty are required to complete periodic temporary assignments at partner enterprises, where they engage directly in hands-on tasks such as cross-border e-commerce operations, international trade compliance consulting, and other industry-specific projects. These practical experiences ensure that educators stay abreast of the latest industry developments, allowing them to continuously update and refine their teaching materials to reflect current trends. By fostering this two-way exchange of knowledge and skills, the "dual-qualified" model dismantles traditional barriers between academia and industry, creating a more dynamic and integrated learning environment. This approach not only enhances the relevance and applicability of academic content but also strengthens university-enterprise partnerships, ultimately preparing students to meet the evolving demands of the global marketplace with greater competence and confidence.

#### 3.2 Pathways for Curriculum System Optimization

# 3.2.1 Modular Restructuring: Integrating Foundational Theory, Practical Skills, and Interdisciplinary Expansion

Traditional curriculum systems in international trade education often suffer from redundant course offerings and misaligned content, leading to inefficiencies in resource allocation and student learning outcomes. To address these challenges, modular restructuring has emerged as an effective strategy, enabling a more precise alignment with students' competency needs. This approach organizes courses into a hierarchical, systematic, and comprehensive framework, ensuring that students acquire both foundational knowledge and cutting-edge skills required in today's global trade landscape.

### a) Foundational Theory Module

The foundational theory module retains essential courses such as International Economics and International Trade Practices, which provide students with a solid grounding in trade principles, policies, and regulations. However, to keep pace with rapid industry transformations, this module has been updated to incorporate emerging theoretical frameworks, such as digital trade regulations (e.g., CPTPP e-commerce clauses, data localization policies) and green supply chain management (e.g., carbon footprint tracking, sustainable logistics). These additions ensure that students are well-equipped to navigate the increasingly complex technological, environmental, and policy-driven challenges in global trade. By blending traditional economic theories with modern advancements, this module fosters a deeper understanding of how trade operates in a digital and sustainability-focused era.

### b) Practical Skills Module

The practical skills module serves as the cornerstone of the curriculum, emphasizing hands-on learning through task-driven methodologies. Courses such as Cross-Border E-Commerce Operations and Free Trade Zone Policy Practices are designed to simulate real industry scenarios, ensuring that theoretical knowledge is directly applicable to professional settings. For example, in Cross-Border E-Commerce Data Analysis, students work with real sales datasets from platforms like Amazon and AliExpress to conduct market trend forecasting, consumer behavior analysis, and product selection strategy development. Similarly, courses like Global Trade Compliance and Risk Management incorporate case studies from multinational corporations, allowing students to assess regulatory risks and develop mitigation strategies. This experiential learning approach not only sharpens students' technical and analytical skills but also ensures that their training is closely aligned with industry

demands.

### c) Interdisciplinary Expansion Module

As modern international trade increasingly intersects with technology, finance, and data science, the demand for interdisciplinary professionals has surged. The interdisciplinary expansion module addresses this need by introducing courses such as Business Python Programming, Blockchain and Trade Finance, and AI Applications in Supply Chain Management. Developed in collaboration with computer science and finance departments, these courses enable students to engage in cross-disciplinary projects such as smart contract design for trade settlements, predictive analytics for logistics optimization, and blockchain-based supply chain traceability systems. By integrating technical skills with trade expertise, this module cultivates a new generation of professionals capable of driving innovation in areas like digital trade, fintech, and sustainable logistics.

# 3.2.2 Embedding Digital Competencies: Python for Business Analytics and Blockchain Technology Applications

Proficiency in emerging technologies is no longer optional but a core competitive advantage for professionals in international trade and economics. To equip students with future-ready skills, the curriculum systematically embeds digital competencies, ensuring graduates can navigate data-driven trade environments and blockchain-powered financial systems.

### a) Python for Business Analytics

The *Python for Business Analytics* course trains students to harness Python—a leading programming language in data science—for trade data analysis, visualization, and predictive modeling. Using real-world datasets, such as import-export statistics from Belt and Road Initiative countries, students learn to clean, process, and interpret trade data to uncover market trends and consumer behavior patterns. For instance, projects may involve:

Forecasting trade demand using time-series analysis with Pandas and Scikit-learn,

Optimizing logistics routes through geospatial data visualization with Matplotlib and Seaborn,

Automating trade report generation to improve efficiency in business analytics workflows.By mastering these skills, students enhance their ability to make data-driven decisions, a critical competency in modern trade careers.

### b) Blockchain Technology Applications

Blockchain is transforming international trade by enabling secure, transparent, and efficient transactions. The curriculum integrates blockchain applications into the International Trade Finance course, where students use simulation platforms to engage in real-world scenarios, such as:

Digital letters of credit (LCs): Automating trade finance documentation to reduce processing delays,

Supply chain traceability: Tracking goods from origin to destination using immutable blockchain ledgers,

Smart contracts for trade agreements: Enforcing self-executing contracts to minimize disputes.

These hands-on exercises demonstrate how blockchain mitigates fraud, enhances compliance, and accelerates cross-border transactions. As industries increasingly adopt blockchain for cross-border e-commerce, fintech, and logistics, students with these skills gain a competitive edge in the job market.

# 3.3 Integration of Internationalization and Localization

### 3.3.1 Curriculum Development for "Belt and Road" Regional Markets

The Belt and Road Initiative (BRI) has fundamentally transformed the landscape of global trade, creating an urgent need for professionals with specialized regional market expertise. Our curriculum responds to this demand through innovative region-specific course clusters that combine rigorous academic study with practical, technology-enhanced analysis.

The Southeast Asian Economic and Trade Cooperation module offers an in-depth examination of ASEAN economic integration, with particular focus on the China-ASEAN Free Trade Area. Students engage with case studies analyzing regional production networks in electronics and automotive sectors, while also evaluating the impact of RCEP implementation on regional value chains. The Central Asian

Energy Trade course adopts a multidisciplinary approach, blending energy economics with geopolitical analysis to study major projects like the China-Central Asia gas pipeline and their implications for regional energy security.

A distinctive feature of these courses is their integration of advanced geospatial technologies. Through hands-on GIS applications, students:

Conduct spatial analysis of BRI trade corridors, evaluating transport efficiency using real-world logistics data

Develop resource mapping projects to identify comparative advantages in different BRI regions

Create interactive dashboards visualizing trade flows and infrastructure development patterns

Simulate the economic impact of proposed infrastructure projects using spatial econometric models

For example, in a semester-long project, student teams might use GIS to analyze the economic corridor linking China's Yunnan province with Myanmar, assessing potential locations for new border trade zones based on terrain analysis, population density, and existing transport networks. Such exercises not only build technical skills but also cultivate strategic thinking about BRI implementation challenges.

### 3.3.2 Cross-Cultural Communication and Multilingual Competency Development

As globalization advances, cross-cultural communication and multilingual proficiency have become indispensable skills in international trade. To address this, the curriculum will expand elective offerings in Southeast Asian languages (e.g., Thai, Vietnamese) through a "language + business" integrated teaching model. IThe expanded language offerings now include not just Southeast Asian languages like Thai and Vietnamese, but also strategic languages such as Russian (for Eurasian markets) and basic Arabic (for Middle Eastern engagements). Each language course incorporates:

Business-specific vocabulary modules covering trade documentation, negotiation terminology, and industry jargon

Simulated business scenarios using VR technology, allowing students to practice client meetings in immersive environments

Case-based learning analyzing real cross-cultural business challenges, such as managing joint ventures in different cultural contexts

The Business Vietnamese course, for instance, goes beyond language instruction to include:

Comparative analysis of Vietnamese and Chinese business etiquette

Workshops on drafting bilingual contracts with attention to legal-cultural nuances

Role-playing exercises for handling common negotiation scenarios in Vietnam

Case studies of successful/unsuccessful market entries by Chinese companies

Advanced students can participate in our "Global Trade Simulation Lab," where multidisciplinary teams tackle complex, multicountry scenarios. A typical simulation might require students to:

Negotiate a multilateral infrastructure financing deal involving Chinese, Malaysian, and Pakistani partners

Resolve a halal certification dispute for a food export venture in Indonesia

Develop a crisis communication plan for a PR incident in an Arab country

These experiences are further enhanced by our industry partnership program, which brings in executives from multinational corporations to share firsthand experiences about cultural challenges in BRI markets. Recent sessions have covered topics like managing religious sensitivities in Middle Eastern business operations and adapting HR practices for Southeast Asian workforces.

By combining rigorous regional market specialization with deep cross-cultural competency development, our curriculum produces graduates who are not just technically proficient but also culturally agile - capable of navigating the complex human dimensions of international trade in BRI countries and beyond. This dual focus ensures our students can convert theoretical knowledge about BRI markets into practical, culturally-informed business success.

### 4. Conclusion

The digital transformation of the global economy and the rapid evolution of new international trade rules present unprecedented challenges for cultivating professionals in international economics and trade. Through systematic analysis of core issues in practical teaching and curriculum design, this paper proposes a "theory-practice-industry" three-dimensional linkage reform framework to address the entrenched shortcomings of traditional pedagogies, such as "prioritizing processes over decision-making" and "emphasizing theory over application." The "Dual-line Simulation" teaching model, by balancing foundational operations and full-chain management training, effectively bridges the gap between student competencies and industry demands. The modular curriculum restructuring, centered on embedding digital competencies and interdisciplinary expansion, shifts educational content from "singular knowledge transmission" to "comprehensive capability cultivation." Simultaneously, deepening university-enterprise collaboration and developing Belt and Road regional courses not only strengthen the practical value of industry-education integration but also highlight the need for localized adaptability in global talent development [8]. However, implementing these reforms requires multi-stakeholder collaboration: policymakers must optimize support mechanisms industry-academia partnerships, universities should accelerate the transition to "dual-qualified" faculty teams, and enterprises must engage more openly in the entire talent development process. Looking ahead, emerging technologies like artificial intelligence and virtual simulation could enable innovative teaching scenarios such as "intelligent sandbox simulations" and "metaverse-based cross-cultural training." Meanwhile, emerging fields like green trade under carbon neutrality goals and global supply chain resilience will offer new directions for curriculum optimization. By continuously iterating pedagogical paradigms through a dynamic lens, we can cultivate "rule-savvy, tech-proficient, and innovation-capable" interdisciplinary professionals in international trade. Such talent will provide robust support for global economic governance and China's high-level opening-up, ensuring alignment with both local needs and global trends.

### Acknowledgements

This work was sponsored in part by the Philosophy and Social Science Research Project of Hubei Provincial Department of Education (Grant No. 22Q081).

### References

- [1] Long Xiaohui. (2019). Reform and Innovation of International Trade Curriculum under the Background of Cross-border E-commerce. Market Modernization, (22), 35–36.
- [2] Zhu Jing. (2019). Research on Teaching Reform of Higher Vocational International Trade Major Based on Deep Integration of Curriculum, Certification, and Competition. Foreign Economic Relations & Trade, (7), 146–148, 151.
- [3] Zhang Wei, Dai Yuzhen, Chen Wenqi, et al. (2019). Construction and Practice of Undergraduate Curriculum Systems in Universities from the Perspective of "Development, Innovation, and Collaboration". Higher Agricultural Education, (03).
- [4] Li Yuxia. (2021). Reform and Practice of Management Courses in Universities Based on Collaborative Innovation Talent Cultivation. Theoretical Research and Practice on Innovation and Entrepreneurship, (10).
- [5] Li, X., & Wang, Y. (2022). Collaborative Innovation in Higher Education: A Case Study of Industry-Academia Partnerships in Cross-border E-commerce Training. International Journal of Educational Technology in Higher Education, 19(1): 1-18.
- [6] Cavusgil, S. T. (2021). "Enhancing Global Competence in International Business Education". Journal of International Business Studies.
- [7] Pan Sukun. (2019). Research on the Revision of Talent Cultivation Programs for International Economy and Trade Majors under the "Belt and Road" Initiative. Foreign Economic Relations & Trade, (3), 122–125.
- [8] Foster, J. (2021). Digital Transformation in Global Trade Education: Integrating AI and Big Data into Curriculum Design. Journal of International Business Education, 16(2): 45-67.