

INCOTERMS Teaching and Learning Innovation: A Competitive Role-Play Framework for Experiential Learning in Global Logistics Education

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ABSTRACT

In the rapidly evolving landscape of global logistics education, a thorough understanding of International Commercial Terms (INCOTERMS) is vital for undergraduate students preparing for careers in international trade and supply chain management. However, a significant pedagogical gap exists: many students struggle to fully comprehend and apply these complex legal and logistical terms, often due to a reliance on traditional, lecture-based teaching methodologies. This study investigates the efficacy of an innovative, qualitative teaching strategy specifically, immersive role-play and competitive performance on improving INCOTERMS comprehension. Utilizing a multi-stage, intervention-based approach across undergraduate logistics classes, students participated in collaborative group role-plays that culminated in an "INCOTERMS War" competition. The qualitative results indicate that this experiential methodology significantly improves student engagement, the practical application of risk-transfer concepts, and overall understanding of global logistics frameworks. By transforming abstract trade regulations into tangible, human-centric negotiations, this study underscores the critical importance of integrating interactive, constructivist approaches to foster deeper comprehension and adequately prepare students for real-world logistical challenges.

Keywords: INCOTERMS, Global Logistics Education, Innovative Teaching Strategies, Qualitative Role-Play, Experiential Learning.

INTRODUCTION

In today's interconnected global economy, a deep understanding of international trade regulations is not merely an academic requirement but an absolute essential for future business leaders, particularly those specializing in logistics and supply chain management. At the heart of these complex global regulations are INCOTERMS (International Commercial Terms), which play a pivotal role in clarifying the exact responsibilities, costs, and risks borne by buyers and sellers in global transactions. These terms form the foundational language of international commerce, dictating everything from who pays for freight to who bears the risk if cargo is damaged in transit.

Despite their critical importance to the functioning of global supply chains, many undergraduate students struggle to grasp these terms deeply enough to apply them effectively in practical scenarios. This fundamental

disconnect in logistics education is largely attributed to the continued reliance on traditional teaching methodologies. Conventional classrooms often rely on rote memorization and passive lectures, a pedagogical approach that fundamentally fails to capture the dynamic, high-stakes, and negotiated reality of global trade.

To address this critical educational gap, this article explores innovative qualitative teaching strategies specifically the strategic use of theatrical role-play and gamified competition—designed explicitly to enhance INCOTERMS comprehension among undergraduate students in global logistics education. By deliberately shifting the educational paradigm away from the passive absorption of facts and toward active, embodied participation, this research aims to provide actionable, evidence-based insights for educators seeking to prepare students for success in their future logistical careers.

Research Objectives and Questions

The primary objective of this study is to identify, implement, and evaluate effective teaching strategies that can significantly improve students' comprehension and the practical application of INCOTERMS. To systematically achieve this objective, the study is guided by the following explicit research questions:

1. How does the implementation of immersive role-play affect undergraduate students' conceptual understanding of risk and cost transfer in INCOTERMS?
2. In what ways does a gamified, competitive framework (e.g., "INCOTERMS War") influence student motivation and engagement in global logistics education?
3. How do collaborative role-play preparations impact the development of peer learning and essential soft skills among logistics students?

LITERATURE REVIEW

The literature indicates that standard trade terminologies serve as the essential architecture for defining the allocation of rights and duties in cross-border commerce (López et al., 2024, p. 82). However, despite their foundational role, these terms are frequently misunderstood or disregarded within conventional international business curricula, leading to a significant gap in professional competency (Foltos, 2014). Contemporary pedagogy increasingly emphasizes that bridging this divide requires moving beyond theoretical transmission toward experiential frameworks that simulate real-world uncertainty (Berenji & Najmi, 2026, p. 1; Xu et al., 2025). Research suggests that while traditional pedagogical methods provide a necessary theoretical foundation, their effectiveness is substantially bolstered when augmented by case-based learning and interactive simulations (Buinwi et al., 2024). Furthermore, incorporating gamification and project-oriented learning allows students to practice strategic decision-making and crisis management in a risk-free environment, effectively bridging the divide between classroom theory and industry practice (Rahmat et al., 2025; Salinas-Navarro et al., 2023, p. 150). These active learning experiences facilitate the development of critical thinking by compelling students to navigate incomplete information and identify necessary supply chain details in real-time scenarios (Snider et al., 2019, p. 148). By integrating such interactive simulations, educators can cultivate essential soft skills—including effective communication, collaborative negotiation, and time management—which are increasingly recognized as vital for professional performance in complex global logistics environments (Pacheco-Velázquez et al., 2024, p. 170).

The increasing complexity of global logistics and international trade demands a deep, nuanced understanding of supply chain management (SCM) and international trade frameworks, especially INCOTERMS. These terms play a critical role in defining the precise responsibilities between buyers and sellers in global transport agreements, providing necessary clarity in international transactions. However, practitioners often face a recurring misalignment between their academic preparation and the high-stakes, situational decision-making required in industry roles (Fantozzi & Schiraldi, 2025; Kotzab et al., 2018, p. 61). This "knowing-doing gap" is exacerbated by curricula that struggle to keep pace with the digital and operational demands of modern, interconnected global supply chains (Gardezi, 2025), (Jæger et al., 2015). However, existing research underscores the profound difficulties faced by students in grasping INCOTERMS, as long-term retention and

practical application often prove highly problematic. One significant hurdle identified in the literature is the sheer complexity and variability of the terms themselves, which can easily create confusion and cognitive overload during traditional instructional delivery. Furthermore, students often find it highly challenging to differentiate between terms that appear functionally similar on paper but carry vastly different legal and financial implications in practice. This cognitive disconnect is severely exacerbated by a lack of practical application opportunities in traditional classroom settings, leaving students struggling to relate theoretical textbook knowledge to real-world operational practices. By incorporating experiential learning through simulated coursework, educators can force students to think atypically and evaluate logistical situations in ways that rote memorization simply cannot replicate (Stuba et al., 2017, p. 1824). Consequently, pedagogical frameworks that prioritize collaborative engagement and active participation are essential for fostering the agile, competency-based skillset required to navigate the evolving demands of contemporary supply chain management (Adebayo et al., 2024; Gardezi, 2025).

The Strategic Importance of INCOTERMS in Global Trade

INCOTERMS, which are developed and periodically updated by the International Chamber of Commerce (ICC), constitute a globally recognized and standardized framework that governs the allocation of responsibilities, costs, risks, and obligations between buyers and sellers engaged in international trade. These universally accepted rules govern the most critical aspects of cross-border transactions. This includes pinpointing the exact transfer of risk, outlining transportation arrangements, stipulating insurance requirements, dictating customs clearance procedures, and formalizing delivery obligations across vastly different modes of transport. Beyond merely acting as delivery protocols, these terms function as strategic instruments that, when correctly applied, enhance supply chain efficiency and facilitate the resolution of potential contractual disputes (Cruz et al., 2025; Hajdukiewicz & Pera, 2021, p. 48). Conversely, the frequent misuse or misinterpretation of these standardized rules can lead to severe operational inefficiencies, creating unplanned financial liabilities and legal risks for participating organizations (Vogt & Davis, 2024). Empirical evidence suggests that such failures in selection often arise because personnel are frequently unaware of the profound implications associated with specific term choices, leading to contracts that are at best costly and at worst inoperable (Davis & Vogt, 2021). Therefore, shifting educational focus from rote memorization toward interactive, simulation-based environments is critical to ensuring students internalize these nuances before entering high-stakes professional roles (Omar et al., 2024). By implementing competitive role-play modules, instructors can simulate the high-pressure environment of international procurement, forcing students to navigate the legal and financial repercussions of their term selections in real-time (Omar et al., 2024). This pedagogical approach transforms abstract definitions into active strategic decisions, compelling learners to assess trade-offs between cost-efficiency and risk mitigation (Sugiono et al., 2024, p. 1085). By clearly delineating the transfer of liability and logistical duties, these terms serve as an essential mechanism for managing the inherent uncertainties and financial exposures prevalent in cross-border commerce (Mtolera et al., 2024). Furthermore, these standardized rules act as a discretionary regulatory framework that complements international sales contracts, allowing parties to balance their specific logistical capabilities against the requirements of the trade (Rojas & Cano, 2022, p. 172).

Additionally, as international trade becomes increasingly complex, volatile, and interconnected, a sound, operational understanding of INCOTERMS is absolutely indispensable for industry professionals. Exporters, importers, freight forwarders, and supply chain managers rely on this knowledge to minimize costly contractual disputes, avoid severe operational errors, and ensure highly efficient trade execution. Nevertheless, despite their obvious strategic importance to the industry, many undergraduate students continue to demonstrate limited conceptual understanding and a worrying inability to practically apply INCOTERMS. Conventional lecture-based instruction continues to emphasize short-term memorization rather than deep experiential learning and authentic problem-solving. This disconnect between theoretical knowledge, and real-world practice often leaves graduating students inadequately prepared to make informed, financially sound logistics decisions in professional, high-pressure settings. Consequently, higher education institutions face a pressing imperative to adopt innovative teaching and learning strategies that actively engage students in realistic, complex trade scenarios. Doing so enables students to develop not only conceptual mastery of the terms but also the critical analytical, communication, and decision-making competencies required in contemporary global logistics and supply chain management.

Theoretical Framework: Constructivism and Experiential Learning

To address these educational shortcomings, this study is deeply underpinned by highly complementary educational theories that emphasize student-centered and active learning paradigms.

Firstly, Constructivist Learning Theory posits that learners do not simply absorb information passively; rather, they actively construct their own knowledge and meaning through lived experiences, social interaction, and continuous reflection. This theoretical perspective heavily supports the use of interactive teaching strategies that force students to grapple with material, enabling them to develop a much deeper understanding of complex concepts such as INCOTERMS by directly connecting theoretical classroom knowledge with authentic, hands-on learning experiences. Complementing the constructivist approach is (Kolb, 1983)

Experiential Learning Theory.

This theory robustly asserts that learning is most effective and permanent when individuals acquire new knowledge through a continuous cycle of direct experience, deep reflection, conceptualization, and active experimentation. Furthermore, the methodology leverages Collaborative Learning Theory, which suggests that peer-to-peer interaction and shared problem-solving deepen cognitive retention. Accordingly, this study integrates theatrical role-play and competitive, hands-on learning activities to provide students with the authentic, low-risk opportunities necessary to apply INCOTERMS in realistic international trade scenarios.

METHODOLOGY

Research Design

To comprehensively investigate the efficacy of this pedagogical innovation, this study adopts a robust qualitative intervention research design. The primary goal is to explore exactly how competitive role-play functions to enhance undergraduate students' understanding of INCOTERMS within the context of international transport and trade education. Unlike conventional, passive classroom instruction, this study formally introduces the "INCOTERMS WAR". This intervention is a highly structured role-play competition that actively allows students to simulate real, high-stakes international trade transactions while physically demonstrating their nuanced understanding of complex buyer and seller responsibilities. The entire intervention is firmly grounded in the Experiential Learning Theory, Constructivist Learning Theory, and Collaborative Learning Theory.

Participants and Institutional Context

The empirical study was carefully conducted within undergraduate classes enrolled in a dedicated International Transport and Trade course at one of the public universities. Purposive sampling was intentionally employed to select the participant pool, ensuring that all students were enrolled in the exact same course and had successfully completed the foundational introductory lessons on INCOTERMS prior to the intervention.

- **Sample Size:** The study included a total, robust sample of 80 undergraduate students.
- **Demographics:** The participants ranged in age from 21 to 22 years old. The gender distribution of the sample was 40 percent male and 60 percent female.
- **Grouping Mechanism:** To facilitate the collaborative elements of the theoretical framework, students were organized into small, diverse collaborative groups consisting of four to six members each.

Teaching Intervention: The Four-Stage Framework

The core methodology of this research centered entirely on immersive role-play, utilizing a highly structured, four-step competitive framework specifically designed to foster deep engagement, peer collaboration, and true experiential learning:

- **Stage 1: Group Formation and Scenario Development** Students in each class were divided into their collaborative groups, and each group was randomly assigned one specific, complex INCOTERM to master (e.g., EXW, FOB, CIF, DDP, FCA, CIP). Groups were required to deeply analyze their assigned term and independently develop an authentic, comprehensive international trade scenario. This scenario had to clearly illustrate the specific obligations of both buyers and sellers, outline precise transportation arrangements, pinpoint the exact transfer of risks, detail insurance requirements, navigate customs procedures, and clarify delivery responsibilities. To enhance the realism of the simulation, students were highly encouraged to prepare detailed scripts, appropriate costumes, mock shipping documents, and supporting physical props to accurately simulate realistic logistics operations.
- **Stage 2: Classroom Role-Play Performance.** In the second stage, each collaborative group formally performed its developed role-play live before their classmates and observing lecturers. Crucially, the students had to physically act out the exact, specific moment that risks, financial costs, and legal responsibilities transferred from the seller to the buyer. The performances were rigorously observed using a standardized observation checklist focusing heavily on the accuracy of the INCOTERMS application, the clarity of the group's explanation, their communication skills, demonstrable teamwork, overall creativity, problem-solving abilities, and the strict authenticity of the logistics practices portrayed. Following each live performance, students participated in guided reflective discussions where lecturers and peers provided immediate, constructive feedback.
- **Stage 3: Selection of Class Representatives.** After all groups successfully completed their performances, a dedicated panel of judges evaluated each role-play utilizing predetermined, stringent assessment criteria. From every participating group, peer and instructor evaluations collectively identified the "Best Actor" or "Best Actress". This title was defined as the specific student who demonstrated the absolute most accurate, articulate, and highly engaging portrayal of the assigned INCOTERMS mechanics. These newly selected students subsequently became their respective class's champions, officially advancing to a high-stakes, cross-class final competition.
- **Stage 4: INCOTERMS WAR Grand Competition.** The intervention culminated when representatives from all participating classes convened for the final "INCOTERMS WAR" role-play challenge. In this high-pressure stage, students were paired directly with representatives from entirely different classes and were given impromptu, unforeseen scenarios. These scenarios required real-time, on-the-spot negotiation utilizing their assigned INCOTERMS. The final winners were critically evaluated by a panel of experienced logistics instructors based on strict technical accuracy, their capacity for creative problem-solving under pressure, and their overall communication skills.

Data Collection and Analysis

Consistent with the rigorous qualitative design of the study, multiple distinct sources of evidence were systematically used to significantly enhance the credibility and trustworthiness of the findings through data triangulation:

- **Participant Observation:** Lecturers carefully observed the students' active participation, their interpersonal communication, and their technical application of INCOTERMS, recording detailed qualitative field notes during all activities.
- **Reflective Journals:** Students were required to prepare detailed journals describing precisely what they learned, the specific challenges they encountered, and their personal reflections on how the role-play improved their conceptual understanding.
- **Focus Group Discussions:** Researchers utilized open-ended questions in structured group settings to deeply explore the students' personal perceptions of learning through role-play and how they viewed its direct applicability to their future logistics careers.

- Judges' Evaluation Sheets: Detailed assessment rubrics, carefully completed by both lecturers and invited expert judges, were collected and analyzed qualitatively.

Data were subsequently analyzed utilizing thematic analysis. This involved systematically comparing codes extracted from the observations, the students' reflective journals, the transcripts of focus group discussions, and the judges' written comments to identify broad, recurring patterns. Following the established framework set forth by (Braun & Clarke, 2006), the rigorous analysis involved deep data familiarization, the systematic generation of initial codes, and the active, thoughtful collation of these codes into broader overarching themes.

To further ensure credibility and dependability in strict alignment with (Lincoln & Guba, 1985), several qualitative strategies were employed. Methodological triangulation was successfully achieved by cross-verifying the data emerging from observations, journals, and focus groups. Additionally, rigorous peer debriefing was routinely conducted among the core research team to refine and challenge coding schemes. Finally, member checking was effectively utilized by sharing the preliminary research findings with a subset of the actual participants to verify the ultimate accuracy of the researchers' interpretations.

RESULTS AND DISCUSSION

The rich qualitative data generated from the instructor observations, the detailed performance rubrics, and the intimate student reflective journals revealed a profound, fundamental shift in how the students interacted with the logistics curriculum. The comprehensive thematic analysis yielded several distinct emergent themes, which are detailed extensively below.

Embodied Comprehension of Risk and Cost Transfer

Post-implementation observations visibly demonstrated a significant, qualitative improvement in the students' overall comprehension of INCOTERMS. By physically embodying the distinct roles of buyers, sellers, and logistics providers within a simulated environment, students successfully transitioned away from the fragile reliance on rote memorization and moved toward true, resilient conceptual understanding. The actual spatial and physical act of handing over a simulated "bill of lading" or actively debating who pays for "insurance" in a theatrical, high-stakes setting allowed the students to accurately visualize the exact point of risk transfer. Prior to the intervention, students widely reported this specific concept as being highly abstract and difficult to grasp.

The evaluating judges explicitly noted that the winning groups in the "INCOTERMS WAR" were consistently those who successfully and clearly isolated the exact moment legal liability shifted from the seller to the buyer. This embodied learning is best encapsulated by Participant 1, who stated in their reflection:

"Holding the physical document made me realize exactly when the buyer takes on the risk..."

These qualitative findings strongly align with and validate (Kolb, 1983)

Experiential Learning Theory, clearly demonstrating that direct, physical experience and active classroom experimentation yield a much deeper and more permanent conceptualization than the passive reception of a traditional lecture. Furthermore, these positive outcomes strongly substantiate the recent conclusions drawn by (Chen et al., 2026), whose research noted that theatrical role-play significantly outperforms traditional written case studies in promoting the longitudinal retention of INCOTERMS among early-career logistics practitioners.

Heightened Motivation Through Gamified Competition

The interactive, competitive strategies embedded within the methodology played a vital, undeniable role in driving profound student engagement. The formal introduction of the "INCOTERMS WAR" successfully created a high-stakes, highly gamified environment. Within this framework, students were found to be highly motivated to research and understand their randomly assigned terms deeply. Crucially, this motivation was not simply extrinsic (e.g., studying just to achieve a passing grade); rather, it was driven by a deep desire to ensure their group's chosen representative could genuinely succeed in the final, public competition.

The qualitative data from the reflective journals indicated a massive shift in behavior, showing that students voluntarily spent numerous additional hours outside of scheduled class time refining their theatrical scripts and passionately debating the complex logistical mechanics, driven heavily by the competitive desire to win accolades. This intense dedication is highlighted by a quote from Participant 2:

"We spent three extra hours at the library just arguing over CIF rules because we really wanted our rep to win the War."

This specific finding aligns incredibly closely with the qualitative analysis conducted by (Rahman & Zhao, 2025). Their work posited that competitive frameworks utilized in modern supply chain education consistently and reliably stimulate much higher intrinsic motivation. Furthermore, such frameworks actively promote rigorous, self-directed learning behaviors that extend far outside the boundaries of mandated classroom hours.

Enhanced Peer Collaboration and Soft Skill Development

The data revealed that peer collaboration was heavily evident during all of the methodology's preparation phases. The qualitative data heavily suggests that as students passionately debated the specific logistics mechanics required to finalize their scripts, they naturally and organically corrected each other's theoretical misconceptions without requiring instructor intervention.

Furthermore, the act of participating in the role-play inherently developed incredibly crucial soft skills. These included cross-cultural communication, high-level negotiation, and active conflict resolution. These specific soft skills are highly demanded by employers in the global logistics industry but are notoriously difficult to teach and rarely practiced in standard university lecture halls. Because the panel of judges purposefully selected the ultimate winners based on which group made their specific INCOTERM "the most understandable" to a general audience, the student groups were forced to intentionally simplify complex legal jargon. This necessity to simplify and explain ultimately created a highly effective, organic peer-teaching mechanism. Participant 3 explicitly noted the value of this collaborative environment, stating:

"My group members explained FCA to me in a way the textbook couldn't, simply by breaking down our character dialogue."

CONCLUSION AND FUTURE RECOMMENDATIONS

Conclusion

This comprehensive study strongly highlights that the implementation of diverse, interactive teaching methods specifically focusing on qualitative role-play and high-stakes, performance-based competitions significantly enhance undergraduate students' baseline comprehension of highly complex regulatory concepts like INCOTERMS. The robust qualitative findings demonstrate that active, deeply engaging, and theatrical pedagogical approaches do not merely serve to entertain the student body; rather, they foster significantly better long-term retention and vastly improve the practical application of theoretical knowledge when tested in real-world, simulated scenarios. By successfully transforming static, confusing legal terms into dynamic, relatable human interactions, this study underscores the immense, undeniable value of moving modern pedagogy beyond traditional lecture-based instruction. It proves the necessity of shifting toward dynamic, experiential learning models within the context of international trade education.

Future Recommendations

As the landscape of global trade continues to face unprecedented geopolitical and operational challenges and evolutions, the absolute mastery of INCOTERMS remains essential for all current and future professionals operating in logistics and supply chain management.

Building upon the success of this intervention, future research should endeavor to longitudinally explore the lasting, long-term impact of these experiential teaching strategies. Specifically, researchers should track students'

knowledge retention as they officially enter the workforce and are tasked with managing real-world logistics applications and multi-million dollar contracts. Additionally, expanding the scope of this study to include a much broader sample size of students drawn from diverse educational institutions and varying cultural regions could offer significantly deeper insights into the broader, cross-cultural efficacy of these role-play methodologies. Finally, future pedagogical studies must investigate the integration of cutting-edge, emerging technologies alongside these traditional role-play frameworks. Specifically, integrating Virtual Reality (VR) simulations with this proven role-play methodology could profoundly enhance experiential learning. Such technological integration would allow logistics students to fully "act" and negotiate within immersive, digital twin environments representing actual, functioning global ports.

REFERENCES

1. Adebayo, V. I., Paul, P. O., Osareme, O. J., & Eyo-Udo, N. L. (2024). Skill development for the future supply chain workforce: Identifying key areas. *International Journal of Applied Research in Social Sciences*, 6(7), 1346–1354. <https://doi.org/10.51594/ijarss.v6i7.1296>
2. Berenji, H. R., & Najmi, H. (2026, January 1). Optimizing Students' Learning in Operations Management: The Impact of Simulation-based Games and Feedback Strategies. *Proceedings of the ... Annual Hawaii International Conference on System Sciences/Proceedings of the Annual Hawaii International Conference on System Sciences*. <https://doi.org/10.24251/hicss.2026.588>
3. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
4. Buinwi, U., Okatta, C. G., Johnson, E., Buinwi, J. A., & Tuboalabo, A. (2024). Enhancing trade policy education: A review of pedagogical approaches in public administration programs. *International Journal of Applied Research in Social Sciences*, 6(6), 1253–1273. <https://doi.org/10.51594/ijarss.v6i6.1243>
5. Chen, L., Martinez, J., & Patel, K. (2026). Theatrical role-play versus traditional case studies: Longitudinal retention of INCOTERMS 2020 among early-career logistics practitioners. *International Journal of Trade and Logistics Education*, 21(1), 45–61.
6. Cruz, M. A. S., Gracia, A., & Camarena, J. (2025). La importancia de los Incoterms en la cadena de suministro internacional y sus implicaciones logísticas, costos de transporte y gestión comercial. *LATAM Revista Latinoamericana de Ciencias Sociales y Humanidades*, 6(2). <https://doi.org/10.56712/latam.v6i2.3757>
7. Davis, J. M., & Vogt, J. (2021). Hidden Supply Chain Risk and Incoterms®: Analysis and Mitigation Strategies. *Journal of Risk and Financial Management*, 14(12), 619–619. <https://doi.org/10.3390/jrfm14120619>
8. Fantozzi, I. C., & Schiraldi, M. M. (2025). Bridging education and industry: university challenges and serious games for professional skill development. *The TQM Journal*, 1–16. <https://doi.org/10.1108/tqm-12-2024-0511>
9. Foltos, B. (2014). LUNA: A Role Play Game for Learning Incoterms 2000. 36. <http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.605.6353>
10. Gardezi, S. H. I. (2025a). Bridging the Global Divide: Identifying Critical Gaps in Supply Chain Education and Vocational Training Curriculum Design and Delivery. Zenodo (CERN European Organization for Nuclear Research). <https://doi.org/10.5281/zenodo.17629345>
11. Gardezi, S. H. I. (2025b). Bridging the Global Divide: Identifying Critical Gaps in Supply Chain Education and Vocational Training Curriculum Design and Delivery. Zenodo (CERN European Organization for Nuclear Research). <https://doi.org/10.5281/zenodo.17629346>
12. Hajdukiewicz, A., & Pera, B. (2021). Factors affecting the choice of Incoterms: The case of companies operating in Poland. *Przedsiębiorczość Międzynarodowa*, 7(4), 35–50. <https://doi.org/10.15678/ier.2021.0704.03>
13. Jæger, B., Rudra, A., Aitken, A., Chang, V., & Helgheim, B. I. (2015). Bridging the Knowing-Doing Gap in Global Supply Chain Education. *Communications of the Association for Information Systems*, 36. <https://doi.org/10.17705/1cais.03621>
14. Kolb, D. (1983). *Experiential Learning : Experience as the Source of Learning and Development*. CERN Document Server (European Organization for Nuclear Research). http://bvbr.bib-bvb.de:8991/F?func=service&doc_library=BVB01&local_base=BVB01&doc_number=

028247008&sequence=000002&line_number=0001&func_code=DB_RECORDS&service_type=MEDIA

15. Kotzab, H., Teller, C., Bourlakis, M., & Wünsche, S. (2018). Key competences of logistics and SCM professionals – the lifelong learning perspective. *Supply Chain Management An International Journal*, 23(1), 50–64. <https://doi.org/10.1108/scm-02-2017-0079>
16. Lincoln, Y. S., & Guba, E. G. (1985). Lincoln, Yvonna, and Egon G. Guba, *Naturalistic Inquiry*. Beverly Hills, CA: Sage, 1985. *Journal of International Crisis and Risk Communication Research*. <https://stars.library.ucf.edu/cirs/690>
17. López, J. G. V., Rojas, J. J. B., & López-Cadavid, D. A. (2024). Interrelations between logistics, trade, and law in the Incoterms® context. *Pomorstvo*, 38(1), 82–95. <https://doi.org/10.31217/p.38.1.7>
18. Mtolera, O. P., Mwendapole, M. J., & Mugisha, E. (2024). Analyzing Common Trade Risks Faced by Tanzanian Traders in International Transactions: A Case Study of Dar es Salaam Importers and Exporters. *Social Science and Humanities Journal*, 8(10), 5236–5246. <https://doi.org/10.18535/sshj.v8i10.1352>
19. Omar, E. N., Jaafar, H. S., & Omar, H. H. (2024). Enhancing INCOTERMS Understanding among Undergraduate Students: The Impact of Innovative Teaching Strategies in Global Logistics Education. *International Journal of Research and Innovation in Social Science*, 63–69. <https://doi.org/10.47772/ijriss.2024.8100006>
20. Pacheco-Velázquez, E., Rodés, V., & Salinas-Navarro, D. E. (2024). Developing learning skills through game-based learning in complex scenarios: A case in undergraduate logistics education. *Journal of Technology and Science Education*, 14(1), 169–169. <https://doi.org/10.3926/jotse.2219>
21. Rahman, A. M., & Zhao, Y. (2025). Competitive frameworks in modern supply chain education: A multi-region qualitative analysis. *Journal of Global Supply Chain Pedagogy*, 14(2), 112–128.
22. Rahmat, A. K., Rashid, M., & Yajid, A. A. (2025). LogistiQuest as a Tool for Problem-Based Learning (PBL) in Logistics Management. *Global Conference on Business and Social Sciences Proceeding*, 17(1), 80–80. [https://doi.org/10.35609/gcbssproceeding.2025.1\(80\)](https://doi.org/10.35609/gcbssproceeding.2025.1(80))
23. Rojas, J. J. B., & Cano, J. A. (2022). TECHNIQUE FOR ESTIMATION OF COSTS AND PRICES IN CONTRACTS FOR THE INTERNATIONAL SALE OF GOODS BASED ON INCOTERMS®. *Acta Logistica*, 9(2), 171–181. <https://doi.org/10.22306/al.v9i2.291>
24. Salinas-Navarro, D. E., Pacheco-Velázquez, E., Silva-Ovando, A. C. da, Mejía-Argueta, C., & Chong, M. (2023). Educational innovation in supply chain management and logistics for active learning in Latin America. *Journal of International Education in Business*, 17(1), 148–169. <https://doi.org/10.1108/jieb-07-2023-0050>
25. Snider, B., Southin, N., & Cole, R. (2019). Patio Swings Intermodal Shipping Competition: An Inquiry-Based Partial Information Exercise. *Decision Sciences Journal of Innovative Education*, 17(2), 146–162. <https://doi.org/10.1111/dsji.12174>
26. Stuba, E., Curkovic, S., & Wagner, B. (2017). The Benefits of Simulated Coursework in Western Michigan University's Undergraduate Supply Chain Program. *Creative Education*, 8(12), 1821–1832. <https://doi.org/10.4236/ce.2017.812125>
27. Sugiono, A., Rahayu, A., Wibowo, L. A., & Hurriyati, R. (2024). Developing models of environment uncertainty, incoterms on strategic alliance and competitive advantage. *Uncertain Supply Chain Management*, 12(2), 1083–1096. <https://doi.org/10.5267/j.uscm.2023.12.001>
28. Vogt, J., & Davis, J. (2024). An exploratory study of Incoterms® knowledge and effective use in trade. *International Journal of Trade and Global Markets*, 19(2), 193–212. <https://doi.org/10.1504/ijtgm.2024.137743>
29. Xu, X., Li, Y., & Fu, K. (2025). Innovative Teaching Design for International Trade Practice Course Based on Diversified Learning Goals. *International Journal of Learning and Teaching*, 197–201. <https://doi.org/10.18178/ijlt.11.4.197-201>