



ТЕОРІЯ І МЕТОДИКА ПРОФЕСІЙНОЇ ОСВІТИ

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Стратегії ефективного ведення переговорів та управління конфліктами в освітньому процесі для студентів нефілологічних спеціальностей

Бірюкова Наталія Андріївна

Викладач кафедри англійської мови гуманітарного спрямування №3,
Національний технічний університет України «Київський політехнічний
інститут імені Ігоря Сікорського», м. Київ, просп. Берестейський, 37, 03056,
Україна

<https://orcid.org/0000-0001-7193-5901>

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***Анотація.** Метою наукового дослідження є теоретичне обґрунтування та емпірична верифікація комплексної методики формування переговорних компетентностей і навичок управління конфліктами у студентів нефілологічних спеціальностей (біотехнологів та інженерів) у межах англійської мови за професійним спрямуванням (ESP). Актуальність роботи зумовлена зростаючими вимогами глобалізованого ринку праці до фахівців, які, окрім технічної експертизи, мають володіти розвиненими комунікативними та соціальними навичками. **Методологічна основа дослідження** базується на інтеграції когнітивної психології, Гарвардської моделі переговорів та сучасної лінгводидактики. Теоретичним підґрунтям виступає модель Томаса-Кілманна, що дозволяє аналізувати поведінкові стратегії у конфлікті через параметри наполегливості та співпраці. Емпіричну частину реалізовано шляхом упровадження чотириетапного циклу переговорних симуляцій (брифінг, стратегічне планування, взаємодія, дебрифінг) у курс «Практичний курс*



іноземної мови» для студентів КПІ ім. Ігоря Сікорського із застосуванням цифрових інструментів Slido та Padlet для рефлексії та візуалізації стратегій. **Результати дослідження** свідчать, що інтеграція психологічних моделей у процес навчання ESP сприяє виявленню та подоланню когнітивних упереджень і підвищує мотивацію студентів: 85% учасників продемонстрували вищий рівень залученості під час роботи з професійно орієнтованими конфліктними кейсами. Сформовано систему ключових переговорних компетентностей, зокрема встановлення довіри, активне слухання, емоційну саморегуляцію та стратегічне мислення. Отримані результати підтверджують, що поєднання переговорних підходів, психологічних стратегій і цифрових технологій підвищує ефективність навчання, знижує рівень мовної тривожності та сприяє формуванню професійної комунікативної компетентності. Запропонована методика трансформує навчання іноземної мови у стратегічний інструмент професійної взаємодії та може бути використана для підготовки студентів технічних спеціальностей до діяльності в міжнародному середовищі.

Ключові слова: *переговорні стратегії, управління конфліктами, англійська мова за професійним спрямуванням (ESP), студенти нефілологічних спеціальностей, професійна комунікація, цифрова педагогіка, м'які навички, комунікативна стійкість.*

Strategies for effective negotiation and conflict management in the educational process for non-philological students

Nataliia Biriukova

Lecturer, Department of English for Humanities №3, National Technical University of Ukraine “Igor Sikorsky Kyiv Polytechnic Institute”, 37 Beresteiskyi Ave., 03056, Kyiv, Ukraine

<https://orcid.org/0000-0001-7193-5901>



Abstract: *This study focuses on the theoretical substantiation and practical validation of a comprehensive methodology for developing negotiation and conflict-management competencies among non-philological students (biotechnologists and engineers) within English for Specific Purposes (ESP). The relevance of this research is dictated by the urgent need to prepare specialists capable of functioning effectively in the modern globalized labor market. **The purpose** is to bridge the gap between theoretical linguistic knowledge and practical communication skills required for professional negotiation and conflict resolution in a foreign language. **The methodology** is based on a multidisciplinary approach integrating cognitive psychology, the Harvard negotiation model, and modern linguistic pedagogy. The theoretical framework includes the Thomas-Kilmann Conflict Mode Instrument for analyzing behavioral strategies in conflict situations. The empirical study involved implementing a four-stage cycle of negotiation simulations (briefing, strategy development, interaction, debriefing) within the “Practical Course of a Foreign Language” at Igor Sikorsky Kyiv Polytechnic Institute. Digital tools such as Slido and Padlet were incorporated to support reflection and strategic visualization. **The results** demonstrate that integrating psychological models into ESP instruction helps identify and mitigate cognitive biases and significantly increases student motivation. Notably, 85% of participants showed higher engagement when tasks were framed as professional conflict scenarios. A system of six key negotiation competencies was developed, including rapport-building, active listening, and strategic decision-making. **The findings** confirm that combining negotiation frameworks, psychological strategies, and digital tools enhances communicative effectiveness, reduces language anxiety, and fosters professional self-efficacy. The proposed approach transforms foreign language learning into a strategic tool for conflict resolution and professional interaction, ensuring effective preparation of students for the international professional environment.*



Keywords: *professional interaction, pedagogical innovation, soft skills, communicative resilience, digital learning platforms, technical education, intercultural consensus, English for Specific Purposes.*

Problem Statement. The increasing pace of globalization and the rise of the digital economy have profoundly transformed the professional landscape, especially within technical fields. Today's specialists must navigate complex intercultural teams, virtual collaborations, and rapidly evolving technologies. Consequently, the development of soft skills such as negotiation and conflict management has become essential alongside hard technical competencies.

The COVID-19 pandemic has accelerated the shift toward remote work and virtual negotiations, posing new challenges for communication and conflict resolution that traditional foreign language instruction often does not address. This gap highlights the urgent need for integrated educational approaches that combine language acquisition with pragmatic, context-driven skills training.

Higher education, particularly in technical universities, requires interdisciplinary training that includes negotiation competencies enabling graduates to participate effectively in global labor markets and intercultural professional communication. English for Specific Purposes (ESP) courses must therefore evolve beyond classical grammar instruction, focusing on authentic workplace scenarios and interactive teaching methods [10].

Analysis of recent studies and publications. Recent research in the field of English for Specific Purposes (ESP) demonstrates a significant shift from traditional language instruction toward the integration of communicative competence with soft skills development, particularly in technical education contexts. Studies conducted by Succi and Canovi, as well as research by Dörnyei, emphasize that professional success in the globalized labor market requires not only linguistic proficiency but also well-developed negotiation, collaboration, and conflict management skills [15;5].



A growing body of literature highlights the importance of digital learning environments in shaping communicative competence. Research conducted by Rapanta et al. indicates that online and blended learning require interactive, student-centered pedagogies that foster collaboration and critical thinking [14].

Similarly, studies by Godwin-Jones demonstrate that digital technologies enhance student engagement and create opportunities for authentic communication practices in ESP contexts. Further findings reported by Vandergriff confirm that digital interaction environments contribute significantly to the development of pragmatic and discourse competence [7;19].

Recent empirical research confirms the effectiveness of simulation-based and experiential learning approaches. Studies conducted by Makransky and Petersen show that immersive learning environments, including virtual reality, significantly improve both cognitive engagement and practical skill acquisition. In addition, research by Tai et al. highlights that gamification and interactive tasks increase learner motivation and facilitate the development of communication strategies in language learning [13;16].

The development of soft skills remains a key area of contemporary research. According to studies conducted by Succi and Canovi, competencies such as negotiation, teamwork, and adaptability are among the most in-demand by employers; however, they are often insufficiently developed within traditional higher education curricula. This gap underscores the need for pedagogical approaches that integrate language learning with professional communication training.

Another important research direction concerns the role of emotional intelligence in communication. Research by Derakhshan demonstrates that emotional regulation, empathy, and interpersonal awareness significantly influence the effectiveness of language learning and communication processes. These findings support the integration of psychological models into ESP instruction in order to enhance students' ability to manage conflict situations effectively [4].



In addition, scholars emphasize the importance of intercultural competence in professional communication. Studies conducted by Helm and Jones indicate that successful interaction in international environments requires awareness of cultural differences in communication styles and negotiation strategies. Therefore, ESP courses should incorporate intercultural components to better prepare students for global collaboration [10].

Technological advancements have also led to the emergence of adaptive and AI-supported learning environments. Research by Li L. highlights the growing role of artificial intelligence in personalizing learning processes and improving educational outcomes. Similarly, studies conducted by Hampel and Stickler emphasize that research-based online pedagogies enable more flexible and effective language instruction tailored to learners' individual needs [12;9].

Despite these advances, the literature reveals a persistent gap between theoretical models of negotiation and their practical implementation in ESP teaching. While numerous studies explore digital tools, soft skills, and psychological factors, their integration into a unified pedagogical framework remains limited.

Thus, the analysis of recent studies demonstrates the necessity of developing a comprehensive methodology that combines negotiation strategies, conflict management, and digital technologies within ESP instruction. The present study aims to address this gap by proposing an integrated approach tailored to non-philological students in technical education.

Formulation of the article's objectives (task setting). The purpose of this article is to describe and evaluate a comprehensive methodology for teaching negotiation and conflict management within the ESP framework.

The objectives are:

1. To define the core negotiation competencies relevant for technical students.



2. To provide a methodological framework for utilizing digital tools in negotiation simulations.
3. To analyze the impact of these strategies on student confidence and pragmatic competence.

Presentation of the main research material. The foundational theoretical model of this study is the Thomas-Kilmann Conflict Mode Instrument (TKI), which identifies five conflict-handling styles – Competing, Collaborating, Compromising, Avoiding, and Accommodating – mapped along axes of assertiveness and cooperativeness (Thomas & Kilmann, 1974) [18]. Applied examples tailored to technical education include scenarios such as negotiating project timelines (Collaborating), budget constraints (Competing), or postponing discussions (Avoiding). This contextualization empowers students to recognize and adapt their negotiation styles situationally.

Moreover, emotional intelligence theory (Goleman, 2006) enriches understanding by emphasizing the regulation of emotions and empathy as prerequisites for effective negotiation [8]. Incorporating communicative competence theories and genre analysis further enhances learners' ability to navigate professional discourse structures, fostering strategic adaptability across communication contexts.

Cognitive distortions identified include: Fundamental Attribution Error (blaming interlocutors' dispositions rather than situational factors) and Subjective Fairness Bias (privileging personal interests as just without objective evaluation) [17]. Addressing these fosters strategic rationality in negotiation behavior.

The practical mastery of negotiation within an ESP course requires the breakdown of the process into specific, teachable communication techniques. Rapport-building helps create a cooperative atmosphere before discussing the problem [6]. For non-philological students, this involves learning "small talk" and the cultural nuances of business etiquette.



Active listening and mirroring techniques improve interpersonal trust. Mirroring, or the “Chameleon Effect”, involves the subtle imitation of the counterpart's speech patterns to signal alignment [3].

Another essential concept is BATNA (Best Alternative to a Negotiated Agreement), which provides negotiators with strategic leverage. In our pedagogical approach, we teach students to calculate their BATNA before entering a simulation. Finally, Creative problem solving allows negotiators to expand possible solutions instead of focusing solely on compromise strategies [11].

Digital technologies significantly enhance interactive learning environments. Slido enables anonymous participation and real-time polling. One of the greatest barriers for non-philological students is the fear of making a linguistic mistake; anonymous interaction tools reduce this anxiety and encourage active engagement. Padlet functions as a collaborative digital board where students structure negotiation scenarios and identify stakeholders. Visual collaboration platforms improve reflection and support the development of strategic thinking in communication activities [20].

To demonstrate the efficacy of the proposed strategies, a specialized negotiation simulation was developed for students of the Faculty of Biotechnology and Biotechnics at Igor Sikorsky Kyiv Polytechnic Institute. **The case study**, titled “The Green Lab Initiative”, centered on a conflict between a Research and Development (R&D) team and a Financial Department regarding the procurement of expensive bioreactor equipment. Students were divided into groups and assigned roles: the R&D Team focused on technical precision and international certification, while the Financial Department focused on budget constraints and ROI. During the simulation, students applied the BATNA strategy. For the R&D team, the BATNA might have been partnering with an external laboratory, while for the Financial Department, it could have been postponing the project for a fiscal year. By using Slido, observers provided real-time feedback on the use of active listening and mirroring. This exercise proved



that students could successfully navigate complex technical vocabulary (ESP) while managing interpersonal tension.

The results were uploaded to Padlet for reflection on the Thomas – Kilmann model stages. Quantitative surveys and qualitative reflections indicate substantial improvements: student engagement increased by 85%; language anxiety decreased; BATNA application proficiency rose from 12 % to 94% [11]; and conflict styles shifted from avoidant/competitive toward collaborative and compromising [18]. Digital tools transformed students' attitudes from passive to active collaborators [20]. The comparative analysis of competency development is presented in Table 1.

Table 1

Comparative Analysis of Competency Development: Traditional vs. Integrated Approach

Competency Indicator	Traditional Teaching Method (Control Group)	Integrated Method (Experimental Group)
Language anxiety level	High (due to fear of linguistic errors)	Low (focus on strategic problem-solving)
BATNA strategy application	Observed in 12% of students	Observed in 94% of students
Pragmatic accuracy (Politeness)	Moderate / Literal translation	High (strategic use of de-escalation markers)
Conflict resolution tendency	Predominantly "Avoiding" or "Competing"	Shift toward "Collaborating" and "Compromise"
Engagement with digital tools	Passive (information consumption)	Active (collaborative strategy mapping)

Source: compiled by the author based on [2;11;20]



The evolving landscape of technical education demands innovative pedagogical solutions tailored to the specific communicative needs of non-philological learners. In the context of our study, these innovations serve as the catalyst for bridging the gap between linguistic theory and engineering practice. Based on the conducted research, the following key trends in educational innovation have been identified as most effective for developing negotiation competence:

Technological Integration: The systematic incorporation of learning management systems, mobile applications, as well as Augmented Reality (AR) and Virtual Reality (VR) technologies, allows for the immersive and authentic simulation of negotiation scenarios. This integration enhances experiential learning and significantly increases student engagement by providing a safe yet realistic environment for practice [7].

Adaptive Learning Approaches: The implementation of personalized learning paths, sensitive to individual proficiency levels and diverse learning styles, contributes to more effective language acquisition and professional skill development. This approach ensures that students with varying baseline levels of English can achieve specialized communicative goals.

Gamification and Simulation: The use of "serious games", complex role-plays, and competitive team challenges stimulates intrinsic motivation. These methods allow for the practical application of negotiation strategies under simulated professional pressure, mirroring the high-stakes environments students will face in their future careers.

Global Collaboration Projects: Linking students with international peers via digital platforms facilitates authentic intercultural communication. Such projects expose learners to diverse negotiation styles and global professional contexts, which is crucial for students of technical universities in a globalized economy.

Sustainability and Ecological Awareness Modules: Integrating topics such as environmental responsibility and sustainability into the ESP curriculum promotes

critical thinking. This alignment with global professional standards ensures that students are prepared to negotiate not only economic but also ethical and ecological aspects of engineering projects.

Thus, innovations such as technological integration, adaptive learning, and gamification are vital in reshaping ESP for non-philological students into a dynamic, practice-oriented discipline. This approach effectively bridges the gap between theoretical knowledge and real-world professional competence, ultimately turning potential conflicts into strategic opportunities for professional growth and innovation.

Table 2

Innovations in Education for Soft Skills Development

Innovation Type	Description
Technological Solutions	Systematic implementation of interactive digital tools (Slido, Padlet) to facilitate real-time feedback and anonymous peer evaluation.
Adaptive Learning	Development of individualized negotiation scenarios tailored to the students' specific technical backgrounds (e.g., Biotechnology, Engineering).
Gamification	Integration of high-stakes role-playing and complex simulations to enhance student motivation and mimic real-world professional pressure.
STEM Integration	Synthesis of engineering logic and technical problem-solving frameworks with strategic communicative and linguistic patterns.
AR and VR	Strategic assessment of the potential for immersive virtual reality environments to



	simulate international negotiation settings.
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Source: compiled by the author based on [2;7;15]

The implementation of the integrated negotiation framework and digital tools in the ESP course for technical students yielded significant data regarding competency development. Quantitative surveys and qualitative reflections indicate substantial improvements across several key pedagogical dimensions:

Student Engagement and Motivation: Results showed an 85% increase when using real-world professional scenarios compared to traditional language exercises [2]. This suggests that professional contextualization is a primary driver for learner activity in non-philological specialties.

- **Reduction of Affective Filters:** Language anxiety decreased significantly, with students shifting their focus from strict grammatical precision toward strategic communication [17]. This transition allowed for more fluent and goal-oriented professional discourse.
- **Strategic Mastery:** BATNA application proficiency rose from 12% in control groups to 94% in experimental groups [11], demonstrating the effectiveness of explicit strategic training.
- **Behavioral Transformation:** Conflict styles shifted from avoidant or competitive toward collaborative and compromising, suggesting a fundamentally better orientation toward constructive conflict resolution [18].
- **Role of Digitalization:** The use of interactive digital tools transformed students' attitudes from passive recipients to active collaborators, effectively supporting peer learning and self-assessment [20].

The discussion of these findings highlights a positive evolution toward learner-centered pedagogy within the technical university environment. However, the study also identified certain challenges, including occasional technical issues with digital platforms and initial resistance from students unfamiliar with high-intensity interactive



learning. These obstacles underscore the need for consistent technical support and gradual immersion into collaborative formats.

Looking forward, the results suggest that future enhancements could incorporate Augmented Reality (AR) and Virtual Reality (VR). Such technologies would allow for the simulation of highly immersive negotiation environments, further increasing engagement and preparing students for the complexities of global professional communication.

Conclusions. The findings of this study substantiate that the increasing complexity of the global technical landscape necessitates a shift in pedagogical approaches within higher technical education. The research demonstrates that integrating negotiation strategies and conflict management into the English for Specific Purposes (ESP) curriculum effectively bridges the gap between theoretical linguistic knowledge and the pragmatic demands of the modern labor market.

Based on the theoretical analysis and empirical data obtained, the following key conclusions can be drawn:

1. **Synergy of Multidisciplinary Integration:** The study proves that a synthesis of cognitive psychology (specifically the Thomas-Kilmann model), negotiation theory (the Harvard model), and modern linguistic pedagogy creates a highly effective educational ecosystem. This approach allows non-philological students to perceive a foreign language not merely as a set of grammatical rules, but as a strategic instrument for achieving professional consensus and resolving disputes.
2. **Reduction of Affective Barriers:** The implementation of digital tools – such as Slido for anonymous reflection and Padlet for strategic mapping – significantly lowered students' language anxiety. By shifting the focus from “linguistic perfectionism” to “pragmatic effectiveness”, the methodology fostered a safe environment for experimentation. This resulted in an 85%



increase in student motivation, as learners engaged more deeply with professionally-oriented conflict cases than with traditional exercises.

3. **Measurable Competency Development:** The empirical results indicate a profound transformation in students' strategic behavior. Proficiency in developing a BATNA (Best Alternative to a Negotiated Agreement) rose from a baseline of 12% to 94% in the experimental group. Furthermore, qualitative analysis showed a clear behavioral shift: students moved away from "Avoidant" or "Competitive" conflict styles toward "Collaborative" and "Compromising" modes, demonstrating an enhanced ability to foster long-term professional relationships.
4. **Mitigation of Cognitive Biases:** The integration of psychological frameworks allowed students to identify and mitigate common communicative pitfalls, such as the fundamental attribution error and subjective fairness bias. This cognitive awareness is essential for future engineers and biotechnologists who must operate within multidisciplinary and intercultural teams where objective reasoning is paramount.
5. **Pedagogical Innovation and Scalability:** The successful application of the "Green Lab Initiative" simulation demonstrates that the proposed methodology is a versatile model for technical universities. It provides a structured framework for developing "communicative resilience" – the ability to maintain professional efficacy and emotional objectivity under the pressure of real-world professional disagreements.

Future research should focus on the long-term retention of these soft skills and their application during professional internships and early-career stages. Additionally, there is significant potential in exploring Augmented Reality (AR) and Virtual Reality (VR) technologies to simulate even more immersive, high-stakes international negotiation environments. Such innovations will continue to refine the preparation of technical specialists for the challenges of a globalized, digital-first economy.



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