# AI-POWERED, DATA-DRIVEN INSTRUCTION FOR BUSINESS ENGLISH: DEVELOPING EXPERIENTIAL LEARNING SKILLS IN UNIVERSITY STUDENTS

**Received Date:** 2025, September 18
**Revised Date:** 2025, October 21
**Accepted Date:** 2025, December 4

**Sharifa Dhajuken***

## ABSTRACT

The integration of Artificial Intelligence (AI) into Business English Teaching has opened new avenues for enhancing university students' experiential learning skills. This article aims to explore the implementation of AI-powered and data-driven instructional strategies to foster experiential learning skills especially in Business English Curricula by leveraging adaptive learning technologies and intelligent data-driven systems in which the lecturer aims to provide personalized learning experiences that align with the principles of experiential learning. This article synthesizes current literature on AI applications in language education, data-driven learning methodologies, and experiential learning theories particularly Kolb's Experiential Learning Cycle. This article demonstrates that the integration of AI-driven instruction not only enhances language proficiency but also fosters critical thinking, problem-solving abilities, and real-world application skills among university students. Studies found that with recommendations for integrating AI technologies to enrich Business English curricula and support experiential learning outcomes.

**Keywords:** Artificial Intelligence, Data-Driven Instruction, Business English Teaching, Experiential Learning, University Education.

* Faculty of Liberal Arts, Sripatum University at Chonburi
Corresponding author e-Mail: t.rose.sharifa@gmail.com

## INTRODUCTION

Business English Communication curricula, a specialized domain within English for Specific Purposes (ESP), serve a critical function in equipping students with the language skills necessary for global business communication. However, traditional approaches to teaching Business English often rely heavily on lectures, rote vocabulary memorization, and decontextualized grammar exercises- methods that fall short in preparing learners for the complex, problem-based, communicative realities of modern workplaces. As Xie (2023) argues, the use of simulations in Business English courses offers students authentic, practice-oriented experiences that better mirror professional contexts, thereby bridging the gap between classroom instruction and workplace demands. Similarly, Albadarin, Saqr, Pope & Tukiainen (2024) systematic review highlights how emerging AI tools such as ChatGPT are increasingly being integrated into education to foster authentic and adaptable communication practices, further underscoring the need to move beyond traditional teaching methods.

Despite growing evidence supporting AI applications in education and the proven effectiveness of experiential learning, there remains limited empirical research on how these two approaches can be effectively integrated in Business English instruction at the university level. Most existing studies focus either on the technical deployment of AI in general language learning or on the pedagogical merits of experiential approaches (de la Puente, Torres, Troncoso, Meza & Carrasca, 2024), without fully exploring how AI can enhance experiential learning processes. Furthermore, little is known about the long-term impact of such integrated methodologies on learners' real-world communication competencies, critical thinking, and readiness for professional business environments (George, Storey & Hong, 2025, pp. 1-30).

This article contributes to the ongoing discussion on AI integration in Business English by synthesizing current literature on AI-powered and data-driven instructional approaches alongside experiential learning theories. Rather than reporting on a single empirical study, the article reviews relevant research and pedagogical perspectives to highlight how AI technologies can support experiential learning processes. The discussion also offers broad recommendations for educators and curriculum developers seeking to modernize Business English pedagogy through AI-enhanced learning environments.

## ARTICLE OBJECTIVES

This article seeks to: Investigate the effectiveness of AI-powered, data-driven instructional strategies in enhancing experiential learning skills among university students majoring in English for Business Communication.

## LITERATURE REVIEW

This section reviews key research on AI in language education and experiential learning, highlighting their roles in enhancing Business English instruction. It also identifies gaps in the literature regarding the integration of AI and experiential approaches, which this article aims to address.

### Experiential Learning in Higher Education

Experiential Learning has gained prominence as a learner-centered approach that promotes skill acquisition through active engagement with real-world scenarios. Rooted in Kolb's Experiential Learning Cycle (1984, pp. 20-38), this methodology conceptualizes learning as a continuous four-stage process: 1) Concrete Experience, where learners participate in authentic tasks; 2) Reflective Observation, in which they analyze their performance and consider multiple perspectives; 3) Abstract Conceptualization, where learners generate or refine theories based on their reflections; and 4) Active Experimentation, where they apply newly formed concepts to new situations.

In higher education, this cyclical process is particularly valuable because it transforms learning from passive knowledge reception into active, iterative skill development. Students learn not only content but also how to evaluate their decisions, adapt strategies, and transfer knowledge to unfamiliar contexts. This makes experiential learning especially relevant for Business English instruction, where learners must navigate presentations, negotiations, problem-solving tasks, and workplace simulations. Through this model, students develop not only linguistic competence but also collaboration, critical thinking, and professional communication skills that closely resemble real business environments.

Within higher education, experiential learning is often implemented through project-based learning, simulations, internships, and problem-based tasks. These methods enable learners to bridge the gap between theory and practice, cultivating competencies that extend beyond linguistic accuracy to include collaboration, creativity, and critical thinking (Beard & Wilson, 2013, pp. 45-78). Bauerle & Park (2012, pp. 715-718) further demonstrate that experiential

approaches enhance knowledge retention, problem-solving, and collaborative skills compared to traditional lecture-based methods.

When applied to Business English instruction, experiential learning proves especially valuable. Business contexts are inherently interactive, requiring learners to navigate negotiations, presentations, and intercultural communication. Research confirms this: for example, Xie (2023) found that business negotiation simulations based on real-world cases help English majors improve soft skills, teamwork, and "practice ability," bridging the gap between classroom instruction and professional demands. Similarly, a study of experiential Business English teaching contrasted traditional, lecture-based training with simulated and real workplace-like tasks and showed that learners in the experiential condition developed greater adaptability to workplace situations (Experiential Business English Teaching-DOAJ). In addition, authentic tasks in EFL settings have been shown to increase student engagement and confidence in oral production when learners work on roles, presentations or discussions that mirror actual communicative needs (Authentic Tasks to Foster Oral Production Among EFL Learners). Thus, experiential learning is not only a pedagogical preference but a necessary foundation for preparing students for globalized workplaces.

**Artificial Intelligence in Language Education**

Artificial Intelligence has increasingly influenced language education by enabling personalized learning pathways, automated feedback, and real-time monitoring of student performance through learning analytics. AI tools-particularly those using natural language processing-support instructors by reducing repetitive tasks and providing learners with targeted feedback that enhances autonomy and motivation (Wei, 2023).

Despite these advantages, challenges persist, including ethical concerns, unequal access to digital tools, and risks of over-reliance on algorithmic feedback. Furthermore, most AI research focuses on general English instruction, leaving Business English contexts and experiential, workplace-oriented tasks comparatively underexplored. This gap underscores the need to examine how AI can specifically support experiential learning processes within Business English education.

**AI and Experiential Learning: Toward Integration**

While experiential learning and AI each offer distinct benefits, research explicitly examining their integration in higher education remains limited. Emerging studies, however, suggest that AI technologies can be deliberately aligned with Kolb's Experiential Learning Cycle

to strengthen each stage of the process. For example, AI-driven platforms can generate concrete experiences through simulations, role-plays, and scenario-based tasks that mirror authentic workplace situations in Business English, such as client negotiations, email correspondence, and meeting interactions (Cao & Phongsatha, 2025; Wang, 2025, pp. 1-9).

Recent research further indicates that the synergy between AI and experiential learning can enhance motivation, creativity, and higher-order skills. Murniart & Siahaan (2025) report that AI-supported experiential tasks promote students' creativity by combining authentic practice with timely, individualized feedback. Similarly, studies in Business English and related fields show that AI-driven, data-informed environments can increase engagement and support performance in blended learning designs (Cao & Phongsatha, 2025; Maican, 2024, pp. 111-124). These findings align with earlier evidence that experiential approaches improve retention, collaboration, and applied problem-solving (Bauerle & Park, 2012, pp. 715-718); Beard & Wilson, 2013, pp. 45-78), while extending such benefits into digitally mediated contexts. The literature gap, therefore, lies not in recognising AI or experiential learning as effective separately, but in systematically documenting how AI-enhanced experiential designs can be implemented in professional language education-particularly Business English-and how they influence learners' communication competencies, critical thinking, and readiness for real-world business environments over time.

## ANALYSIS AND DISCUSSION

Building on the identified gaps, this article reviews how AI-powered, data-driven instructional strategies can enhance experiential learning in Business English courses, improving students' language proficiency, communication competencies, critical thinking, and problem-solving skills. The integration of Artificial Intelligence and Data-Driven Instruction into English for Business Communication teaching is anticipated to bridge the gap between theoretical knowledge and practical application (Cao & Phongsatha, 2025). By aligning with Kolb's Experiential Learning Cycle, this approach supports a holistic learning experience encompassing concrete experience, reflective observation, abstract conceptualization, and active experimentation, ensuring students develop the skills necessary to meet the demands of the 21st-century workplace.

Despite growing evidence supporting AI in language instruction and the established merits of experiential learning,

Despite substantial evidence supporting AI in language instruction and the well-established benefits of experiential learning, their integration within Business English education remains underdeveloped. This absence is not merely a gap in the literature but a missed opportunity for leveraging AI to strengthen the experiential learning cycle in ways traditional instruction cannot achieve. Current studies tend to treat AI and experiential learning as separate domains-AI research focusing on technical features such as adaptive feedback or analytics, and experiential learning research centering on authentic engagement and skill development. When viewed together, however, these strands reveal a clear potential for AI to augment experiential learning processes by making simulations more authentic, feedback more immediate, and learning pathways more personalized. This article positions that intersection as essential for preparing students for the communication demands of modern workplaces, especially in Business English contexts.

In applying this perspective to Business English instruction, the personalized and adaptive nature of AI becomes a mechanism for deepening experiential learning outcomes. Real-time analytics, for example, enable learners to reflect on communication choices during negotiation simulations or business-case role-plays, thereby enriching the reflective observation phase of Kolb's cycle. Similarly, AI-generated prompts, scenario adjustments, and automated linguistic insights support learners as they conceptualize strategies and experiment with improved responses in increasingly complex business situations. These affordances are particularly relevant to Business English, where authentic communication tasks-such as pitching ideas, responding to client inquiries, or analyzing professional correspondence-require both linguistic accuracy and strategic decision-making. By synthesizing research across AI-supported learning and experiential frameworks, this article highlights how AI can serve as a catalyst that strengthens learners' autonomy, communication competence, and readiness for real-world business environments-outcomes that traditional, lecture-based methods struggle to achieve.

Moreover, while the potential of AI-enhanced experiential learning is recognized, challenges such as equitable access to technology, robust data privacy protocols, and adequate instructor training remain significant barriers. AI integration, therefore, it requires lecturers to take an active role in co-designing learning activities that meaningfully support experiential learning processes. Within such designs, students can use AI-generated analytics to guide reflective observation, apply abstract conceptualisation in simulated business scenarios, and engage in active experimentation through iterative problem-solving tasks. These pedagogical possibilities

illustrate how AI-supported environments may contribute to the development of higher-order skills such as decision-making, strategic thinking, and professional communication-skills widely emphasized in Business English curricula and professional preparation, even though the present article does not empirically evaluate these outcomes.

The need for more targeted research on AI-enhanced experiential learning is increasingly recognized, especially given that much existing work focuses narrowly on language proficiency or technological features without addressing the broader skill development required in international business communication. This gap reinforces the importance of examining how AI-supported experiential approaches can contribute to more holistic competence-building in Business English education.

By drawing on the literature discussed above, I argue that integrating AI with experiential learning offers a promising yet underdeveloped pathway for strengthening Business English education. The reviewed studies collectively suggest that while AI can enhance feedback, personalization, and learner engagement, its full value emerges only when embedded within experiential, practice-oriented tasks that mirror the communicative demands of modern workplaces. From this synthesis, I contend that Business English curricula should adopt AI-supported experiential designs that encourage learners to make decisions, analyze their performance, and iteratively refine their strategies in realistic business scenarios. Such an approach has the potential to cultivate not only language and communication skills but also the critical thinking, problem-solving, and professional readiness required in global business contexts. Although this article does not report empirical findings, it proposes a conceptual direction for curriculum development that aligns with the evolving needs of higher education and international business communication.

## CONCLUSIONS

This article underscores the significant potential of AI-powered, data-driven instructional strategies to transform Business English teaching within university education by fostering experiential learning skills. Rather than implying that such integration has already been implemented, the discussion outlines how educators and curriculum designers could conceptually align adaptive AI tools with Kolb's experiential learning framework to create more practice-oriented learning environments. In this envisioned model, instructors would use AI-generated feedback, simulations, and analytics to support students as they move through the experiential cycle-helping them engage with realistic tasks, reflect on their performance, develop conceptual

understanding, and experiment with improved strategies. While this framework is not tested empirically in the present article, it offers a theoretical direction for fostering language proficiency, communication competence, critical thinking, and professional readiness in Business English curricula.

The analysis highlights that AI-driven instruction, with features such as personalized feedback, adaptive learning paths, and real-time analytics, can enhance student engagement, motivation, and autonomy. When combined with experiential learning tasks-such as simulations, role-plays, and project-based activities-students are better equipped to apply knowledge in authentic business contexts, mirroring the challenges and complexities of the global workplace. While the benefits are substantial, successful implementation requires attention to equitable access, data privacy, and adequate training for educators to effectively harness AI tools without compromising the experiential learning principles central to student-centered education.

Overall, this article offers a conceptual contribution by synthesizing perspectives from Artificial Intelligence, Data-Driven Instruction, and Experiential Learning and discussing their implications for Business English curricula. Rather than presenting empirical findings, the article provides theoretically informed insights and practical directions that educators and curriculum developers may consider when modernizing language instruction to better prepare students for the evolving demands of professional communication and global business environments.

## RECOMMENDATIONS

To support the integration of Artificial Intelligence and data-driven approaches in Business English education, the following directions are proposed:

**1. Adopt AI-supported learning tools** Incorporate adaptive AI platforms, intelligent feedback systems, and simulation-based tasks that reflect authentic business communication scenarios.

**2. Strengthen experiential task design** Integrate AI into project-based, role-play, and scenario-driven activities to deepen learners' engagement and support the experiential learning cycle.

**3. Provide professional development for instructors** Offer training that helps lecturers effectively implement AI tools while maintaining reflective, learner-centered pedagogy.

**4. Ensure equitable and ethical AI use** Address issues of access, data privacy, and ethical management of learning analytics to support fair and responsible implementation.

**5. Promote ongoing curriculum innovation** Continuously revise Business English curricula to align AI-enhanced experiential learning practices with global workplace communication demands.

## REFERENCES

Albadarin, Y., Saqr, M., Pope, N., & Tukiainen, M. (2024). A systematic literature review of empirical research on ChatGPT in education. ***Discover Education***, ***3***(1), article number 60.

Bauerle, T. L., & Park, T. D. (2012). Experiential learning enhances student knowledge retention in the plant sciences. ***HortTechnology***, ***22***(5), pp. 715-718. https://doi.org/10.21273/HORTTECH.22.5.715

Beard, C., & Wilson, J. P. (2013). ***Experiential learning: A handbook for education, training and coaching*** (3rd ed.). London: Kogan Page.

Cao, S., & Phongsatha, S. (2025). An empirical study of the AI-driven platform in blended learning for business english performance and student engagement. ***Language Testing in Asia***, ***15***(1), article number 39. https://doi.org/10.1186/s40468-025-00376-7

de la Puente, M., Torres, J., Troncoso, A. L. B., Meza, Y. Y. H., & Carrascal, J. X. M. (2024). Investigating the use of ChatGPT as a tool for enhancing critical thinking and argumentation skills in international relations debates among undergraduate students. ***Smart Learning Environments***, ***11***(1), article number 55. https://doi.org/10.1186/s40561-024-00347-0

George, A., Storey, V. C., & Hong, S. (2025). Unraveling the impact of ChatGPT as a knowledge anchor in business education. ***ACM Transactions on Management Information Systems***, ***16***(1), pp. 1-30. https://doi.org/10.1145/3705734

Kolb, D. A. (1984). ***Experiential learning: Experience as the source of learning and development***. Hoboken, New Jersey: Prentice Hall.

Maican, M. A. (2024). Business English in Higher Education: Adapting to the AI Era. ***Bulletin of the transilvania University of Brasov***. Series V: Economic Sciences, ***17***(66), pp. 111-124. https://doi.org/10.31926/but.es.2024.17.66.2.11

Murniarti, E., & Siahaan, G. (2025). The synergy between artificial intelligence and experiential learning in enhancing students' creativity through motivation. ***Frontiers in Education***, ***10***. https://doi.org/10.3389/feduc.2025.1606044

Wang, N. C. (2025). Scaffolding creativity: integrating generative ai tools and real-world experiences in business education. In ***Proceedings of the Extended Abstracts of the CHI Conference on Human Factors in Computing Systems (CHI EA '25)*** 2025, April 26-May 01, (pp. 1-9). Yokohama: Japan. https://arxiv.org/abs/2501.06527

Wei, L. (2023). Artificial intelligence in language instruction: Impact on english learning achievement, L2 motivation, and self-regulated learning. ***Frontiers in Psychology, 14,*** article number 1261955. https://doi.org/10.3389/fpsyg.2023.1261955

Xie, Q. (2023). Using business negotiation simulation with China's english-major undergraduates for practice ability development. ***Heliyon***, ***9***(6), e16236. https://doi.org/10.1016/j.heliyon.2023.e16236

Xie, Q. (2023). Using simulation in business english courses for China’s english majors. ***SAGE Open***, ***13***(4). https://doi.org/10.1177/21582440231215987