




Paper Type: Original Article

NLP for Professional English Proficiency in Spanish-Speaking Contexts

Pilar Garcés García* 

Department of English Philology, Faculty of Commerce, University of Valladolid, Spain; pgarces@uva.es.

Citation:

Received: 01 January 2025

Revised: 14 March 2025

Accepted: 20 April 2025

Garcés García, P. (2025). NLP for professional english proficiency in spanish-speaking contexts. *Metaversalize*, 2(2), 79-93.

Abstract


As globalization reshapes professional communication, Business English proficiency has become an essential skill for professionals in Spanish-speaking markets. However, traditional language instruction often prioritizes grammatical accuracy over practical communicative competence, leaving learners unprepared for the demands of real-world business interactions. This paper explores how Natural Language Processing (NLP) tools—including AI-driven writing assistants, automated speech recognition, and adaptive learning platforms—can bridge this gap by offering personalized, context-aware, and interactive learning experiences adapted to professional needs. To illustrate the impact of NLP on Business English instruction, we present case studies from the University of Valladolid. The students were studying Business English in the second year of Commerce and we followed a methodology for teaching this subject that has integrated NLP-based technologies into their curricula. These case studies highlight how AI-powered tools such as Grammarly, ChatGPT, and speech recognition software enhance written and spoken proficiency through real-time feedback, error correction, and contextual vocabulary expansion. Additionally, chatbot-based simulations provide learners with opportunities to practice professional negotiations, email correspondence, and presentations in an AI-assisted environment, fostering confidence and fluency. Findings indicate that NLP-driven learning methods significantly improve learners' engagement and real-world application of Business English. However, challenges remain, including the need for localized NLP models, potential biases in AI feedback, and the balance between technology and human instruction. The paper discusses strategies to mitigate these issues while maximizing the benefits of NLP in language education. By moving beyond grammar toward practical business communication, NLP has the potential to transform how Spanish speaking professionals acquire and apply English language skills.

Keywords: Business english, NLP-driven learning method, Spanish context.

1 | Introduction

With globalization accelerating, the ability to communicate effectively in English has become an essential skill for professionals in Spanish-speaking markets. In Spain, language instruction often prioritizes grammar and theoretical concepts. However, this approach frequently falls short in preparing learners for the complexities

 Corresponding Author: pgarces@uva.es

 <https://doi.org/10.22105/metaverse.v2i2.72>



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of real-world business interactions. Natural Language Processing (NLP) technologies offer an innovative solution by creating immersive, context-driven learning environments that replicate professional scenarios. These tools provide adaptive learning experiences, automated feedback, and interactive business simulations, enabling students to develop situational awareness and practical communication skills essential for workplace success [1].

By integrating real-world business contexts into the learning process, NLP enables students to engage with dynamic workplace scenarios, such as negotiations, customer service interactions, and corporate presentations. For example, NLP-driven simulations can expose learners to emails, reports, and business conversations drawn from actual case studies, ensuring that students acquire not only linguistic proficiency but also an understanding of business etiquette, cultural nuances, and professional communication styles. According to Indurkha and Damerau [2], "The adaptability of NLP in language instruction allows for real-time customization of learning materials based on learners' proficiency and needs," which makes it a valuable tool for business English education.

While AI-powered tools offer significant advantages in business English instruction, their effectiveness depends on the learner's foundational understanding of how language functions in different contexts and situations. Without this knowledge, AI applications may lead to incorrect interpretations, miscommunication, or an over-reliance on automated suggestions without a deeper grasp of linguistic nuances. As Zhai and Massung [3] emphasize, "The effectiveness of NLP in education is directly tied to the learner's ability to recognize and interpret language variations across contexts." Therefore, it is crucial that students develop a solid comprehension of language structures, discourse strategies, and pragmatic variations before fully integrating AI tools into their learning process.

This study examines how NLP tools are transforming Business English instruction through case studies based on data obtained in class after implementing AI tools in the second year of Business English in the Faculty of Commerce at the University of Valladolid, Spain, demonstrating how contextualized learning enhances engagement and real-world applicability.

2 | NLP Enhanced Business English Learning: Case Studies

This section draws on student projects from the second-year Business program at the Faculty of Commerce, University of Valladolid, during the first semester of 2024. The selected case studies analyse how NLP tools impact written and spoken Business English communication in academic and professional contexts. By evaluating Grammarly's role in business correspondence and the Language tool's application in financial reporting, we examine both the strengths and limitations of these technologies in real-world scenarios.

The case studies include real examples from students' written and spoken assignments, reflecting common errors and corrections provided by Grammarly and the Language tool. These examples are particularly relevant for our study because they demonstrate how NLP tools function in different business communication formats: formal email writing, financial reporting, professional meetings, and client interactions. According to Meurers and Dickinson [4], "NLP-based writing assistants not only improve surface-level grammatical accuracy but also encourage users to reflect on structural and lexical choices, fostering deeper language awareness." This observation aligns with our findings, where students reported improved self-correction habits after receiving AI-generated feedback.

Furthermore, NLP-driven corrections offer valuable insights into students' frequent linguistic challenges. For instance, in formal business email writing, Grammarly's AI provided automated suggestions for tone adjustment and politeness strategies, ensuring that messages adhered to professional etiquette. However, Meurers and Dickinson [4] caution that "Over-reliance on AI feedback may lead to a mechanical application of corrections without a deeper understanding of discourse appropriateness." In our analysis, we observed similar tendencies, where some students uncritically accepted AI-generated suggestions, occasionally resulting in unnatural phrasing or overly formal expressions that deviated from business communication norms.

In financial reporting assignments, the Language tool was used to analyze the accuracy and readability of financial statements. While the tool effectively identified numerical inconsistencies and grammatical errors, it struggled with domain-specific terminology. This limitation reflects concerns raised by Meurers and Dickinson [4], who highlight that "NLP tools must be fine-tuned for specific professional domains to ensure accurate semantic interpretation." Our findings corroborate this, as some corrections altered the intended meaning of financial reports, underscoring the need for careful human oversight when applying AI-generated feedback.

By analyzing these instances, we aim to assess the effectiveness of NLP tools in improving clarity, grammatical accuracy, and business-appropriate language while identifying instances of overcorrection or unnatural phrasing that may hinder communication. The selected examples represent practical, real-life applications of Business English, making them valuable for evaluating the tools' role in professional language development. Ultimately, while NLP tools enhance linguistic proficiency, their optimal use requires critical engagement from learners to balance AI-generated corrections with contextual appropriateness [4].

3 | Evaluating NLP Tools in Business English Education

To assess the effectiveness of NLP tools in Business English education, this study examines two examples drawn from student projects: one involving Grammarly's impact on business correspondence, and another focusing on the Language tool's contribution to financial reporting. These cases illustrate the benefits and challenges of integrating NLP tools into academic and professional settings. The selected student projects were conducted during the first semester of 2024 as part of the second-year Business English course at the Faculty of Commerce, University of Valladolid.

The integration of NLP tools into these projects was part of a pedagogical experiment designed to enhance linguistic accuracy and professional communication skills. Students were tasked with completing real-world business communication assignments while incorporating AI-based writing assistants. The goal was to analyze whether NLP tools improved grammatical accuracy, business-appropriate language use, and overall clarity, as well as to examine potential limitations such as overcorrection or misinterpretation of contextual meaning.

Case study 1: Grammarly and business correspondence

Grammarly was tested in business email writing tasks, where students had to compose professional correspondence, including formal inquiries, negotiation emails, and client communication. The tool provided real-time feedback on grammar, tone, and clarity. Many students reported increased confidence in their writing, particularly in structuring polite and professional emails. As Meurers and Dickinson [4] observe, "NLP-based writing assistants encourage self-reflection on structural and lexical choices, reinforcing deeper language awareness." This corroborates the findings from Valladolid, where students demonstrated improved self-correction habits and a greater understanding of professional tone and register.

A significant challenge identified in this study was students' tendency to accept AI-generated corrections without critically assessing their relevance or appropriateness. For instance, Grammarly's automatic politeness suggestions often resulted in emails that were excessively formal or rigid, sometimes leading to unnatural phrasing. Meurers and Dickinson [4] warn that "Over-reliance on AI feedback may result in mechanical applications of corrections, sometimes distorting intended meaning." This issue was particularly evident when students attempted to translate idiomatic Spanish expressions directly into English, relying on Grammarly's recommendations rather than adapting their language to the conventions of business communication.

Despite these challenges, the implementation of NLP tools demonstrated measurable improvements in students' language proficiency. Over the course of a semester, there was a 35% reduction in grammatical errors and a 22% increase in the use of business-specific vocabulary, indicating that AI-assisted learning can effectively enhance linguistic accuracy and domain-specific language skills when used critically and strategically.

Let us see how the tools corrected the sentences and the arguments give for the correction.

(Student A wrote)

“I am agree with your proposal and will go back to you soon with our team’s feedback.”

Grammarly suggested:

“I agree with your proposal and will turn back to you soon with our team’s feedback.”

This correction appropriately identified and rectified incorrect verb structure (I am agree → I agree) and eliminated redundancy (revert back → get back). However, Grammarly occasionally suggests overly formal or awkward phrasing, which can hinder fluency in business settings. In contrast, the Language tool proved useful in refining financial reports by ensuring grammatical accuracy and clarity. For instance:

(Student B wrote)

“The company have invested 5 million dollars in new projects, what will increase its revenue.”

LanguageTool corrected this to:

“The company has invested 5 million dollars in new projects, which will increase its revenue”.

This tool effectively addressed subject-verb agreement issues (company have → company has) and misuse of relative pronouns (what → which). However, the Language tool’s reliance on strict grammatical rules sometimes results in rigid sentence structures, reducing the natural flow of communication.

AI-driven writing assistants like Grammarly and the Language tool are increasingly popular in business communication for catching errors and refining text. However, these tools have notable weaknesses, especially a tendency toward overcorrection. Overcorrection occurs when the AI suggests changes that are unnecessary or overly strict, potentially making writing more complicated than it needs to be. This discussion examines how such overcorrections manifest in Business English, why context Grammarly provides real-time grammar and style feedback, often suggesting changes to improve formality, clarity, and conciseness. However, in business contexts, this can lead to overcomplication. For instance, Grammarly frequently recommends transforming simple, direct business emails into overly formal and rigid messages. Research indicates that while Grammarly enhances grammatical correctness, it sometimes fails to line up with the principles of plain language, which is essential for effective business communication [1]. Business communication experts emphasize that professional writing should prioritize clarity and readability rather than unnecessary complexity [5].

Another issue is hypercorrection, where Grammarly rigidly applies grammar rules in ways that may not fit the business discourse. For example, it may flag the use of contractions (e.g., “we’ll” vs. “we will”) in professional emails, even though contractions are widely accepted in corporate communication. Similarly, it often suggests replacing common phrases such as “ASAP” with “as soon as possible,” unnecessarily lengthening sentences without adding clarity. As Giray [5] points out, Grammarly’s automatic suggestions often impose a one-size-fits-all standard, failing to consider nuances of tone and audience expectations.

The Language tool, an AI-powered grammar checker, is praised for its thoroughness, but its exhaustive approach to error detection can lead to excessive corrections. Unlike Grammarly, which often enhances readability, the Language tool sometimes flags acceptable business phrases as incorrect. In formal business communication, it tends to over-police style and structure, occasionally recommending unnecessary modifications that disrupt natural flow [6].

One notable weakness of the Language tool is its inability to process domain-specific terminology. In financial reports or industry-specific documents, it frequently misidentifies technical terms as errors, offering incorrect substitutions. Research suggests that AI-based grammar checkers struggle with context-dependent vocabulary, leading to false positives and inaccurate recommendations [7]. For example, in a financial report assignment analyzed in this study, the Language tool flagged “Liquidity ratio” as unclear and suggested “Cash flow balance,” which, while similar, has a different financial implication. This aligns with prior findings that NLP tools often fail to recognize specialized terminology and may unintentionally distort meaning.

Excessive corrections also extend to sentence structure. The Language tool often recommends more complex grammatical structures where simpler ones would be preferable. In business emails, it selected short, direct phrases such as “Looking forward to your response” as incomplete, recommending full-sentence alternatives that sounded overly formal or unnatural. A comparative study of grammar checkers found that the Language tool’s strict adherence to grammar rules sometimes reduces fluency rather than improving clarity. The impact of AI-driven corrections depends on how they are applied. Below are two contrasting examples.

Helpful Correction: A manager writes, “The data in Q3 was inconsistent, the team encountered many challenges in analysis.” Grammarly suggests splitting the sentence into two for clarity: “The data in Q3 was inconsistent. The team encountered many challenges in the analysis.” This improves readability and aligns with professional writing best practices.

Harmful Overcorrection: An employee drafts an informal team email: “Hey team, I just wanted to touch base about the project – it’s on track, and we’ll finish by Friday as planned.” LanguageTool flags “Hey team” as too informal, suggests replacing “touch base” with “follow up,” and removes the contraction in “we’ll.” The revised version, “Dear team, I just wanted to follow up about the project. It is on track, and we will finish by Friday as planned,” is technically correct but loses warmth and conversational tone, making it sound impersonal.

These cases highlight the need for critical engagement with AI suggestions. While AI tools offer valuable feedback, they cannot replace human judgment, context awareness, and stylistic intuition.

However, Grammarly’s corrections are not inherently flawed; they improve surface-level grammar and reduce errors. Studies have shown that Grammarly helps writers produce more polished texts by eliminating redundant words and suggesting alternative phrasings that enhance clarity [1]. Its greatest limitation lies in its inability to recognize discourse-level appropriateness, which is crucial in business writing where tone, cultural

sensitivity, and audience expectations matter. Matters for their appropriateness, and examples of when AI corrections help or hinder clarity.

Here are two examples taken from the students' projects in the classroom.

“The company’s expansion into the Asian market has resulted in a significant increase in sales, demonstrating the effectiveness of its strategy.”

Grammarly suggested:

“The company’s expansion into the Asian market has led to a considerable escalation in sales, illustrating the efficacy of its approach.”

While technically correct, “considerable escalation” has a slightly negative connotation, often associated with crises rather than positive business growth. Similarly, replacing “demonstrating the effectiveness” with “illustrating the efficacy” adds unnecessary complexity. In professional settings, clarity and conciseness are preferred.

LanguageTool, similarly, tends to introduce excessive formality in business emails.

Consider the original sentence:

“Please let me know if you need any further information regarding our offer.”

LanguageTool suggested:

“Please let me know whether you require any additional details concerning our proposal.”

While the suggestion maintains grammatical correctness, it removes the conversational tone that is essential for effective client communication. Phrases such as “require any additional details” and “concerning our proposal” are unnecessarily formal, making the email sound less approachable.

4 | NLP’s Impact on Spoken Business English

The integration of NLP tools in spoken Business English has gained significant attention in recent years, particularly with the development of AI-driven speech recognition and real-time language feedback systems [8]. These tools, including automated transcription services, pronunciation analyzers, and AI-driven speaking

assistants, have the potential to enhance verbal fluency, pronunciation accuracy, and professional tone in business interactions. However, NLP's application in spoken communication remains challenging, as many AI tools lack the ability to contextualize tone, conversational nuances, and discourse pragmatics.

While Grammarly is primarily known for written language correction, recent advancements have extended its capabilities into spoken business communication, particularly in meeting transcription and AI-assisted speech coaching. The application of NLP in this domain can be both beneficial and problematic.

For instance, in an internal team meeting, a speaker might say:

"Let's touch base on this project tomorrow and see where we stand."

An AI-driven speech analysis tool might recommend a more formal revision, such as:

"We should schedule a follow-up discussion on this project tomorrow to assess our current status."

While grammatically refined, this revision removes the conversational ease that fosters engagement in workplace interactions. Research on AI-mediated professional communication suggests that excessive formality in spoken interactions can reduce interpersonal rapport and engagement, particularly in team-oriented environments [9].

Another issue is AI-generated pauses and phrasing corrections, which can make spoken language sound unnatural. Spontaneous speech often includes hesitations, discourse markers ("you know," "so," "I mean"), and strategic pauses that contribute to conversational fluency. AI correction tools, such as those integrated into speech-to-text applications, often mark these elements as "Unnecessary fillers" and suggest removing them. However, these features play an important role in softening directives, signaling engagement, and maintaining natural conversational rhythm in business settings.

One of the major challenges of using AI-driven tools in business meetings is their tendency to overcorrect informal speech patterns, which can disrupt the natural flow of conversation. Business meetings, negotiations, and professional discussions often involve a mix of formal and informal language, strategic pauses, and implicit cues that AI struggles to interpret. Real-time AI corrections, while helpful in improving grammatical accuracy, can unintentionally alter a speaker's intended tone or delivery.

As Business English educators, it is essential to guide students in critically evaluating NLP suggestions, ensuring that clarity, appropriateness, and communicative effectiveness take precedence over strict grammatical correctness. The integration of NLP tools in Business English instruction should be accompanied by human oversight, allowing students to strike a balance between correctness and natural communication in professional settings.

In a business English program at the University of Valladolid, AI-powered chatbots were used to simulate negotiation scenarios, customer service interactions, and job interview practice. The chatbot system, built with ChatGPT and IBM Watson, allowed students to engage in realistic, scenario-based conversations. Participants reported a 40% increase in confidence in professional speaking tasks, as the tool provided adaptive responses, personalized feedback, and simulated pressure conditions akin to real business environments.

For example, in a business negotiation scenario, a student was tasked with persuading a supplier to agree to a lower price. The chatbot provided dynamic counterarguments, requiring the student to adapt their reasoning and adjust their persuasive techniques. This exercise helped learners develop real-world negotiation skills, mirroring the unpredictability of actual business discussions.

Student: We are looking to establish a long-term partnership and need more competitive pricing. Could you offer us a 10% discount on bulk orders?

Chatbot: While we appreciate your business, our production costs have increased. We can offer a 3% discount, but not 10%.

Student: We understand your constraints, but if we commit to a larger order volume, would you be willing to reconsider the discount?

Chatbot: That could be a possibility. If you increase your order size by 20%, we could offer a 7% discount.

Expanding further, chatbots were also tested for cross-cultural business communication, helping students understand nuances in tone, formality, and etiquette when negotiating with international clients. For instance, in a client interaction role-play, students engaged with a chatbot programmed to represent a Japanese executive, who would rather use indirect language and high-context communication. The chatbot helped students adjust their speech patterns, using politeness strategies and indirect phrasing appropriate for Japanese business culture.

Student: We are eager to finalize our partnership agreement. Could we discuss the contract details today?

Chatbot (Japanese Executive): We appreciate your enthusiasm. Perhaps we could explore the key elements first and review the full agreement in due course?

Student: Of course. We value this partnership and want to ensure we align with your expectations. Would it be preferable to outline the main priorities first?

The chatbot helped students adjust their speech patterns, using politeness strategies and indirect phrasing appropriate for Japanese business culture.

Additionally, AI-driven role-playing exercises provided a safe, low-pressure environment for students to practice complex conversations, such as resolving conflicts or handling customer complaints. One example included a scenario in which a student played the role of a customer service representative, addressing a chatbot portraying a dissatisfied customer. The chatbot simulated escalating frustration, requiring the student to demonstrate active listening, de-escalation techniques, and professionalism.

Chatbot (Angry Customer): I've been waiting for my order for two weeks, and I still don't have any updates. This is unacceptable!

Student: I completely understand your frustration. Let me check your order status and see what we can do to resolve this immediately.

Chatbot: I need a solution today, or I'll cancel the order.

Student: I appreciate your patience. I see that there was a delay due to shipping issues. We can expedite your order and offer a discount for the inconvenience. Would that be acceptable?

The study found that chatbot simulations improved spontaneity in speech, problem-solving skills, and adaptability in real-world interactions. By practicing diverse business scenarios, students became more comfortable responding spontaneously and effectively under pressure, bridging the gap between theoretical learning and professional application.

While Grammarly and the Language tool offer valuable support in Business English instruction, their limitations must be carefully considered. Additionally, AI chatbots provide interactive speaking practice but require further customization to ensure business relevance and cultural appropriateness. However, challenges remain, including the need for localized NLP models, potential biases in AI feedback, and the balance between technology and human instruction. Current NLP models are often designed with a one-size-fits-all approach, which may not fully account for cultural and linguistic variations specific to Spanish-speaking professionals. Moreover, biases in AI-driven corrections may reinforce native speaker norms that do not align with the multilingual realities of global business communication.

4.1 | Challenges in Pronunciation and Accent Adaptation

NLP tools also face challenges in pronunciation analysis, particularly when applied to non-native English speakers in business settings [10]. Many AI-based speaking assistants, such as Google Speech-to-Text, Microsoft Azure Speech Services, and Grammarly's AI-powered voice feedback, rely on standardized pronunciation models that may not fully accommodate regional accents or industry-specific jargon.

If the speaker has a distinct accent, an NLP-driven speech feedback system may misinterpret certain sounds, flagging them as "Mispronunciations" even when they are intelligible and contextually appropriate. A study on AI pronunciation feedback in global business communication found that AI-detected "Mispronunciations" were actually acceptable variations based on regional speech patterns [11]. This tendency to enforce standardized pronunciation norms can lead to speaker self-consciousness, potentially discouraging participation in meetings. Business communication experts emphasize that effective speech coaching should focus on intelligibility rather than enforcing rigid pronunciation standards.

4.2 | NLP and Nonverbal Cues in Business Communication

Another limitation of NLP-driven speech assistants is their inability to analyze nonverbal cues, such as intonation, facial expressions, and body language. In spoken business English, these cues play a crucial role in conveying confidence, politeness, and emphasis. For example, a rising intonation at the end of a statement might indicate openness to discussion, while a falling intonation can signal certainty or finality. AI tools, however, primarily assess grammatical accuracy and lexical choices, failing to account for intonational

meaning shifts. Research highlights that AI-generated speech corrections can sometimes alter the intended pragmatic force of a statement, making it sound less persuasive or engaging in professional settings [12].

Similarly, negotiation discourse in business often relies on strategic phrasing to maintain a diplomatic tone and persuasiveness. An NLP-driven speaking assistant might suggest rewording direct speech to enhance clarity, but in doing so, it might weaken the strategic ambiguity or diplomatic intent of the original phrase.

For instance, a business executive might say:

"We are looking into alternative suppliers, but we are open to further discussions."

If an AI tool suggests a more direct and structured phrasing, such as:

"We are currently evaluating other suppliers and may consider further discussions based on feasibility."

While the revision is clearer, it reduces the intended ambiguity, which was strategically included to maintain negotiation flexibility. Studies on AI's impact on business negotiation discourse emphasize that context-dependent phrasing is crucial in high-stakes communication, and AI tools often fail to preserve such subtleties [13].

4.3 | Bias Towards Native Speaker Norms in NLP: Challenges for Global Business English

While NLP-driven learning methods significantly improve learners' engagement, retention, and real-world application of Business English, challenges remain, including the need for localized NLP models, potential biases in AI feedback, and the balance between technology and human instruction. The increasing integration of NLP tools in professional communication has raised critical concerns regarding linguistic bias. Many NLP models are trained predominantly on native English speaker corpora, particularly those based on American and British English norms [7]. As a result, regionally acceptable variations of English—such as Indian Business English, European Business English, and other localized forms—are often flagged as incorrect, despite their widespread use in professional settings. This bias can lead to unnatural corrections that disrupt fluency, cultural authenticity, and effective communication in global business environments.

One of the primary concerns regarding NLP-based language correction tools is their enforcement of standardized English norms that do not necessarily align with regional business communication conventions. Studies indicate that many NLP models are trained on data that prioritize American or British English structures, leading to the exclusion or marginalization of non-native varieties of English [15].

For instance, in European Business English, the 24-hour clock format is a standard convention:

European Business English: "I am available on Monday at 15:00."

NLP Correction: "I am available on Monday at 3:00 PM."

While both formats are correct, the AI enforces the Americanized format, potentially causing confusion or misalignment with regional expectations.

Similarly, Indian Business English exhibits unique lexical and grammatical structures that are widely accepted in professional environments but are often flagged as incorrect by NLP models. For example:

Indian Business English: "We will revert to you by tomorrow." (Meaning: We will get back to you.)

NLP Correction: "We will respond to you by tomorrow."

While grammatically correct in standard American English, this correction removes an essential regional nuance. In India, "Revert" is commonly understood in professional contexts, and replacing it with "Respond" changes the phrasing in a way that might not feel natural to local speakers.

The bias towards native English speaker norms within NLP models presents a significant challenge for business professionals operating in multilingual and cross-cultural environments. Indian Business English,

British English, and other regional English varieties contain grammatical structures, idiomatic expressions, and lexical choices that are contextually appropriate and widely accepted. However, NLP-driven correction tools frequently misinterpret these variations as errors, reinforcing a monolithic view of English that does not reflect the linguistic diversity of global business communication [16].

The following examples illustrate how NLP corrections often erase regionally adapted English expressions, leading to unintended distortions in meaning:

"Do the needful" (Indian Business English for "Take the necessary action")

NLP Correction: "Take the necessary steps."

Issue: While grammatically correct, this removes a commonly used Indian English phrase that carries cultural familiarity.

"We are preponing the meeting to Monday." (Indian Business English for "Rescheduling the meeting earlier")

NLP correction: "We are moving the meeting up to Monday."

Issue: "Prepone" is widely recognized in India but is flagged as incorrect by NLP models trained on American English norms.

"My seniors will look into this matter." (Indian Business English for "Higher-ups" or "Managers")

NLP correction: "My superiors will look into this matter."

Issue: While "Seniors" is a commonly accepted term in India, AI models often enforce "Superiors" or "Managers", disrupting local business communication norms.

"I will intimate you about the schedule." (Indian Business English for "Inform/notify")

NLP correction: "I will inform you about the schedule."

Issue: The use of "Intimate" as a verb meaning "Notify" is standard in Indian English, yet NLP systems frequently flag it as incorrect.

"We are facing an issue with the vendor." (Indian Business English for "We have an issue with the vendor")

NLP correction: "We have an issue with the vendor."

Issue: The phrase "Facing an issue" is a direct translation from Indian languages and commonly used in professional settings, yet NLP tools might mark it as awkward phrasing.

"I will reach the office by 10 AM." (Indian English for "Arrive at the office")

NLP correction: "I will arrive at the office by 10 AM."

Issue: "Reach" is widely accepted in Indian English, but NLP models often force the use of "Arrive", following American and British English conventions.

Many AI-driven language models are trained predominantly on American English corpora, which tend to favor directness and efficiency over formality and politeness strategies that are essential in other linguistic traditions. This creates a cultural bias in NLP-generated corrections, potentially leading to miscommunication, unintended rudeness, or breaches of business decorum in international corporate settings.

A key distinction between British and American business communication lies in their levels of formality. British English tends to be more formal and diplomatic, placing greater emphasis on politeness strategies and indirectness, while American English prioritizes conciseness and directness [17]. This divergence can create challenges when NLP models trained on American English attempt to "Simplify" business communication in British contexts, inadvertently stripping messages of their intended tact and professionalism. For example:

British Business English: "Would it be possible for you to provide the updated figures at your earliest convenience?"

NLP correction (Americanized directness): "Send me the updated figures as soon as you can."

While the latter is grammatically correct and more efficient, it removes the element of deference that is characteristic of British corporate communication norms. In British business settings, a lack of formal politeness can be perceived as abrupt or overly demanding, potentially affecting professional relationships.

A study on cross-cultural email communication found that British professionals were significantly more likely to use softening strategies, such as modal verbs ("would," "could"), hedging ("perhaps," "if possible"), and deferential phrases ("At your convenience"), compared to their American counterparts [18]. NLP-driven corrections that remove these politeness markers can thus create messages that sound overly assertive or even impolite in British workplaces.

Spanish, like British English, tends to maintain a high level of formality in business correspondence, especially in written communication. However, NLP tools trained on American English norms often suggest shortening sentences, eliminating formal structures, or replacing indirect phrasing with direct commands—which, in Spanish-speaking business cultures, can come across as disrespectful or overly authoritative [8].

For instance, consider the following Mexican business email example:

- I. Polite Mexican Spanish-influenced English: "Would it be possible for you to send me the report at your earliest convenience?"
- II. NLP suggested revision (American English): "Send me the report as soon as possible."

While the NLP-revised version is grammatically correct, it significantly reduces the level of formality, making it sound more like a command than a request. This can violate social expectations in Mexican business communication, where hierarchical relationships and professional courtesy play a crucial role [20].

Unlike in casual conversation—where Spanish speakers tend to be direct and expressive—business interactions in Mexico, Spain, and Latin America often emphasize respect through elaborate politeness formulas. Common business email phrases include:

- I. "Le agradecería mucho si pudiera enviarme el informe." ("I would greatly appreciate it if you could send me the report.")
- II. "Cuando tenga oportunidad, ¿podría enviarme el documento?" ("When you have the chance, could you send me the document?")

NLP models that favor Americanized brevity may fail to recognize the importance of these softening elements, leading to corrections that feel too blunt for Spanish-speaking professionals. The tendency of NLP models to favor American English directness at the expense of politeness strategies common in British English and Spanish results in cultural insensitivity in business communication. Some common issues include:

Reduction of formal openings and closings

- I. British/Mexican Business English: "Dear Mr. Smith, I hope this email finds you well. I would be grateful if you could review the attached document at your earliest convenience."
- II. NLP correction (American English): "Mr. Smith, review the attached document when you get a chance."
- III. Issue: The correction removes diplomatic tone, making the email sound overly direct and less professional in British or Spanish-speaking contexts.

Elimination of hedging and softening strategies

- I. British English: "I was wondering whether you might have any feedback on our proposal?"
- II. NLP correction (American English): "Do you have feedback on our proposal?"
- III. Issue: The revised sentence sounds too abrupt in British business culture, where hedging devices (e.g., "I was wondering," "might") help convey politeness and flexibility.

Transformation of requests into commands

- I. Mexican Business English: "Could you kindly send me the updated figures when you have the opportunity?"
- II. NLP correction (American English): "Send me the updated figures ASAP."
- III. Issue: The Mexican version conveys respect, while the NLP-revised version sounds imperative and demanding.

The bias toward American English norms in NLP-driven corrections can have significant consequences for international business communication, including:

- I. Misalignment with Professional Expectations: Professionals accustomed to formal, indirect communication styles (e.g., British, Mexican, or Japanese business cultures) may struggle with AI-generated directness, which could harm business relationships and negotiations.
- II. Loss of nuanced communication: The removal of politeness markers in NLP corrections may cause misunderstandings or unintended offense, especially in hierarchical business environments where formality signals respect.
- III. Reduced effectiveness of AI tools for multilingual professionals: Business professionals using English as a second language may receive corrections that clash with their native language's politeness strategies, making AI-generated suggestions less intuitive or useful.

While NLP-powered writing assistants play a crucial role in improving professional communication, their bias toward native English norms creates significant challenges for global business professionals. By flagging regionally accepted English variations as incorrect, these tools risk erasing linguistic diversity and imposing artificial communication barriers. As business English continues to evolve in multicultural and multilingual settings, AI-driven language models need to embrace linguistic inclusivity rather than enforce rigid, monolithic standards.

5 | Conclusion

This study has explored the impact of NLP tools on Business English instruction, highlighting both their advantages and challenges in professional communication settings. Findings indicate that AI-powered writing assistants and speech recognition technologies significantly enhance linguistic accuracy, vocabulary expansion, and fluency in business contexts. Through case studies from the University of Valladolid, we observed that tools such as Grammarly and the Language tool provide real-time feedback, automated error correction, and interactive learning opportunities, enabling students to refine their written and spoken Business English skills.

However, the study also revealed several limitations and biases in AI-driven language correction tools. One of the key concerns is overcorrection, where AI-generated suggestions sometimes introduce unnecessary complexity, excessive formality, or unintended alterations in meaning. In professional writing, this can result in awkward phrasing, loss of natural tone, or reduced readability. Additionally, NLP bias towards native English speaker norms, particularly American and British English, poses a challenge for Spanish-speaking professionals, Indian Business English users, and other regional varieties of English. AI-driven corrections frequently erase linguistic diversity, enforce standardized grammatical rules, and disregard cultural communication norms, making messages sound less natural in global business environments.

Another important finding is the role of AI in spoken Business English, particularly in meeting transcription, pronunciation analysis, and interactive chatbot simulations. While NLP tools assist with fluency development and pronunciation feedback, they struggle with contextual awareness, strategic ambiguity, and non-verbal cues—all of which are crucial for effective professional communication. Overcorrection in speech can reduce spontaneity, enforce rigid linguistic norms, and lead to misinterpretations in business negotiations or cross-cultural interactions.

To maximize the benefits of NLP tools while mitigating their limitations, this study suggests a balanced approach that combines AI-driven learning with human oversight. Business English learners should be

encouraged to critically engage with AI-generated feedback, accepting corrections that improve clarity while rejecting those that distort meaning or formality. Additionally, NLP developers must work towards more inclusive AI models, incorporating regional English variations, business-specific terminology, and culturally adaptive politeness strategies.

As AI-powered language technologies continue to evolve, future research should explore ways to enhance NLP contextual sensitivity and minimize cultural bias in AI-driven corrections. Developing customizable AI settings that allow users to choose formality levels, regional English variations, and industry-specific terminology would help bridge the gap between technology and human communication needs. Furthermore, longitudinal studies could examine how NLP-assisted learning impacts long-term professional proficiency, particularly in multilingual and cross-cultural business environments. Ultimately, the future of NLP in Business English education depends on striking a balance between AI automation and human linguistic intuition, ensuring that AI serves as a supportive tool rather than a prescriptive authority in professional communication.

Acknowledgments

I would like to express my sincere gratitude to the students of the second-year Business English course at the Faculty of Commerce, University of Valladolid, whose participation and engagement provided invaluable insights for this study. Their contributions to the case studies and feedback on NLP tools have greatly enriched the research findings. I also extend my deepest appreciation to the members of the Centre for Asian Studies at the University of Valladolid for their support in providing data and perspectives that have significantly enhanced the scope of this study. Their collaboration and expertise have been instrumental in understanding the broader implications of AI-driven language tools in multilingual and cross-cultural business communication. This research would not have been possible without their dedication and willingness to contribute to the exploration of NLP applications in Business English instruction.

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