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The Role of AI-Enhanced Pragmatics Instruction in Overcoming Students' Miscommunication Problems

دور التعليم التداولي المعزز بالذكاء الاصطناعي في التغلب على مشكلات سوء التواصل لدى الطلاب

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Article abstract:
This study explores how AI-enhanced instruction can contribute to the mitigation of miscommunication among EFL learners. To this end, the investigation included 60 students from M'sila University, divided into control and experimental groups. Employing a quasi-experimental design and a Discourse Completion Task (DCT), the experimental group received AI-enhanced pragmatics instruction. The findings indicated significant improvement in students' pragmatic awareness. Overall, the evidence supports the instructional effectiveness of AI-enhanced instruction. Accordingly, it is advisable to embed AI-enhanced pragmatics instruction systematically within EFL learning environments.
Keywords: *AI enhanced instruction; pragmatic competence; EFL miscommunication problems; Discourse Completion Task (DCT); AI integration.*

ملخص المقال:
تستكشف هذه الورقة دور تعليم التداولية المعزز بالذكاء الاصطناعي في تقليل سوء التواصل لدى طلاب اللغة الإنجليزية كلغة اجنبية الذين يواجهون صعوبات في فهم اللغة. باستخدام اختبارات استكمال الخطاب (*DCT*). أظهرت النتائج تحسينات كبيرة في الوعي والأداء التداولي للطلاب، وزيادة قدرتهم على تمييز المعاني السياقية وثقتهم في المواقف التواصلية المعقدة. تؤكد هذه النتائج على إمكانات دمج تعليم التداولية المعزز بالذكاء الاصطناعي، وذألك لمعالجة سوء التواصل الفردي وتحسن تعليم اللغة. لذا، يُدعى إلى دمج هذا التعليم بشكل منهجي في برامج تعلم اللغة الإنجليزية كلغة أجنبية.
كلمات مفتاحية: تعليم معزز بالذكاء الاصطناعي، الكفاءة التداولية، سوء التواصل في اللغة الإنجليزية كلغة أجنبية، (DCT)، الوعي التداولي.

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Introduction

The Growing adoption of emerging technologies has largely transformed learning environments, with a clear effect on language teaching and on how students learn languages. At this time, Artificial Intelligence (AI) is emerging as an essential tool in English as a Foreign Language (EFL) instruction, offering solutions to several pedagogical challenges. Among these challenges is pragmatic competence, meaning as the ability to use language appropriately in real social contexts (Hamoudi, 2018). This competence remains one of the most complex aspects of language learning for EFL students (Meddah & Belmihoub, 2026b).

Despite of many years of formal English instruction, the majority of Algerian EFL learners continue to struggle with pragmatic aspects of communication, which can lead to miscommunication in daily interactions (Meddah & Belmihoub, 2026a). undeniably, Pragmatic competence included the knowledge and skills needed to produce language correctly in context, including the understanding of speech acts, conversational implicatures, politeness strategies, and contextually appropriate patterns of communication (Hamoudi, 2018, 2020).

In addition, the lack of valid pragmatic instruction in traditional EFL classrooms has been thoroughly assessed in the Algerian context. Thus, Several studies have shown that grammar-focused teaching remains the dominant approach, while the development of communicative and pragmatic competence receives little attention, if any (Bounab, 2022; Hamoudi, 2018, 2020). This pedagogical gap becomes particularly serious as Algerian society increasingly engages in international academic and professional exchanges, and digital platforms where pragmatic competence is essential for acceptable interaction (Klimova & Chen, 2024).

Hence, traditional ways to teach contextual language face several limitations. To begin with, classrooms often lack the contextualized input that is necessary for pragmatic learning, since textbooks provide insufficient exposure to the nuanced variations of language use (Sadikovna et al., 2024). Second, the association of very limited class time and large numbers of students in Algerian universities makes it difficult for teachers to provide suitable feedback on learners' pragmatic performance. Third, the socio-cultural norms differences between learners' first language and the target one , create a large pragmatic transfer issues that require clear and explicit instruction in how language is appropriately used. (Hicham & Bachir, 2020).

Today, the integration of AI-based instruction offers promising solutions to these challenges. AI-enhanced learning platforms can provide learners with extensive access to contextualized pragmatic scenarios, immediate and personalized feedback, and adaptive support that responds to individual learner needs (Benaicha & Semoud, 2024). Recent advances in natural language processing (NLP) and conversational agents create opportunities for EFL learners to engage in realistic pragmatic interactions across varied contexts and to receive corrective feedback that would be extremely difficult to provide systematically in traditional settings (Zarfsaz, 2024).

Although AI research in education is expending, the Algerian context remains insufficiently explored, especially around the adoption and application of AI technologies for pragmatics lessons. As such, this work seeks to address this difficulties by investigating how AI-based tools can help reduce miscommunication problems among Algerian EFL students. The research focuses on third-year English students at Mohamed Boudiaf University of M'sila, examining their pragmatic challenges and evaluating the effectiveness of AI-mediated interventions in developing their pragmatic competence.

Research Objectives

This study aims to:

1. Evaluate the effectiveness of AI-enhanced pragmatics instruction in improving students' pragmatic awareness and performance.
2. Investigate the challenges and opportunities associated with implementing AI-enhanced pragmatics instruction in the Algerian EFL context.

Research Questions

The following research questions guide this investigation:

1. What are the most frequent types of pragmatic miscommunication problems encountered by third-year EFL students at M'sila University?
2. To what extent does AI-enhanced pragmatics instruction improve students' pragmatic competence compared to traditional teaching methods?
3. What are the main challenges and facilitating factors for implementing AI-enhanced pragmatics instruction in the Algerian EFL classroom?

Significance of the Study

This research is expected to contribute to both the theoretical and practical dimensions of EFL education in Algeria. First, it extends current understandings of how AI technologies can be used to address specific aspects of linguistic and pragmatic competence, an area that has received relatively little attention, particularly in the Algerian context. Second, the findings are likely to offer practical insights for curriculum designers, EFL instructors, and educational policymakers seeking to improve language instruction and better prepare students for effective intercultural communication in an increasingly globalized world.

1. Literature Review:

1.1. Pragmatic Competence in EFL Learning:

Pragmatic competence is a fundamental component of communicative competence. Further, It is learner's ability to understand and produce language that are culturally appropriate in specific community and contexts (Thomas, 1983). Within the framework of communicative competence proposed by Bachman (1990), pragmatic competences is typically described as comprising two essential and fundamental dimensions: pragmalinguistic competence, which concerns the linguistic resources available for realizing communicative acts (such as formulae, sentence types, and mitigation devices), and sociopragmatic competence, which includes the social perceptions and contextual judgments that underlie the choice and interpretation of those communicative actions.

Several papers in the Algerian arena have documented significant pragmatic deficiencies among EFL learners. In this respect, Dendenne & Beghoul (2016) assessed pragmatic competence among Algerian university students and found that learners had limited awareness of appropriate speech act realization, particularly in requests and apologies. Additionally, their study showed that students often transferred pragmatic norms from Arabic into English, producing utterances that, although grammatically correct, were pragmatically inappropriate. Similarly, Bouhania (2020) investigated compliment responses among Algerian EFL learners and reported systematic divergence from native English speaker patterns in ways that could lead to misunderstandings in intercultural communication.

Pragmatic failure can take different ways in learner language. Hamoudi (2018) identified four categories of pragmatic problems among Algerian EFL students. First, speech act miscommunication take place when learners fail to recognize or appropriately perform speech acts such as requests, refusals, and complaints; for example, Algerian students often produce direct requests that native speakers are likely to perceive as impolite or rude. Second, difficulties in comprehending implicature emerge when students cannot decode or understand conversational implicatures, including those underpinning humour and indirectnes. Third, cultural gaps would prevent learners from interpreting culturally embedded expressions such as idioms. Fourth, discourse-level problems manifest in inappropriate turn-taking, inadequate use of discourse markers, and interactional patterns that may increase the risk of communication breakdowns.

The consequences of pragmatic failure extend beyond simply linguistic inaccuracy. As Thomas (1983) argued, while grammatical errors are most of the time attributed to insufficient language proficiency, pragmatic failures are often interpreted as personal rudeness. This makes pragmatic competence unquestionably fundamental for Algerian EFL learners who wish to participate in international academic collaboration programmes, where effective communication requires not only grammatical accuracy but also appropriate language use (Tewfik, 2021).

1.2. Traditional Approaches to Pragmatics Instruction in Algeria:

Despite the importance and the role of pragmatic competence, EFL instruction in Algerian universities inadequately fill this area of language learning. In this respect, Guerid & Abdellatif (2018) conducted an analysis of language teaching methods in the Algerian universities and found that instruction paid little attention to the pragmatic aspects of language use. Their findings showed revealed that pragmatic instruction was not systematic and that teachers most of the time addressed pragmatic issues only when errors occurred, rather than implementing structured pragmatics lessons.

Many elements contribute to deepen this pedagogical gap. First, as Achili & Zerouki (2024) explained, most Algerian EFL teachers have very limited training in pragmatics pedagogy. Their study of 58 teachers from across Algerian universities revealed that fewer than 15% had received any formal training in teaching pragmatics during professional development. As a result, many instructors lack confidence in addressing pragmatic issues and tend to focus on linguistic domains where they feel more competent.

Second, resource limitations also underscore pragmatics instruction. Boudjemaa (2019) analyzed commonly used EFL textbooks in Algerian universities and found that pragmatic content was clearly insufficient, if not totally neglected and that most materials provided are not contextualized with examples of appropriate language use. The few pragmatic elements that did appear in these textbooks were presented mainly through decontextualized rules rather than through authentic communicative scenarios that would enable learners to grasp contextual meanings.

1.3. AI Technologies in Language Education

AI tools encompass a range of technologies, including intelligent tutoring systems, chatbots, automated writing assistants, and online learning platforms. These technologies use machine learning algorithms to analyze learner language and create adaptive learning experiences that respond to individual learner needs in ways that traditional instruction cannot.

Recent developments in natural language processing (NLP) have enhanced AI capabilities in language education. In this respect, Guemide and Sahraoui (2023) and Meddah and Belmihoub (2026b) examined the application of conversational AI in Algerian EFL contexts and found that chatbot systems could engage learners in more realistic dialogues and recognize pragmatically inappropriate responses in order to provide contextually relevant corrective feedback.

Their studies demonstrated that AI equipped with pragmatic awareness could identify not only grammatical errors but also pragmatic failures, such as inappropriate lexical choices, overly direct requests, or insensitive expressions.

The theoretical foundations of this approach draw from multiple frameworks. From a sociocultural perspective, AI tools can function as mediating artefacts that scaffold learners' development within their zone of proximal development (ZPD) and provide support that enables them to accomplish tasks they could not manage independently.

From an interactionist perspective, AI-powered conversational agents can create opportunities for negotiation of meaning and focused feedback, processes widely recognized as facilitating language acquisition(Long & Lin, 2022).

From a cognitive perspective, AI systems can implement principles of repetition, adaptive difficulty, and immediate feedback that help to optimize learning processes (Suvankulova, 2024).

1.4. AI-Enhanced Pragmatics Instruction: International studies

Although research on AI applications in pragmatics instruction remains very limited compared to other domains, the emerging studies report promising results.

Taguchi (2021) investigated the effectiveness of a webbased pragmatics instruction programme that used AI to provide learners with needed feedback on their speech act performance; the experimental study with 120 EFL learners found that participants who engaged with the AI enhanced instruction demonstrated greater improvements than those in the conrol group.

Similarly, Taguchi (2022) assessed the use of virtual reality (VR) for teaching pragmatic competence. Additionally, the study used scenarios in which learners interacted with AI driven virtual interlocutors, such as requesting in stores, writing invitation, and making complaint. Consequently, the findings indicated that learners who practiced in these AI-enhanced virtual environments showed improved pragmatic awareness and more target-like speech act realizations. Notably, the AI systems' ability to provide immediate, contextualized feedback on pragmatic appropriateness appeared to be a critical factor in these gains.

Further, Yousefi and Nassaji (2019) conducted a meta analysis of technology mediated pragmatics instruction, and they identified several effectives of AI supported approache. First, successful interventions using explicit pragmatic instruction with ample opportunities for practicing and feedback. Second, effective AI based tools incorporated authentic, contextualized speech acts that exposed learners to sociolinguistic factors.

1.5. The Algerian Context: Technology Integration in EFL Education

The Algerian higher education system has undergone significant reform efforts, with increasing emphasis on integrating technology into teaching and learning. However, as Achili and Zerouki (2024) documented, the actual implementation of educational technologies in EFL classrooms remains challenging and faces multiple obstacles. Their study of AI integration across Algerian universities found that while 70% of teachers reported "often" or "always" using some form of technology in their teaching, the majority of this usage involved basic presentation tools rather than sophisticated AI-powered instructional applications.

Infrastructure limitations constitute a primary obstacle. Guerid and Abdellatif (2018) noted that inconsistent internet connectivity, insufficient computer facilities, and limited licensed educational software constrain teachers' ability to use technology-enhanced instruction effectively. These infrastructural challenges are particularly acute in pragmatics instruction, where interactive, real-time AI applications require reliable high-speed internet connections that many Algerian institutions cannot consistently provide.

Professional development deficits represent another significant barrier. Benaicha and Semmoud (2024) surveyed EFL teachers across multiple Algerian universities and found that teachers generally held positive attitudes toward AI technologies, yet reported feeling inadequately prepared to integrate these tools into their pedagogical practice. Only about 20% of respondents indicated having received any training in using AI for language teaching.

Despite these barriers, recent studies suggest growing positive attitude among Algerian students toward technology-enhanced learning. In this respect, (Haddadi, 2025) investigated student attitudes toward AI-powered language learning tools and found high levels of interest and engagement, particularly among younger learners who had grown up with digital technologies. Students reported appreciating the personalized, self-paced nature of AI-enhanced learning and valuing the immediate feedback that such systems can provide.

2. Methodology

2.1. Research Design

The main purpose of this study is to examine the impact of using AI- driven tools to mitigate EFL students' miscommunication problems. To this end, we adopted a quasi-experimental design; this methodology is the most appropriate in similar studies where the topic is not yet thoroughly investigated (Creswell, 2019; Garcia et al., 2020; Kothari, 2012)

The researcher employed a quantitative method using a self-designed Discourse Completion Task (DCT), also known as Discourse Completion Test.

2.2. Validity and Reliability of Research Instrument

validity was established by submitting the DCT to three experienced teachers, who were asked to rate its relevance and clarity (on a scale from 1 to 5). The score was mean = 4.33, indicating that the instrument's

validity was achieved. Furthermore, Cronbach's alpha for all items was .86, which clearly suggests that the reliability of the instrument was acceptable.

The research was conducted during the first semester of the 2025-2026 academic year at the Department of English, Mohamed Boudiaf University of M'sila, Algeria.

2.3. Participants

Participants of this study were 60 third-year English students enrolled in the Oral Expression course at M'sila University. The sample comprised 47 female and 13 male students, ages 20-25 (M = 21.3 years).

Participants were assigned to two groups through convenience sampling:

- Experimental Group (n = 30): Received AI-enhanced pragmatics instruction using selected platforms alongside traditional classroom instruction.
- Control Group (n = 30): Received traditional pragmatics instruction using textbook materials without AI integration.
- That is to say, During the intervention, the experimental group was encouraged to use an AI chatbot to generate ideas and actively participate in the sessions. For instance, the teacher used AI-generated videos using a data show, and the students were permitted to freely use AI chatbots during the sessions. However, the control group followed the teacher explanation only and where not allowed use AI tools.

2.4. Research Tools

In this paper, a Written Discourse Completion Task (DCT) served as the primary quantitative measure of pragmatic competence. The DCT consisted of various scenarios reflecting everyday communicative events; see Appendix **A**.

2.5. Results

Before the experiment, both groups pragmatic competence grades were calculated. The experimental group had a mean score of 2.45 and SD = 0.51 while the control group had a mean score of 2.44 and SD = 0.50. These similar scores indicated that both groups started with comparable pragmatic competence levels.

Table1 Pre-test Mean Scores by Speech Act Category

Speech Act Category	Experimental Group Mean/SD	Control Group Mean/ SD
Requests	2.67 (.59)	2.60 (.44)
Refusals	2.33 (.47)	2.29 (.57)
Apologies	2.31 (.54)	2.33 (.44)
Complaints	2.50 (.49)	2.45(.41)

- Note: Scores range from 1 (completely inappropriate) to 5 (fully appropriate); see Appendix **B**

RQ1: Types of Pragmatic Miscommunication Problems

Al-hamzi et al. (2024) and Hamoudi (2018) show that inappropriate directness, insufficient politeness, inadequate strategies, and cultural transfer from Arabic are important sociopragmatic problems because they can lead to miscommunication even when learners have adequate grammatical knowledge. Therefore, the analysis of answers focused on these four primary categories of pragmatic miscommunication problems.

In this respect, these problems were identified through qualitative analysis of students' responses and classification of error types:

First, Inappropriate directness accounted for one out of four errors, representing 25% of the total errors. This means that students often produced requests or complaints in a direct way without using enough polite or mitigating expressions.

This was particularly evident in scenarios like student-professor interactions. For instance, an example from Scenario 1 (requesting from professor):

"*Give me extension for the paper because I am sick*"

- **Pragmatic issue**: Imperative form inappropriate for superior; lack of politeness markers, minimal explanation.

Second, insufficient politeness represented 15% of the total errors. This category included responses that did not contain enough deference or politeness markers, especially in asymmetrical power relations and high-imposition situations. Example from Scenario 6 (refusing department head's invitation):

"*I can't come to the conference because I have plans"*

- **Pragmatic issue:** Abrupt refusal without expressing appreciation or providing sufficient explanation; minimal consideration of face threat.

Example from Scenario 3 (requesting computer at library):

'Are you finished? I need the computer'

- **Pragmatic issue:** Insufficient politeness marking for request; potentially face-threatening assumption.

Third, cultural transfer from Arabic constituted half of the total errors, or 50%. This category involved the transfer of Arabic pragmatic norms into English, where they were often inappropriate in academic and social contexts.

Example from Scenario 11 (apologizing to professor for lateness):

"*Sorry professor, it was fate that I forgot*"

- **Pragmatic issue**: Attribution to external forces reflects Arabic cultural norms.

Fourth, Inadequate Face-Saving Strategies (10% of total errors): Students failed to employ appropriate strategies to mitigate face-threatening acts, which result in potentially offensive or relationship-damaging utterances.

Example from Scenario 15 (complaining to roommate about noise):

'*Your music is too loud every night. Stop it now'*

- **Pragmatic issue:** Bald-on-record complaint without softening devices or collaborative problem-solving approach.

RQ2: Effectiveness of AI-Enhanced Instruction

Post-test Analysis

Following the 8-week intervention, both groups showed improvement in pragmatic competence scores experimental group demonstrating substantially greater gains across all speech act categories.

Table2 Post-test Mean Scores by Speech Act Category

Speech Act Category	Experimental Group Mean/SD	Control Group Mean/ SD
Requests	4.15 (.59)	3.22 (.61)
Refusals	3.98 (.47)	3.05 (.57)
Apologies	3.98 (.54)	3.28 (.56)
Complaints	4.03 (.49)	2.98(.56)

Basically, the experimental group showed an improvement of 1.58 points on the 5-point scale, which represent a 64.5% increase. In contrast, the control group improved by 0.69 points,or a 28.3% increase. Hance, the experimental group's improvement was more than twice that of the control group (1.58 vs. 0.69 points).

Table3 paired-sample t-test

Group	Pre-test M (SD)	Post- test M (SD)	t	p /d
Experimental	2.45(0.52)	4.04 (0.42)	14.62	< .001/ 2.67
Control	2.42 (0.49)	3.13 (0.49)	5.18	< .001/ 0.95

The t-test results indicate that both groups showed improvement from pre-test to post-test, but the experimental group demonstrated a substantially greater gain. Its mean score increased from 2.45 (SD = 0.52)

to 4.04 (SD = 0.42), with a t-value of 14.62, p < .001, and a large effect size of d = 2.67. In comparison, the control group improved from 2.42 (SD = 0.49) to 3.13 (SD = 0.49), with a t-value of 5.18, p < .001, and an effect size of d = 0.95. These results suggest that the treatment had a stronger effect on the experimental group than on the control group.

2.6. Discussion:

This study investigated the effectiveness of AI pragmatics instructions in addressing miscommunication problems among Algerian EFL students. The findings provide evidence that AI-integrated approaches improve pragmatic competence compared to traditional instruction methods, with significant implications for language pedagogy in the Algerian higher education context.

The experimental group's substantial improvement (64.5% vs. 28.3% in the control group) demonstrates that AI offers significant pedagogical advantages for pragmatics learning. Students in the experimental group improved more than twice as much as those in the control group over the same treatment period. These findings align with (Yousefi & Nassaji, 2019) meta-analysis, which revealed larger effect sizes for computer-mediated pragmatics instruction compared to face-to-face instruction. In the Algerian context, (Achili & Zerouki, 2024) documented growing receptivity among EFL teachers toward AI integration, though they noted implementation challenges related to infrastructure and training challenges partially addressed through the hybrid model employed in this study.

Several interrelated causes explain the experimental group's out performance. First of all , AI platforms provided valid and contextualized feedback on pragmatic appropriateness, which allows students to recognize and correct inappropriate patterns in real-time. This immediate feedback prevented inappropriate forms and accelerated learning, consistent with (Taguchi, 2021) findings on the benefits of instant corrective feedback in virtual pragmatics environments. Besides, AI tools enabled unlimited practice opportunities that extended far beyond classroom time constraints, addressing a critical limitation in Algerian EFL classrooms where large class sizes (often more than 35 students) and limited hours totally prevent adequate individual practice (Bounab, 2022). Furthermore, Students in the experimental group practiced scenarios 5-8 times on average, while control group students typically completed each written exercise only once, time consuming activities. Third, AI platforms adapted to individual student needs, providing more challenging scenarios as competence developed and offering additional support in areas of difficulty. This personalization proved particularly valuable given the varied pragmatic competence levels within the sample, where pre-test scores ranged from 1.5 to 3.2 (Sung & Kang, 2024) Fourth, AI tools provided explicit metalinguistic explanations of sociopragmatic principles underlying appropriate language choices. When students used overly direct requests with professors, AI feedback explained concepts of power distance, face threat, and conventional indirectness. This explicit instruction aligns with research that demonstrated that explicit teaching is more effective than implicit learning for pragmatic features, particularly in foreign language contexts. Aleb and Loucif (2025) recently confirmed area with Algerian EFL learners, finding that clear explicit pragmatic instruction can significantly improved comprehension of ambiguit speech acts compared with implicit exposure alone.

Moreover, the current studies identified four primary categories of pragmatic miscommunication problems that are consistent with previous research on Arab EFL learners (Ghazzoul, 2019). The experimental group demonstrated good improvements in reducing inappropriate directness, with errors dropping from 42% to 8%. Post-test analysis showed that 78% of experimental group students used conventional indirect forms in high-power-distance scenarios, compared to only 32% in the control group.

This finding parallels Cohen and (Ishihara, 2017) webbased pragmatics curriculum, which similarly improved learners strategic use of indirectness through exposure to multiple examples combined with metalinguistic explanations. Thus, The persistent directness in the control group reflects pragmatic transfer from Arabic, where directness differ from English norms (Rachid & Anissa, 2017)

Both groups improved in politeness performance, but the experimental group showed greater control. The AI platforms' power to demonstrate and generate how native speakers combine multiple politeness strategies (apology markers, and appreciation expressions) proved particularly valuable. Students could observe not just that politeness markers were needed, but how different markers work synergistically to create

appropriately polite utterances (Brown & Levinson, 1987). Interestingly, few members of experimental group students over-corrected, producing formal language even in casual peer interactions, a common developmental stage documented by (Bardovi-Harlig, 2021)which suggests that learners adopt conservative strategies before calibrating appropriateness levels.

Besides, L1 pragmatic transfer from Arabic decreased in both groups but remained more persistent than other error types.

The most common persistent transfer patterns involved use of Arabic expressions ("Inshallah," "God willing") in contexts where English speakers would express direct personal agency. This finding aligns with (Ghazzoul, 2019) documentation of similar transfer patterns among Arab learners and highlights that certain cultural patterns require more than eight weeks to modify substantially. Future AI enhanced instruction should incorporate dedicated contrastive pragmatics modules that directly address specific Arabic-English pragmatic differences more clearly (Benattabou, 2020)

The experimental group's improved use of face-saving strategies represents particularly significant progress. Post-test analysis showed that 82% of experimental group responses in face threatening scenarios employed at least one face saving strategy, compared to 43% in the control group. Understanding and implementing face management requires sophisticated sociopragmatic awareness that traditionally develops slowly through extensive target language exposure which most Algerian EFL learners lack (Hamoudi, 2018).

AI platforms effectively simulated such exposure by providing many scenarios to illustrate face considerations and eventually provide explicit feedback on face threatening mitigation.

On another layer, in refusal activities, experimental group learned to make responses using multiple face saving moves. for instance, express appreciation, think of legitimate reasons, than express regret; admittedly, these moves that rarely appeared in control group responses are, in fact, consistent with native speaker norms and conventions. (Félix-Brasdefer, 2008),.

3. Practical Implications and Limitations of the Study

The study advocates that AI-enhanced pragmatics instruction can be implemented in Algerian university contexts despite infrastructure constraints and problems. The hybrid approach (combining AI tools with traditional classroom instruction) proved to be feasible even with occasional connectivity issues. The eight-week intervention duration appears sufficient to produce meaningful improvements in most pragmatic categories, making the approach practical for integration into existing courses without major curriculum restructuring (Arzim & Kouicem, 2024). Successful implementation requires teacher preparation in both pragmatics' pedagogy and AI tool integration. Teachers need understanding of core pragmatic concepts, criteria for selecting appropriate AI tools, strategies for structuring hybrid instruction, and techniques for interpreting and extending AI feedback in classroom discussion. Professional development programs should address these competencies, as (Achili & Zerouki, 2024) found that only 20% of Algerian teachers felt adequately prepared to implement AI-enhanced instruction effectively.

Several limitations should be considered:

This study also has some limitations. First, the participants came from only one university and were selected by convenience sampling, so the results may not represent students from other universities or different backgrounds. The sample was also uneven, with 47 females and only 13 males, which may affect how broadly the findings can be applied. For this reason, the results should be understood as specific to this group rather than to all university students.

Another limitation is the use of the DCT. Although it is a common tool in pragmatics research, it mainly shows what students know about pragmatics, not necessarily how they actually behave in real conversations. In daily life, people may respond differently from how they do on a written task. For this reason, future studies should use more natural data, such as real conversations, role plays, or classroom interaction, to see whether the same improvement appears in real communication.

Finally, the eight-week intervention may not have been long enough to bring about full pragmatic development, especially when cultural habits are deeply rooted. A longer program and follow-up testing would help show whether the improvement lasts over time.

Despite these limitations, the study provides powerful evidence for AI-enhanced pragmatics instruction's effectiveness in the Algerian EFL context and offers practical guidance for implementation.

As AI innovative technologies continue to evolve, develop and become more accessible, their capability to transform pragmatics pedagogy appears substantial and worthy of continued investigation.

Conclusion

As Algerian society grows more connected to international academic, career, and digital networks, the practical English as a Foreign Language (EFL) skills of learners are gaining in value. When pragmatic breakdown occurs, it can injure interpersonal ties, lead to large-scale misinterpretations, and reduce opportunities, effects that are less common from straightforward grammatical mistakes. Against this background, the present study examined how effective AI-enhanced instruction in pragmatics is for reducing miscommunication among Algerian EFL students at Mohamed Boudiaf University of M'sila. As we compare instruction that blends AI with standard approaches, the research offers measured evidence that AI tools improve practical competence.

To begin with, AI-enhanced pragmatics instruction beat traditional approaches when it came to reinforcing students' pragmatic competence. Across a period of eight weeks, the experimental group recorded improvements exceeding twice those of the control group, with results spanning all assessed speech-act categories: requests, refusals, apologies, and complaints. Second, the study shows that Algerian EFL students encounter particular pragmatic difficulties that AI-based instruction can help address. Four patterns kept repeating in misunderstandings: overly straightforward wording, too little politeness cues, cross-cultural carryover from Arabic, and weak methods for preserving face. The immediate, context-sensitive feedback and repeated opportunities for practice provided by AI platforms were effective in promoting a more refined pragmatic awareness.

Third, the results suggest that AI technologies can provide practical solutions to constraints that are well known in Algerian EFL pragmatics instruction. Structural limitations—such as restricted classroom time, large class sizes, insufficient teacher training in pragmatics pedagogy, and the absence of contextualized materials—can be substantially reduced through deliberate AI integration. Consistent with this, the hybrid approach used in the study, which combined traditional classroom instruction with AI-supported independent practice, proved to be a reasonable and workable model for tackling some existing constraints in the Algerian setting. Importantly, students made significant gains even though they occasionally experienced technical problems, indicating that AI integration remains feasible even where infrastructure is less than ideal.

Finally, the findings underline that strong AI integration is more about systematic and careful instructional planning than about randomly implemented tools. The structured intervention (combining explicit metapragmatic instruction using AI generated materials was more effective than traditional black and white instruction alone.

As we look forward, lasting cooperation among researchers, teachers, administrators, and policymakers will have to continue. This collaboration should be paired with continuous evaluation, ongoing improvement of practice, and a clear dedication to the ultimate goal: enabling students to develop stronger pragmatic competence that facilitates access to academic opportunities, supports professional development, and enables meaningful participation and integration in global communities.

Sources and References

Achili, N., & Zerouki, N. (2024). Using Artificial Intelligence in Algerian Higher Education: Opportunities and Challenges from Teachers' Perspectives. *ATRAS Journal*, *5*(3), 541–556. https://doi.org/10.70091/atras/ai.34

Al-hamzi, A. M. S., Nababan, M., & Santosa, R. (2024). Socio-pragmatic analysis of utterances with polite addressing terms : translation shift across Arabic- English cultures. *Cogent Arts & Humanities*, *11*(1).

https://doi.org/10.1080/23311983.2024.2359764

Aleb, S., & Loucif, L. (2025). Implementing English as a Medium of Instruction in Algerian Higher Education : The Role of ICT in Addressing Challenges and Leveraging Opportunities Salma Aleb Higher School of Management and Digital Economy , Algeria Leila Loucif. *International Journal of Education and Development Using Information and Communication Technology (IJEDICT)*, *21*(3), 1–24.

Arzim, M., & Kouicem, K. (2024). Considering Pragmatics in Foreign Language Writing Instruction: Teachers' Attitudes and Practices. *Algerian Journal of Research and Studies*, *4*(7), 163–178.

Bardovi-Harlig, K. (2021). Another piece of the puzzle: The emergence of the present perfect. *Language Learning*, *51*, 215–264.

Benaicha, B., & Semmoud, A. (2024). Investigating Algerian EFL teachers' attitudes towards AI utilization in language education. *ATRAS: Revue Algérienne Des Sciences Du Langage et de La Traduction*, *30*, 136–142.

Benaicha, B., & Semoud, A. (2024). Investigating Algerian EFL Teachers' Attitudes Towards AI Utilization in Language Education. *ATRAS Journal*, *5*(3), 130–150. https://doi.org/10.70091/atras/ai.8

Benattabou, D. (2020). Helping EFL students avoid socio-pragmatic failure: focus on nonverbal intercultural competence. *TESOL and Technology Studies*, *1*(1), 23–41.

Boudjemaa, D. (2019). Evaluating Pragmatic Information in Algerian EFL Textbooks: The Case of 'My Book of English, Year Three.' In *Forum de l'enseignant* (pp. 137–156).

Bouhania, B. (2020). Attitudes of EFL Teachers toward the Competency Based Language Teaching: The Case of South Algerian Secondary Schools in Adrar. *Arab World English Journal (AWEJ)*, *11*(September), 585–598. https://doi.org/dx.doi.org/10.24093/awej/vol11no3.38

Bounab, F. (2022). Teachers' perceptions of the teaching of speech acts and pragmatics in the EFL classroom at the Algerian higher education institutions. *Journal of Human Sciences*, *33*(2), 649–666.

Brown, P., & Levinson, S. C. (1987). Politeness: Some universals in language usage. In *Cambridge university press*.

Creswell. (2019). *Research design : qualitative, quantitative, and mixed methods approaches* (V. Knight (ed.); 5th ed., Vol. 17). SAGE.

Dendenne, B., & Beghoul, Y. (2016). *Pragmatic Transfer In Requests And Apologies Performed By Algerian Efl Learners*. Université Frères Mentouri - Constantine 1.

Félix-Brasdefer, J. C. (2008). *Politeness in Mexico and the United States.* John Benjamins.

Garcia, A. R., Filipe, S. B., Fernandes, C., Estevão, C., & Ramos, G. (2020). *Introduction to Research in Education* (18th ed.). Wadsworth.

Ghazzoul, N. (2019). *Linguistic and Pragmatic Failure of Arab Learners in Direct Polite Requests and Invitations : A Cross-cultural Study*. *9*(2), 223–230.

Guemide, B., & Sahraoui, A. (2023). Implementing AI applications to improve English language learning among EFL students in Algeria: A survey study from university students' perspective. *International Journal of Literacy and Education*, *3*(2), 38–46.

Guerid, F., & Abdellatif, N. (2018). Specific Vocabulary Integration in an English for Specific Purposes Course. *English for Specific Purposes World*, *20*(56).

Haddadi, W. (2025). The Effectiveness of Medea Sudents' Use of Artificial Intelligence Application In learning English At Algerian Universities A Field Study At Setif 2 University. *Journal of Studies in Language, Culture, and Society*, *8*, 109–126.

Hamoudi, A. (2018). Exploring the Socio-pragmatic Appropriacy of Speech Act Realization among EFL Students : A Case Study. *Annales Des Lettres et Des Languesc. F. L. L . Université de M'Sila*, *May*, 68–84.

Hamoudi, A. (2020). Argentinian Journal of Applied Linguistics Threads of Socio-pragmatics in Higher Education : Perspectives on Improving EFL Learning and Use Argentinian Journal of Applied Linguistics. *Argentinian Journal of Applied Linguistics*, *9*(1), 60–69.

Hicham, B., & Bachir, B. (2020). Using Writing Assistive Technology to Improve EFL University Students

Performance. *Quarterly of Iranian Distance Education*, *2*(2), 1–15.

Ishihara, N. (2017). Web-Based Curriculum for Pragmatics Instruction in Japanese as a Foreign Language: An Explicit Awareness-Raising Approach. *Language Awareness*, *16*(1), 21–40. https://doi.org/10.2167/la398.0

Klimova, B., & Chen, J. H. (2024). The Impact of AI on Enhancing Students' Intercultural Communication Competence at the University Level: A Review Study. *Language Teaching Research*, *43*, 102–120. https://doi.org/10.32038/ltrq.2024.43.06

Kothari, C. R. (2012). *Research Methodology* (3rd ed.).

Long, J., & Lin, J. (2022). An empirical study on cultivating college students' cross-cultural communicative competence based on the artificial-intelligence English-teaching mode. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.976310

Meddah, M., & Belmihoub, A. (2026a). EMI TEACHERS AND AI : A TAM PERSPECTIVE. *Armenian Folia Anglistika*, 84–102.

Meddah, M., & Belmihoub, A. (2026b). Integrating Artificial Intelligence to Enhance University Students ' Engagement : The Case of Third-Year EFL Students at the University of M ' sila , Algeria. *EL MIEYAR*, *30*(2), 74–86. https://doi.org/DOI: 10.37138

Rachid, B. M., & Anissa, B. (2017). Investigating Pragmatic Transfer in Interlanguage Apologies Performed by Algerian EFL Learners. *Journal of Faculty of Letters, Human and Social Sciences*, 17–41.

Sadikovna, S. G., Mansurovna, V. F., Salixovna, R. D., Xikmatullayevna, I. I., & Bobajanov, B. (2024). the Role of Ai and Web 2.0 Tools in Developing Pragmatic Competence of L2 English Learners. *SPAST Reports*, *1*(7). https://doi.org/10.69848/sreports.v1i7.5098

Sung, M.-C., & Kang, S. (2024). Developing AI Chatbots for Pragmatic Instruction of Korean Secondary L2 English Learners. *Korean Journal of English Language and Linguistics*, *24*(May), 441–459. https://doi.org/10.15738/kjell.24..202405.441

Suvankulova, A. N. (2024). How AI And Mobile Apps Can Enhance Students' Communicative Competencies. *Science and Innovation International Scientific Journal*, *3*(10), 106–116. https://doi.org/doi.org/10.5281/zenodo.14012070

Taguchi, N. (2021). Application of Immersive Virtual Reality to Pragmatics Data Collection Methods. *Calico Journal*, *38*(2), 181–201. https://doi.org/https://doi.org/10.1558/cj.41136

Tewfik, S. (2021). Social and environmental movement and the need for public communication by social actors. the case of Kabylia in Algeria. *Journal of Human Movement Science*. https://doi.org/10.23977/jhms.2021.020101

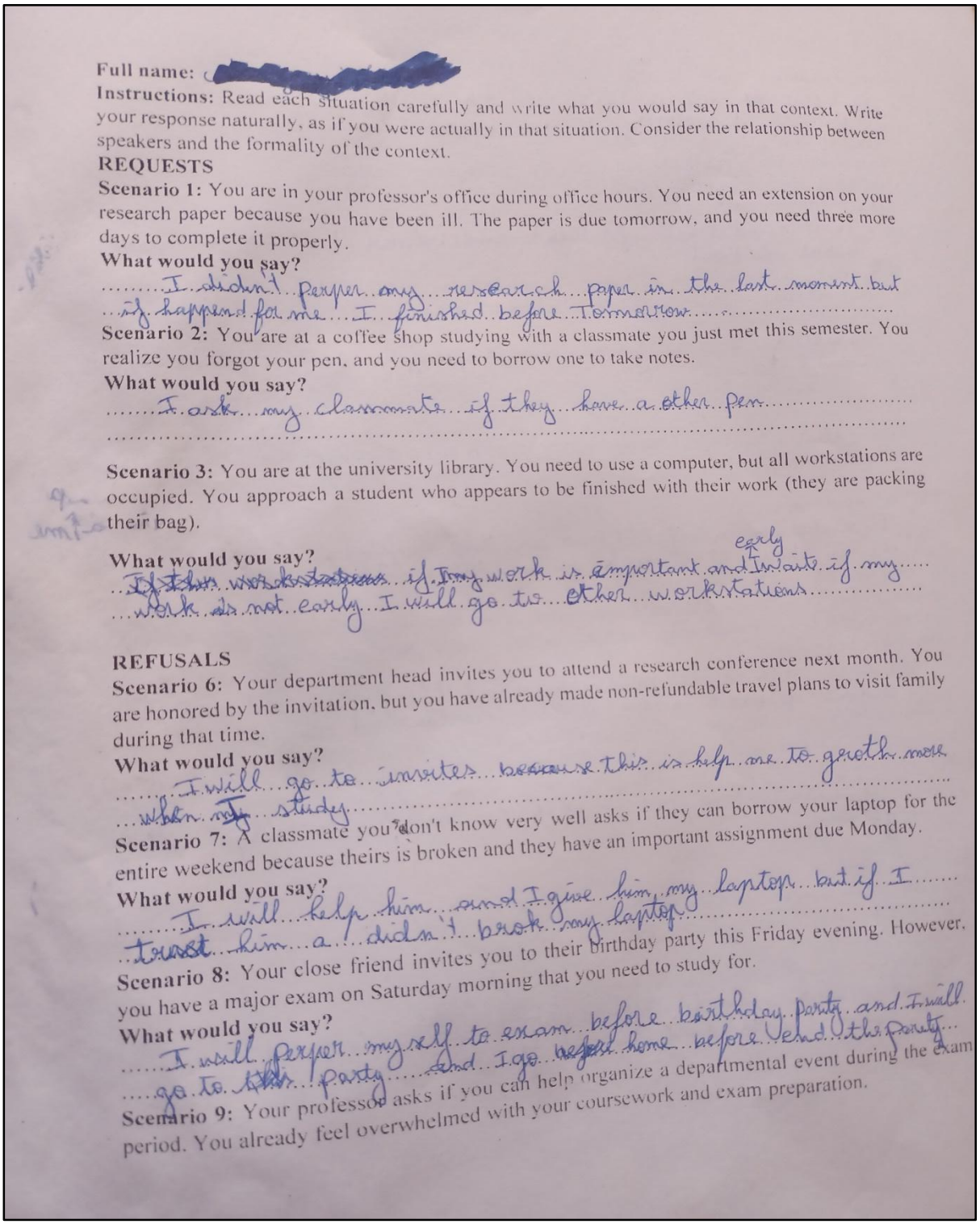
Thomas, J. (1983). Cross-cultural pragmatic failure. *Applied Linguistics*, *4*(2), 91–112. https://doi.org/doi.org/10.1093/applin/4.2.91

Yousefi, M., & Nassaji, H. (2019). A meta-analysis of the effects of instruction and corrective feedback on L2 pragmatics and the role of moderator variables Face-to-face vs. computer-mediated instruction. *ITL - International Journal of Applied Linguistics*, *170*(2), 277–308.

Zarfsaz, E. (2024). The Effect of Using NLP Techniques on the Writing Ability of EFL Learners. *Journal of English Language Pedagogy, Literature, and Culture*, *9*(1), 17–33. https://doi.org/10.35974/acuity.v8i2.2952

Appendix A: Sample DCTs

Pre-test



Full name: [redacted]

Instructions: Read each situation carefully and write what you would say in that context. Write your response naturally, as if you were actually in that situation. Consider the relationship between speakers and the formality of the context.

REQUESTS

Scenario 1: You are in your professor's office during office hours. You need an extension on your research paper because you have been ill. The paper is due tomorrow, and you need three more days to complete it properly.

What would you say?

I didn't perper my research paper in the last moment but if happend for me I finished before Tomorrow

Scenario 2: You are at a coffee shop studying with a classmate you just met this semester. You realize you forgot your pen, and you need to borrow one to take notes.

What would you say?

I ask my classmate if they have a ether pen

Scenario 3: You are at the university library. You need to use a computer, but all workstations are occupied. You approach a student who appears to be finished with their work (they are packing their bag).

What would you say?

~~If the workstations~~ if my work is important and I waite if my early work is not early I will go to ether workstations

REFUSALS

Scenario 6: Your department head invites you to attend a research conference next month. You are honored by the invitation, but you have already made non-refundable travel plans to visit family during that time.

What would you say?

I will go to ~~invites~~ because this is help me to geath more when my study

Scenario 7: A classmate you don't know very well asks if they can borrow your laptop for the entire weekend because theirs is broken and they have an important assignment due Monday.

What would you say?

I will help him and I give him my laptop but if I trust him a did n't brok my laptop

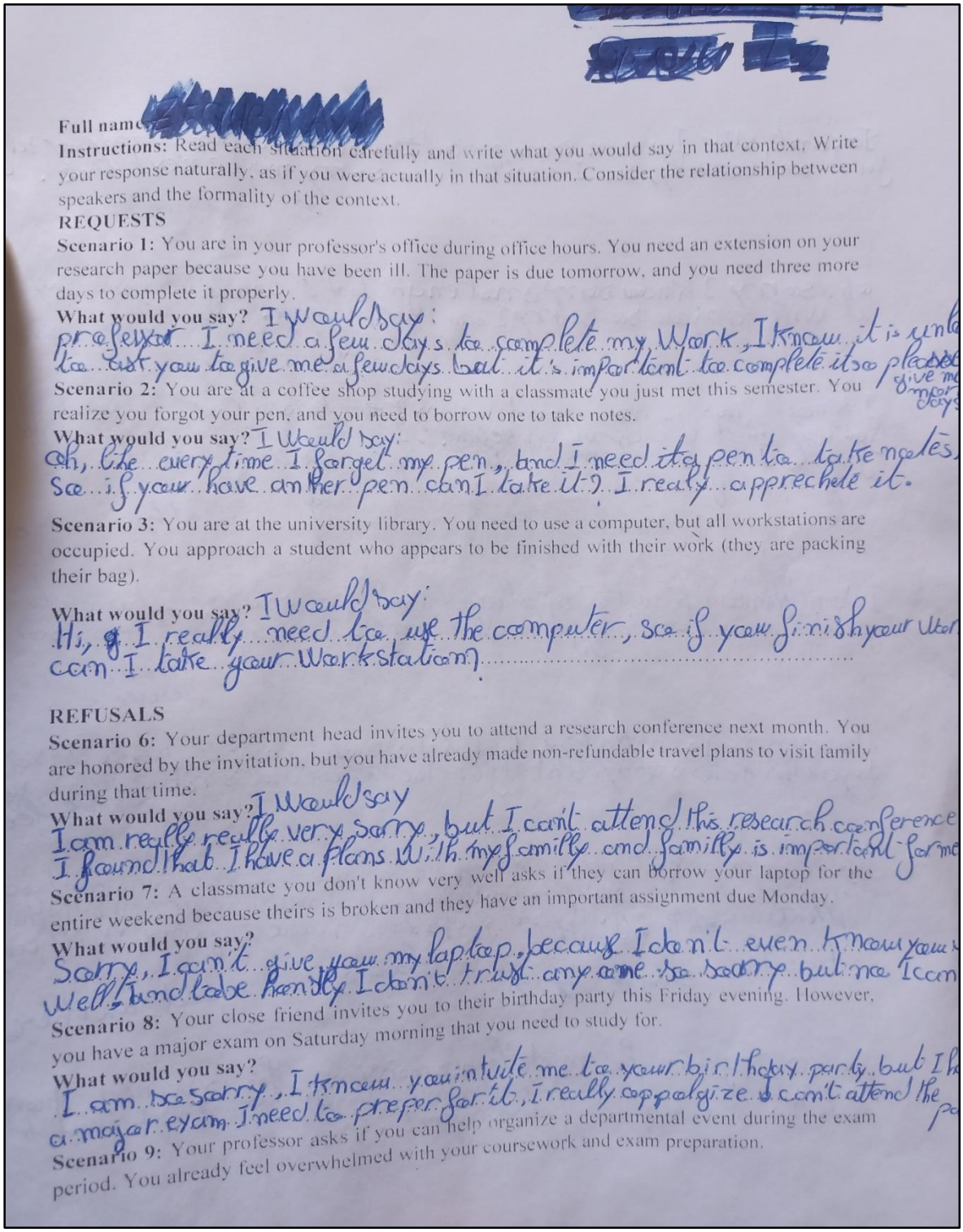
Scenario 8: Your close friend invites you to their birthday party this Friday evening. However, you have a major exam on Saturday morning that you need to study for.

What would you say?

I will perper my self to exam before birthday party and I will go to ~~the~~ party and I go ~~to~~ home before I end the party

Scenario 9: Your professor asks if you can help organize a departmental event during the exam period. You already feel overwhelmed with your coursework and exam preparation.

Post-test



Full name: [redacted]

Instructions: Read each situation carefully and write what you would say in that context. Write your response naturally, as if you were actually in that situation. Consider the relationship between speakers and the formality of the context.

REQUESTS

Scenario 1: You are in your professor's office during office hours. You need an extension on your research paper because you have been ill. The paper is due tomorrow, and you need three more days to complete it properly.

What would you say? I would say:
professor I need a few days to complete my Work, I know it is unfo
to ask you to give me a few days but it's important to complete it so please
give me more days

Scenario 2: You are at a coffee shop studying with a classmate you just met this semester. You realize you forgot your pen, and you need to borrow one to take notes.

What would you say? I Would say:
oh, like every time I forget my pen, and I need it a pen to take notes,
So if your have another pen can I take it? I really apprechete it.

Scenario 3: You are at the university library. You need to use a computer, but all workstations are occupied. You approach a student who appears to be finished with their work (they are packing their bag).

What would you say? I would say:
Hi, I really need to use the computer, so if your finish your Wor
can I take your Workstation.

REFUSALS

Scenario 6: Your department head invites you to attend a research conference next month. You are honored by the invitation, but you have already made non-refundable travel plans to visit family during that time.

What would you say? I Would say
I am really really very sorry, but I can't attend this research conference
I found that I have a plans With my family and family is important for me

Scenario 7: A classmate you don't know very well asks if they can borrow your laptop for the entire weekend because theirs is broken and they have an important assignment due Monday.

What would you say?
Sorry, I can't give your my laptop, because I don't even know your
Well I understand be friendly I don't trust any one so sorry but no I can

Scenario 8: Your close friend invites you to their birthday party this Friday evening. However, you have a major exam on Saturday morning that you need to study for.

What would you say?
I am so sorry, I know you invite me to your birthday party but I h
a major exam I need to prepar for it, I really appalgize I can't attend the
pa

Scenario 9: Your professor asks if you can help organize a departmental event during the exam period. You already feel overwhelmed with your coursework and exam preparation.

Appendix B: scoring rubrics

Score	Description
5	• Fully appropriate
4	• Largely appropriate
3	• Partially appropriate
2	• Mostly inappropriate
1	• Completely inappropriate