

The Role of Integrating Chat GPT as a Pedagogical Learning Aid on the Students' Communicative Skills: The Case of Master One English Language Students at Setif 2 University, Algeria

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Abstract

The current paper concerns the integration of ChatGPT as a pedagogical learning aid in the English as a Foreign Language (EFL) classroom. It aims to report the effects of ChatGPT on students' communicative skills. The research was conducted at Mohamed Lamine Debaghine Sétif 2 University using a questionnaire administered to Master One students. The collected data revealed a high level of appreciation among students for the integration of ChatGPT in the overall process of learning English as a foreign language. Students expressed positive views regarding the role of ChatGPT in enhancing their communicative skills. Finally, the study recommends that the target population invest more effort in using ChatGPT.

Keywords: ChatGPT, communicative skills, communicative competence, English language education, pedagogical aids

ملخص

تهدف الدراسة الحالية إلى دمج برنامج الدردشة الآلي "ChatGPT" كأداة تعليمية وتربوية في تدريس اللغة الإنجليزية كلغة أجنبية، وتسعى إلى رصد التأثيرات المتعددة لـ "ChatGPT" على مهارات الطلاب التواصلية. أُجري البحث في جامعة محمد لمين دباغين - سطيف 2، باستخدام استبيان وُزِعَ على الطلاب لجمع البيانات الكمية، وتتبع الدراسة تصميمًا استكشافيًا يهدف إلى الإجابة عن سؤال البحث. وتتكوّن عينة الدراسة من طلبة السنة الأولى ماستر بقسم اللغة الإنجليزية. وكشف تحليل البيانات المجمعة عن مستوى عالٍ من التقدير لدمج "ChatGPT" بين الطلاب في عملية تعلّم اللغة الإنجليزية كلغة أجنبية. كما أفاد الطلاب بأراء إيجابية حول دور "ChatGPT" في تطوير مهاراتهم التواصلية. وأخيرًا، توصي الدراسة الفئة المستهدفة ببذل مزيد من الجهود في استخدام "ChatGPT".

كلمات مفتاحية: شات جي بي تي، تعليم اللغة الإنجليزية، المهارات التواصلية، الكفاءة التواصلية، الوسائل التعليمية

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Introduction

Recently, it has been widely recognized that education has evolved significantly over the past few years. As with most fields in the technological age, educational systems, including foreign language learning and teaching pedagogy, prioritize fostering students' creativity, curiosity, and critical thinking skills as the cornerstones of their curricula (Zafari, 2019). To foster critical thinking abilities and increase students' innate motivation to pursue academic goals, educators must encourage them to shift from being passive recipients of knowledge to engaging as active participants in the learning process. Consequently, integrating technology into the learning process is increasingly viewed as essential and could positively help students achieve their academic objectives while meeting their new communicative, digital needs and orientations. Hence, educators use digital and media resources to enhance their instructional methods and improve their students' academic achievements, especially in the field of EFL learning.

Nowadays, one of the most prominent technological innovations and aids used in English language classrooms is ChatGPT. Learning and teaching different English language skills, the cornerstone of communicative competency, has never been easy in traditional education because students are often not fully engaged by its repetitive methods. ChatGPT has been introduced as a pedagogical learning aid in English language education to offer real-time feedback, 24/7 accessibility, individualized training, data-driven progress monitoring, and heightened engagement from students.

Moreover, using ChatGPT reflects native speakers' natural use of the target language in daily interaction and communication. Bemanger and Alhasan (2021) investigated ChatGPT's integration as a learning tool and its effects on English writing ability, while Hasan and Hoon (2013) examined its impact on language learning development in general. Consequently, integrating ChatGPT has gained significant interest in English foreign language education worldwide, as it is considered an effective pedagogical aid capable of achieving what traditional teaching and learning methods often cannot, particularly concerning the ultimate aims of English language education.

Nevertheless, despite considerable research dedicated to using ChatGPT as a pedagogical aid in the EFL context, students' opinions regarding its use as an innovative educational technology have received little attention. *The present study*, entitled "The Integration of ChatGPT as a Pedagogical Learning Aid in the Algerian EFL Classroom Context," aims to assess the effectiveness of this integration and its impact on English language learning in general. The study seeks to understand language learning and student participation in the process. As education evolves, integrating ChatGPT offers a promising avenue for addressing long-standing challenges in English language learning as a foreign language internationally, and in Algeria in particular.

One primary objective of integrating ChatGPT for students of English as a foreign language is to increase their communicative competence. Given language's significant role in students' academic and professional performance, developing creative ways to help students learn English is increasingly important. Enhancing students' communicative competence through ChatGPT and other existing technological means is one approach to achieving this goal. While artificial intelligence will undoubtedly transform education, research in this specific area remains limited.

Integrating ChatGPT is a crucial pedagogical aid that enables EFL students to understand and decode the language input they receive from the classroom environment. This input delivered by ChatGPT can originate from primary natural language sources (e.g., native speakers) or secondary artificial language producers (e.g., audio, videos, movies). However, it is acknowledged that EFL students often encounter difficulties comprehending oral input in English. Results from a focus group discussion with students at Mohamed Lamine Debaghine Setif 2 University revealed that some students struggle to understand spoken English,

especially by native speakers. These difficulties may stem from a lack of exposure to native speakers' speech and interaction, insufficient listening practice, or a lack of interest or motivation in the activity itself. The researchers believe ChatGPT could facilitate English learning and help students successfully achieve their communicative goals. Consequently, this paper seeks to answer the following research questions:

- To what extent does using ChatGPT as a pedagogical learning aid improve students' communicative skills?
- What roles does ChatGPT play in the overall process of English language learning?

Literature Review

The emergence of ChatGPT in education presents a promising solution to challenges in traditional education systems, such as overcrowded classrooms, a lack of personalized attention, and difficulties keeping pace with technological advancements. ChatGPT mimics human conversation and provides information conversationally. Its history dates back to the 1960s with early examples like Joseph Weizenbaum's ELIZA, capable of mimicking human-like responses by reflecting user inputs as questions (Weizenbaum, 1966). Another notable figure is Kenneth Colby, who developed PARRY, a chatbot designed to simulate a paranoid patient with schizophrenia, demonstrating the ability to engage in text-based conversations and exhibit delusional behavior (Colby, 1981). According to Abdulrahman et al. (2019), podcasting is a revolutionary form of mobile technology allowing digital audio and video programs to be streamed and downloaded to mobile devices. It is an innovative streaming service enabling learners to download various audio and video from the internet onto their mobile phones. It is argued that audio material offers an authentic language input source that EFL students can use to improve their English proficiency.

Adding flexibility to the traditional EFL learning process is one of the most acknowledged advantages of using podcasts. Students can download English podcasts and listen anytime and anywhere (Ramli, 2017). They can also choose podcasts based on topics that interest them or that meet their academic needs for personal growth and academic development. This feature increases learners' motivation to engage in the EFL learning process inside and outside the classroom and is particularly beneficial for higher education learners. According to Amiri et al. (2023), students can access and review lectures offline at their convenience by listening to recordings on mobile phones or laptops. This is helpful for university students who often struggle to take notes during lectures and enables them to revise lessons using podcasts. Another positive feature is the ability to repeat, pause, and replay the podcast as needed to understand its content. This facilitates comprehension by offering learners opportunities to learn new words and reinforce retention through repeated exposure.

Using ChatGPT-generated podcasts, especially those recorded by native speakers, exposes learners to real language use in real-life contexts. It shows them how the target language (TL) is used for communication and serves various purposes in real-life interaction. Amiri et al. (2023) explained that this activity develops students' grammatical competence, including the use of idioms and phrasal verbs. It also enhances their familiarity with accurate pronunciation, different accents, and dialects, encouraging learners to imitate authentic performance to improve their own communication skills.

Additionally, listening to podcasts produced by native speakers significantly contributes to developing learners' speaking skills, including both accuracy and fluency. According to Chan et al., listening to podcasts can enhance students' vocabulary, grasp of language structure, and performance in learning tasks. This demonstrates ChatGPT's impact in revealing accurate language structures and rules to increase learners' awareness and improve their performance. Conversely, Baehaqi and Inggriis (2015) experimentally proved the role of extensive podcast

listening in improving oral fluency through exposure to authentic language input, illustrating speakers' intonation, stress, and pronunciation.

Incorporating process data can offer students insights into their learning progress and introduce new avenues for formative feedback, self-reflection, and skill development. Feedback plays a crucial role in learning success, with research indicating its significant impact on student outcomes (Hattie, 2009; Wisniewski et al., 2019). Highly informative feedback can foster self-directed learning and effective metacognitive control. ChatGPT, utilizing generic language models from the internet, offers feedback through text or voice interfaces and has been proposed and studied for numerous educational applications. The conventional education system confronts challenges such as overcrowded classrooms, insufficient personalized attention, diverse learning paces and styles, and struggles to keep abreast of rapidly evolving technology and information. As education transforms, ChatGPT emerges as a promising remedy to tackle some of these issues effectively. While some institutions eagerly embrace ChatGPT, recognizing its relevance, others exercise caution, opting not to hastily integrate it into modern educational environments. Consequently, significant academic literature explores ChatGPT's role in education, its potential advantages, and associated risks...

Methods and Materials

An exploratory research design is employed to offer details and explanations regarding a phenomenon that is unknown or a field not thoroughly investigated. The main goal of exploratory research is to generate inductively derived generalizations about the group, process, activity, or circumstance under examination (Stebbins, 2011). Its primary purpose is to produce understanding of a topic so the results can be applied to a wider population.

The exploratory research design appears most suitable for approaching this topic and identifying teachers' challenges in their language classrooms. Consequently, this study employs an exploratory research design to generate understanding and provide background for challenges encountered during the process of teaching English to university students.

Participants

The population is an integral element of the research methodology. According to Hossan, Mansor, and Jaharuddin (2023), the population refers to the set of individuals or entities forming the study's focus; results can be applied to them. It includes individuals, groups, organizations, or other entities relevant to the research. The findings are generalized to this population after reaching conclusions. The population for this study comprises Master One students of English at Mohamed Lamine Debaghine Setif 2 University. They were selected for their advanced academic level, enabling them to provide valuable opinions and information based on extensive learning experiences, including exposure to various language teaching materials like ChatGPT.

The study sample is closely related to the population. Tarsi and Tuff (2012) define the sample as a subset of the population sharing the same features. Therefore, the sample is part of the population. As populations are often too large to include every individual, researchers select a smaller group comprising the sample. Findings are generalized to the population, as its individuals share the same characteristics.

To determine the sample size, researchers choose a suitable sampling technique. Primarily, there are two types: probability and non-probability sampling (Showkat & Parveen, 2017). Probability sampling, based on randomization, gives each population member an equal chance of selection. Non-probability sampling relies on convenience or pre-determined criteria. This study used probability sampling, as there were no specific selection criteria. The total

population included 365 students. Using an online questionnaire accessible to all population members, 78 participants formed the final sample. For the interview, 15 students from different groups volunteered.

Research Procedures and Instruments

The study generated quantitative data via a questionnaire survey. Frequencies and percentages were calculated to describe in detail the integration of ChatGPT as a pedagogical learning aid in EFL education, specifically rating its importance and contribution to communicative skills in the Algerian EFL classroom. A questionnaire is a set of questions designed to gather statistics on a specific topic. According to Roopa and Satya (2012), a well-designed and executed questionnaire is a vital tool for concluding specific individuals, groups, or populations. Its main purpose is to gather data systematically and standardly. This study used an adapted questionnaire from Abdulrahman, Basalama, and Widodo (2018), who examined a similar area. Some questions were taken and modified to meet this study's aims; additional statements were included to gather specific data on participants' perceptions regarding ChatGPT's integration to improve communicative skills.

The obtained data were analyzed using the following strategy:

1. **Data Classification and Organization:** Data were ordered in tables or figures based on the data collection procedure. They were organized and classified according to similar answers, helping the researcher summarize raw data and begin interpreting it.
2. **Data Description:** This involved reading the data depicted in tables/figures through frequencies and percentages, explaining it using words and expressions alongside numbers. It bridges previous and subsequent steps, adding meaning by summarizing and describing the data.
3. **Seeking Justifications for the Data:** Relations among the data, research steps, and influencing factors were defined. Data were then connected to the main theories in the study's theoretical framework, seeking agreement or disagreement. Justifications were highlighted and compared to previous research, establishing data as meaningful answers to the research questions.
4. **Connecting Data with Literature Review, Research Problem, Assumptions, and Questions:** Data were linked to the literature review, research problem, and questions by explaining how they relate to the collected data. This step confirmed or disconfirmed the data against previous sections, examined whether the data answered the research questions, stated whether they supported the questions/problem/assumptions positively or negatively, and established their appropriateness, ultimately making the data fully meaningful.

Results and Discussion

This section attempts to present the results of the questionnaire survey conducted with the participants of the study. It reports the different information of the participants in regard to the integration of Chat GPT within the overall process of learning the English language. The results of the current survey are reported through frequencies and percentages for each question in the questionnaire through tables.

Table 1. *Students' learning style*

	Frequency	Percent
Auditory (audio)	22	28.2%
Visual (images)	42	53.8%
Physical	14	17.9%
Total	78	100.0%

Table One is about the multiple learning styles followed by the participants in regard to the process of learning English as a foreign language. The figure reports the participants' answers through statistics, percentages, and frequencies. The findings show that a large number of the participants selected the (Visual) learning style, with a percentage of 53.8%. This indicates that they mostly like to use pictures and images in their language learning process as an effective pedagogical learning aid. Other participants reported their preference for the (Auditory) learning style, with a percentage of (28.2%), implying that they like listening to language input as another vital learning style. Finally, another similar percentage of the participants demonstrated that they prefer the (physical) learning style, with a percentage of 28.2%, indicating that they prefer learning through physical movements and interaction. It is worth mentioning that Chat GPT, as a pedagogical learning aid, can offer all the available learning styles since it can assist the learning and teaching process with the most reliable means and produce either inside a classroom setting or outside a classroom.

Table 2. *Students' learning Difficulties*

	Frequency	Percent
Lack of vocabulary	17	21.8%
Speed of the speaker	20	25.6%
Accent and pronunciation of the speaker	19	24.4%
Lack of practice and exposure to the language	11	14.1%
Stress and anxiety during listening	5	6.4%
Background noise in large classrooms	6	7.7%
Total	78	100.0%

Table Two illustrates the different difficulties that hinder the process of teaching and learning English as a foreign language. This question reports on the causes that invite Chat GPT to be adopted as an effective pedagogical learning aid in order to overcome, to some extent, the problems that students face and bring the process of learning to its end. The table depicted that most of them attribute these difficulties to the Speed of the speaker. With a percentage of (25.6%). Other participants selected (Accent and pronunciation of the speaker) as the main cause for these difficulties, with a percentage of 24.4%. Moreover, some participants indicated (Lack of vocabulary) as their main cause of learning problems, with a percentage of 21.8%. Furthermore, (Lack of practice and exposure to the language) is another cause that has been selected by (14.1%) of the participants, followed by (Background noise in large classrooms), which has been selected by (7.7%) of the participants. On the other hand, few participants selected (Stress and anxiety during listening) with a percentage of 6.4%. Any foreign language learners will report as much as problems and difficulties that hinder this task since the exposure to a foreign language is only artificial and not natural. Consequently, technology does its best to bring some kind of natural exposure through ChatGPT.

Table 3. *Students' use of Chat GPT*

	Frequency	Percent
Never	10	12.8%
Rarely	19	24.4%
Sometimes	34	43.6%
Often	13	16.7%
Always	2	2.6%
Total	78	100.0%

Table Three represents the participants' frequency of using Chat GPT as a pedagogical learning aid within the process of learning English. It is shown through the data presented in the table that most of the participants practice this activity of using Chat GPT occasionally, with a percentage of 43.6%. Other participants reported the option (Rarely) to represent the frequency with which they use Chat GPT, with a percentage of 24.4%. Moreover, (16.7%) of the participants chose (Often) as their third option to indicate the frequency of their exposure to Chat GPT in some of the tasks assigned to learn English, followed by (12.8%) of the participants who prefer (Never). Furthermore, only a few participants declared that they (Always) use Chat GPT, with a percentage of 2.6%. The results obtained indicate that using Chat GPT is a common practice among EFL students both inside and outside the classroom. The justification of little use and exposure to Chat GPT may be due to hard and heavy access as well as little command over it.

Table 4. *The role of ChatGPT in learning*

	Frequency	Percent
Strongly agree	30	38.5%
Agree	31	39.7%
Neutral	10	12.8%
Disagree	5	6.4%
Strongly disagree	2	2.6%
Total	78	100.0%

Table Four illustrates participants' perceptions towards the role of Chat GPT in increasing students' motivation and interest to learn English through the medium of technology. It is demonstrated that the majority of participants (Agree) that using Chat GPT increases learners' motivation to learn, with a percentage of 39.7%. They are followed by other participants who selected to (Strongly agree) with a percentage of (38.5%), and (12.8%) who chose to be (Neutral) towards the statement. Moreover, a few participants decided to select (Disagree) and (Strongly Disagree) with a percentage of (6.4%) and (2.6%) respectively. These results indicate positive attitudes towards using Chat GPT as a learning pedagogical aid while they learn English both inside and outside the classroom context. The data presented in Table Four proves that Chat GPT contributes to facilitating comprehension and interaction in the overall process of learning English.

Table 5. *The role of Chat GPT for Communicative Skills*

	Frequency	Percent
I agree	64	82.1%
I disagree	2	2.6%
Neutral	12	15.4%
Total	78	100.0%

Table Five indicates the participants' perceptions towards the role of Chat GPT in improving English communication skills. It is illustrated that the majority of participants (agree) that listening to Chat GPT improves communication skills, with a percentage of 82.1%. They are followed by (15.4%) who chose to be (Neutral), whereas (2.6%) decided to (disagree) with the statement. The data collected through this question indicates that the participants have different opinions about the role of Chat GPT in improving communication skills. The divide among the participants illustrated that Chat GPT can improve all four integrated language skills by exposing EFL learners to quasi-natural real-life conversations, different accents, and vocabulary. Thus, it helps them develop better pronunciation, fluency, and overall communication skills. Furthermore, the multiple participants elaborated that imitating native speakers through the application of Chat GPT inside and outside the classroom setting will increase speech rate and way of performance helps foreign language students acquire language communicative skills. Other participants noted that Chat GPT presents learners with a variety of language aspects. This way, they can train their language skills to understand the different matters in English. Moreover, the participants declared that Chat GPT helps expand students' vocabulary through encountering new words and expressions, increases their motivation to learn, and promotes their grammar competence as well. All in all, the statistics reported that Chat GPT is useful in enhancing the students' communicative skills. The possible justification behind this role is that Chat GPT can improve communication skills because it exposes students to different speaking styles, learning styles, help them learn new vocabulary and expressions, and enhance their ability to understand and respond effectively in conversations, increases students' imagination, and provides them with interesting ideas to discuss and speak about with others. Moreover, Chat GPT also helps train students' comprehension skills to be able to respond to language input and speak their minds.

Pedagogical Implications

The interpretation and the discussion of the data collected through the questionnaire revealed the following implications:

- The majority of the participants really rely on the visual and auditory learning style since these styles contribute effectively to making the target students have a good command over English language vocabulary knowledge, as well as communicative language skills. This indicates that students could have previous learning experiences through technological means, especially Chat GPT, as part of their English learning processes, since they showed their preference for auditory tools. Indeed, they showed that most of them like using Chat GPT and actually practice this preference as much as possible.
- The majority of the participants have positive attitudes towards using Chat GPT to understand spoken language from different accents, speeds, and pronunciations, as it also improves speaking performance by exposing EFL learners to natural, real-life conversations, different accents, and vocabulary. Thus, it helps them develop better pronunciation, fluency, and overall communication skills. It shows them how the Target

Language is used in communication and how it could serve different purposes in real-life interactions. Therefore, this activity develops students' communicative competence in terms of the use of idioms and phrasal verbs. It also encourages learners to imitate this authentic performance to improve their own communication skills.

- The target sample has positive attitudes towards using Chat GPT for a variety of language aspects. This way, they can train their learning experiences and learn to understand the different aspects the communicative skills which are assigned with the English language around the world. Moreover, other participants declared that this tool helps expand students' knowledge through encountering new words and expressions, increases their motivation to learn, and promotes their grammar competence as well.
- All in all, the overall results report positive attitudes towards the integration of Chat GPT in the EFL learning process. They further recommend that teachers use this authentic language teaching tool in teaching the English language, especially for communicative skills. So, the integration of Chat GPT forms the foundation for effective language communication.
- The findings report again that most students are not frequently exposed to Chat GPT in their language learning classrooms. However, they revealed that they use ChatGPT outside the classroom. They also acknowledge that using Chat GPT could be more entertaining and engaging than conventional methods. So all the participants have positive perceptions of the benefits of using Chat GPT in the process of learning English as a foreign language, especially for this communicative end.

Conclusion

The present study provided a detailed discussion about the integration of Chat GPT as a pedagogical learning in the field of English as a foreign language education in Algebra. The study reported that Chat GPT has an effective and positive contribution to achieving the students' communicative skills at the end of the process of teaching and learning English as a foreign language. The multiple data obtained from the sample of the study a summarized for the results obtained. It showed that Students exhibited favorable attitudes regarding Chat as a pedagogical learning aid. The study finally recommends that the concerned population take into consideration the aspect of integrating Chat GPT as a supplementary language teaching and learning tool in modern education besides the traditional EFL classroom conventions, to increase students' motivation to learn and enhance their exposure to authentic language input that would improve their language communicative skills and proficiency.

Declaration of AI Refined

This document has benefited from the application of AI-driven tools. These tools were utilised to correct grammar and spelling and improve the overall writing style. It is acknowledged that the use of these technologies may introduce certain AI-generated linguistic patterns. However, the core intellectual content, data interpretation, and conclusions presented remain the sole work of the authors.

Statement of Absence of Conflict of Interest

The authors declare that there are no conflicts of interest related to the research, findings, or recommendations presented in this paper. All conclusions drawn are independent and unbiased.

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