

Artificial Intelligence and Its Implications for English Language Teaching in Indian Higher Education Institutions: Paradigms, Possibilities, and Pedagogical Challenges

***Dr.M.Umar**

Lecturer in English, Government College (Men), Kurnool, Andhra Pradesh

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Abstract

The inclusion of Artificial Intelligence (AI) in ELT at the higher education level is changing the teaching landscapes across the globe, and India is not an exception to this trend. Taking into account the linguistic plurality of India and the crucial importance of English as a medium of instruction and employability, there emerges a need for novel tools that can help to fill the gap created by conventional pedagogies. This conceptual research article aims at identifying the diverse role of AI in ELT at the higher education level in India and conversational AI, while assessing their alignment with the objectives of the National Education Policy (NEP) 2020. Furthermore, the article critically analyzes the socio-technological challenges inherent to the Indian context, including the digital divide, linguistic marginalization regarding "Indian English," academic integrity, and the readiness of faculty. The article concludes with recommendations for a synergistic "Human-AI" pedagogical model tailored to the Indian higher education ecosystem.

Keywords: Artificial Intelligence, English Language Teaching (ELT), Higher Education, India, NEP 2020, Automated Writing Evaluation, Digital Divide.

Introduction

The linguistic ecosystem of Indian higher education is complex. English functions simultaneously as a second language (ESL), an associate official language, and the primary medium of instruction in elite professional institutions (engineering, medicine, management). Consequently, English proficiency is inextricably linked to social mobility and corporate employability in India. However, the massification of higher education—evidenced by the Gross Enrollment Ratio (GER) crossing 28%—has resulted in crowded classrooms with vast disparities in students' language proficiency.

The conventional approaches to English Language Teaching (ELT), which heavily depend upon the Grammar-Translation approach or teacher-based classroom lectures, have been found to be unsuccessful in catering to the needs of the learners individually. The emergence of AI, including NLP and GenAI, signifies a complete shift in paradigms. According to NEP 2020 of India, the use of technology in the teaching-learning process has been recommended to guarantee equity and quality in education. In this paper, the usage of AI in English language teaching in Indian universities, its advantages, and distinctive challenges associated with it will be discussed.

Literature Review

AIEd has swiftly become a disruptive technology in the world of education and learning environments due to the introduction of AI technologies in the field of education for improved learning processes and disrupting the way traditional education is being conducted (Lai et al., 2023). There have been various studies done on how these tools have affected different educational sectors, especially ELT (Crompton et al., 2024).

Several systematic literature reviews have examined the prevalence of AI within ELT as it has evolved substantially since 2017 (Crompton et al., 2024). One of the earliest large-scale systematic reviews of AI in English language teaching/learning was conducted by the British Council which reviewed 43 studies published between 2014 and 2023 across all learner levels (Crompton et al., 2024). The study has provided a first of its kind insight that AI is being used mostly in five categories of speaking skills, writing, reading comprehension, pedagogical and self-regulation. However, it is interesting to note that listening did not emerge from the data as an area where AI is being significantly applied (Crompton et al., 2024).

Sharadgah and Sa'di (2022) have also carried out another systematic review of AI on the present state of affairs of the AI application in ELT by examining 64 studies throughout 2015- 2021. Their study exhibited favorable results in AI because it is useful for the development of English, translation, assessment, recognition, attitude, and satisfaction (Sharadgah and Sa'di, 2022). A meta-analysis by Xu et al. (2025) including 15 studies with 2,156 participants, further supports these claims, revealing a large positive effect for AI-assisted language learning across various contexts.

Krishnan and Zaini (2023) have reviewed 15 papers from 2020 to 2024 in their review study about AI-driven tools such as ITS, game-based application and automatic assessment tool. Some of the respectable AI driven platforms or tools are WordTrek, CHEN-slate, Kahoot, Quizizz, and Quizalize. From the research conducted by Daud et al. (2025), it is clear that AI assists in English teaching mostly through tools such as grammar checkers,

chatbots, and language learning application. Besides, writing assistance is the most used application, accounting for 54.55% of the literature reviewed.

As mentioned above, AI tools have shown promising results in improving various English language skills, including speaking, writing, reading, and vocabulary development (Crompton et al., 2024; Sharadgah& Sa'di, 2022). Research findings from Heathco (2025) reported that ESL learners gained much from AI-based learning platforms over the convention means of skill improvement as Generative AI solutions such as chatbots allow learners to learn languages more effectively as AI provide instantaneous translations, support of pronunciation, and fix grammar errors.

A systematic review of studies by Sahli et al. (2024) on AI's impact on university students' writing skills found that AI timely feedback enhances coherence and cohesion, enhances cognitive engagement through reflection in action, immediate decision-making, and responsive action. Koraishi, 2024 focused on evaluating ChatGPT's reliability in grading IELTS Writing Task 2, revealing its impressive capabilities in understanding and evaluating academic writing. The interactive nature of ChatGPT allows students to debate mistakes, ask for clarification, and receive examples or rewritten essays predicted to improve their IELTS scores (Koraishi, 2024).

Moreover, Chen & Chen (2020) also suggested that AI-enabled ITS can enhance reading comprehension and vocabulary development of students better than conventional approaches owing to its customized learning pathways that suit individual needs and differences, leading to increased fluency and language accuracy (Crompton et al., 2024). Moreover, according to Davoodi (2024), AI plays a very significant role in bilingual education and has great potential to bridge language gaps by providing personalized translation and culturally tailored content. Not only does it have something to do with language learning but is related to cultural proximity as well which is highly beneficial for ESL students (Davoodi 2024).

Recent studies suggest that AI is beneficial for speaking, especially pronunciation. Crompton et al (2024) found that pitch-flatness and intonation are traits which can be removed through AI systems that rely on visual pitch displays such as spectrograms to support the improving of children's speech. In addition, AI chatbots (e.g., voice assistants, etc.) have been shown to support conversation and language learning (Crompton et al., 2024). Xu et al. (2025), Google Assistant and ELSA Speak were used as well to develop students' conversational skills. One educator highlighted the use of Google Assistant in helping learners to practice conversation functions in terms of fluency, intonation and pronunciation. These AI-driven communication platforms facilitate authentic dialogues for the students, contributing to the development of oral communication skills (Xu et al., 2025).

Another important use case for education is AI's role in automating administrative duties. AI-mediated assessment tools are identified as an emerging area in reviews spanning adaptive placement tests and automatic scoring. Teachers are spending an awful lot of their precious time grading and administering, but not those companies that utilise AIEd such as those using Turnitin and Grade scope. These instruments offer quick, unbiased feedback and analyse several language skills at once. Mabuan (2024) explored how AI-based tools such as ChatGPT could enhance grading and provide rapid feedback for language learners. It means that teachers can use all their energy to provide exciting, differentiated lessons, rather than being caught up in the daily administrative side of the system.

However, along with the benefits, there are some key associated challenges when it comes to the integration of AI in ELT. Crompton et al. (2024) identified few technical barriers consisting of tool breakdown, poor connection and wrong AI. In addition, current limitations of AI systems often differ from the users' expectations with regard to improved performance and natural interaction with humans (Crompton et al., 2024). Also, issues in the usage of AI include academic dishonesty and overreliance on AI tools (Daud et al., 2025). Other issues that may be problematic are classroom management issues and AI-related distractions. Therefore, a cautious and balanced integration will help to eliminate distractions and preserve human engagement (Xu et al., 2025).

In summary, The AIEd systems are designed to help in the learning process as they increase the performance of the students as well as assisting the teachers through the use of AI to meet various needs of the learning process (Lai et al., 2023). The adoption of AI within the educational context has been fast due to the efficiency with which it helps in provision of customized learning process, proper administration procedures, and instantaneous feedback provision, hence making the educational process more effective and inclusive (Chan & Tang, 2024; Pang et al., 2024).

Globally, AI and ELT—often termed Computer-Assisted Language Learning (CALL) or Mobile-Assisted Language Learning (MALL)—has evolved from rudimentary drill-and-practice software to sophisticated conversational agents. Scholars like Chapelle (2001) laid the groundwork for evaluating CALL, emphasizing the need for linguistic accuracy and learner engagement.

In the Indian context, research has historically focused on the use of basic technology (audio-lingual labs, multimedia). However, post-2020, there has been a surge in literature exploring AI. Studies by Indian researchers (e.g., Sharma & Mishra, 2021) highlight the efficacy of AI-driven grammar checkers in improving writing skills among tier-2 city college students. Despite this, a significant gap remains in longitudinal studies assessing how AI

impacts communicative competence and critical thinking in the Indian ESL classroom, where mother-tongue interference (L1 transfer) is a major hurdle.

Research Methodology

This study employs a qualitative, conceptual research design. It synthesizes existing empirical studies, policy documents (specifically NEP 2020 and UGC guidelines), and theoretical frameworks of second language acquisition (SLA) to analyze the integration of AI in Indian ELT. The analysis is categorized into pedagogical applications, socio-technological challenges, and future directives.

Benefits

Teaching The introduction of Artificial Intelligence (AI) in English Language Teaching (ELT) has brought about a major change in the approach and effectiveness of language teaching, particularly for commerce students in India. There is a growing tendency to use AI-enabled technologies to make personalized teaching, enhance engagement, and increase language proficiency in a way that could not be achieved through conventional teaching alone. From a commerce education point of view, since the students need effective language skills in order to operate in an international environment, the use of AI becomes particularly relevant.

1. Personalized Learning and Adaptive Teaching

Perhaps the best thing about AI in ELT is the ability to personalize education. As opposed to the one-size-fits-all models that traditional teaching methodologies follow, AI models can personalize education based on the real-time data of learners' performance. Examples of such tools include the intelligent tutoring systems and language learning applications (Duolingo, ELSA Speak, and Scribe Sense). The programs personalize the process by adjusting the difficulty level, repetition frequency, and form of feedback (Hwang et al. 598). It helps in providing personalized instruction to commerce students as they may differ in their English proficiency and objectives related to business communication. Apart from that, personalized education increases the autonomy of learners as they can access the material anytime and anywhere, they want to learn independently. It is very important for Indian students as they have to manage both academic responsibilities and internships.

2. Enhanced Writing and Speaking Proficiency

The utilization of AI is very important when it comes to enhancing productive language skills in the form of speaking and writing skills that are vital in commerce-related subjects. Grammarly and QuillBot are applications that can be used to give real-time feedback about the grammar, coherence, tone, and vocabulary used to write, hence enabling students to develop good writing skills (Raman and Sharma 80). In business communication, where formality and accuracy is required, such applications will assist students to live up to

industry standards. Speech recognition application is another example of AI technology that will assist students in improving pronunciation, intonation, and fluency. This includes applications such as Google Read Aloud and ELSA Speak which utilize machine learning to analyze and give feedback about pronunciation errors..

3. Real-Time Assessment and Feedback

Timely feedback is an integral part of learning. AI allows for automatic assessment of language output, such as essays, reports, and emails and provides feedback instantly and in detail. Not only does this allow for addressing mistakes but also promotes continuous learning processes. With conventional learning methods, in particular in classes with numerous students (which is common in India's universities), providing such feedback is hard (Zawacki-Richter et al. 11). Additionally, AI allows for tracking of the learning process longitudinally, providing both learners and teachers with information about their progress and problem areas. For instance, dashboards offered by Microsoft Reading Progress or Class kick give insights to be used by the teacher for adjusting the classroom lessons.

4. Contextual Specific Language Practice

A distinct advantage of using AI in ELT among commerce students is the possibility of simulating real-life conversations within their domains. For example, through the use of chatbots in AI, it is possible to simulate conversations with customers, negotiate business deals, and write professional emails that would allow students to hone their skills with vocabulary and situations in real-life settings. This will improve the functionality and culturally appropriate usage of language by the students (Patel 114). This is because one of the main goals of teaching English in commerce classes is bridging the gap between the academic version of the language and its professional usage.

5. Increased Engagement and Motivation

Learning environments that use artificial intelligence tend to be interactive, gamified, and stimulating visually, leading to increased engagement by the students. Elements of gamification like points and levels make language learning fun and exciting, reducing intimidation experienced by students who feel unconfident in their language capabilities. This is highly relevant in India, where English is usually the second or even third language of most students, causing the students to experience language anxiety (Kumar and Sharma 91). The use of AI also promotes multi-modal learning whereby text, audio, and visuals are used at once. For instance, AR in AI-based learning applications makes abstract language ideas concrete.

4. AI Interventions in Indian ELT: Current Applications

4.1. Automated Writing Evaluation (AWE)

In Indian universities, evaluating descriptive English papers for thousands of students often leads to delayed feedback and subjective grading. AWE tools like Grammarly, Turnitin, and custom AI graders are being integrated to provide instantaneous, formative feedback. For Indian students who struggle with syntax, collocations, and article usage (common issues due to L1 transfer from Indo-Aryan or Dravidian languages), AWE acts as a 24/7 tutor, highlighting errors and suggesting corrections before final submission.

4.2. Conversational AI and Chatbots (GenAI)

The introduction of Large Language Models (LLMs) like ChatGPT, Gemini, and Claude has democratized conversational practice. In India, many students suffer from "English anxiety" or fear of peer judgment when speaking in class. AI chatbots provide a judgment-free zone for practicing role-plays (e.g., job interviews, group discussions). Furthermore, text-to-speech (TTS) and speech-to-text features allow students to practice pronunciation and intonation, addressing the disconnect between "textbook English" and spoken communicative English.

4.3. Adaptive Learning Platforms

AI-driven platforms (e.g., Duolingo, custom LMS integrations) utilize algorithms to assess a student's current proficiency level and tailor the curriculum accordingly. In a typical Indian classroom, a student from a vernacular-medium school may be placed alongside a student from an elite English-medium school. Adaptive AI ensures that the former receives foundational grammar and vocabulary, while the latter is challenged with advanced discourse analysis, thereby enabling personalized learning at scale.

4.4. AI in Translation and Bilingual Education

NEP 2020 strongly advocates for mother-tongue/regional language instruction in early grades, transitioning to English later. AI translation tools are increasingly used in higher education to help students comprehend complex academic texts by translating them into Hindi, Tamil, or Telugu. This scaffolding allows students to grasp conceptual knowledge without being entirely hindered by linguistic barriers.

5. Challenges and Limitations in the Indian Context

While the potential is vast, the deployment of AI in Indian ELT is fraught with contextual challenges:

5.1. The Digital Divide and Infrastructural Bottlenecks

The most glaring issue is the digital divide. While elite institutions (IITs, central universities) have high-speed internet and access to premium AI tools, students in state universities and affiliated colleges in rural or semi-urban areas struggle with erratic connectivity, lack of

smart devices, and outdated computer labs. AI risks exacerbating existing educational inequalities rather than bridging them.

5.2. Linguistic Bias and "Indian English"

Most commercial AI tools are trained predominantly on Standard American or British English corpora. They frequently flag Indian English usages (e.g., "prepone," "do the needful," or specific Indian idiomatic structures) as grammatically incorrect. This creates a pedagogical conflict: should Indian educators use AI to enforce "native-speaker" norms, or should they encourage Indian English as a legitimate dialect? Currently, AI acts as an assimilative force, often marginalizing indigenous linguistic expressions.

5.3. Academic Integrity and Over-reliance

The ease of generating essays and assignments using GenAI has led to an epidemic of academic dishonesty across Indian campuses. Faculty members are often ill-equipped to detect AI-generated content or differentiate it from heavily paraphrased student work. More detrimentally, over-reliance on AI stunts the cognitive process of writing; students become passive recipients of AI output rather than active constructors of language.

5.4. Teacher Agency and AI Literacy

There is a pervasive fear among Indian English faculty regarding job displacement. More importantly, there is a severe lack of AI literacy. Many educators view AI merely as a plagiarism-detection tool rather than a pedagogical assistant. Without adequate training, teachers cannot guide students on how to prompt AI effectively (prompt engineering) or how to critically evaluate AI-generated text for hallucinations and biases.

6. Discussion: Towards a Synergistic Pedagogy

The findings suggest that AI should not be viewed as a replacement for human teachers, but rather as a "co-pilot." In the Indian context, the socio-emotional aspects of teaching—motivating first-generation learners, understanding cultural nuances, and fostering critical debate—remain exclusively human domains.

A synergistic model requires shifting the teacher's role from a "knowledge transmitter" to a "facilitator of learning." For instance, an instructor can use class time for high-order tasks (debates, critical analysis of literature) while offloading low-order tasks (basic grammar correction, vocabulary drilling) to AI.

Furthermore, India must invest in developing localized AI models. An AI trained on a corpus of Indian English, capable of understanding the phonological and syntactical variations of Indian learners, would be far more effective than off-the-shelf Western software.

7. Recommendations

- Curriculum Restructuring: University Grants Commission (UGC) should mandate modules on "AI for Academic Writing and Communication" within the Ability Enhancement Compulsory Courses (AECC) offered in the first year of all undergraduate programs.
- Faculty Development Programs (FDPs): Institutions must conduct intensive FDPs focusing on AI literacy, prompt engineering, and AI-assisted rubric design for English faculty.
- Formulation of AI Policies: Indian universities must draft clear, context-specific policies regarding the ethical use of AI, moving away from outright bans to guidelines on how to appropriately cite or acknowledge AI assistance.
- Public-Private Partnerships (PPP): To overcome the digital divide, the government and EdTech companies should collaborate to provide low-bandwidth, offline-capable AI ELT applications tailored for rural universities.

8. Conclusion

The integration of AI in English Language Teaching within Indian higher education is an inevitable and potentially transformative shift. It offers scalable solutions to historical problems such as large class sizes, lack of personalized feedback, and limited conversational practice. However, technology is not inherently emancipatory. In India, the success of AI in ELT hinges on addressing the digital divide, mitigating linguistic biases against Indian English, and fundamentally rethinking the role of the teacher. By adopting a critical, human-centric approach to AI integration, Indian higher education can equip its youth not just with English proficiency, but with the digital literacies required to thrive in the 21st-century global workforce.

References

- Chapelle, C. A. (2001). *Computer applications in second language acquisition: Foundations for teaching, testing and research*. Cambridge University Press.
- Chen, & Chen, W. 2020. Intelligent tutoring systems and their application in English language learning. *Journal of Educational Technology & Society* 23(4): 45-57.
- Crompton, H., Edmett, A., Ichaporia, N., & Burke, D. (2024). AI and English language teaching: Affordances and challenges. *British Journal of Educational Technology*, 55(6), 2503-2529.

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- Davoodi, A. (2024). Crafting innovative paths in non-linear professional learning for bilingual education: the role of connectivism in the age of AI. *Professional Development in Education*, 1-17. <https://doi.org/10.1080/19415257.2024.2421492>.
<https://www.educationjournal.info/article/387/5-3-75-794.pdf>
- Government of India. (2020). *National Education Policy 2020*. Ministry of Education.
- Koraishi, O. (2024). The Intersection of AI and Language Assessment: A Study on the Reliability of ChatGPT in Grading IELTS Writing Task 2. *Language Teaching Research Quarterly*, 43, 22-42.
- Krishnan, V., & Zaini, H. (2025). A Systematic Literature Review on Artificial Intelligence in English Language Education. *International Journal of Research and Innovation in Social Science*, 9(3s), 17-27.
- Kukulka-Hulme, A. (2020). Mobile Assisted Language Learning: A critical analysis of its historical trajectories and future prospects. *ReCALL*, 32(3), 197-211.
- Lai, T., Zeng, X., Xu, B., Xie, C., Liu, Y., Wang, Z., Lu, H., & Fu, S. (2023). The application of artificial intelligence technology in education influences Chinese adolescent's emotional perception. *Current Psychology*, 43(6), 5309. <https://doi.org/10.1007/s12144-023-04727-6>.
- Sharadgah, T. A., & Sa'di, R. A. (2022). A systematic review of research on the use of artificial intelligence in English language teaching and learning (2015-2021): What are the current effects? *Journal of Information Technology Education: Research*, 21. <https://doi.org/10.28945/4999>.
- Sharma, R., & Mishra, S. (2021). Efficacy of Automated Writing Evaluation tools in enhancing the writing skills of ESL learners in Indian tier-2 cities. *Journal of Educational Technology & Society*, 24(4), 112-125.
- University Grants Commission (UGC). (2021). *UGC Guidelines for Dual Degree and Online Education*.
- Warschauer, M., & Healey, D. (1998). Computers and language learning: An overview. *Language Teaching*, 31(2), 57-71.
- Xu, G., Yu, A. & Liu, L. (2025). A meta-analysis examining AI-assisted L2 learning. *International Review of Applied Linguistics in Language Teaching*. <https://doi.org/10.1515/iral-2024-0213>.
- Zawacki-Richter, O., Marín, V. I., Bond, M., & Gouverneur, F. (2019). Systematic review of research on artificial intelligence applications in higher education—where are the educators? *International Journal of Educational Technology in Higher Education*, 16(1), 1-27.