

AI TECHNOLOGY TRANSFORMS THE WAY LANGUAGES ARE TAUGHT AND LEARNED.

1.Kartheek Ravipati (M Tech. CSE, Regd. No:2301050031)

Koneru Lakshmaiah Education Foundation (KLEF), Vaddeswaram, Green fields, Guntur,
Andhra Pradesh, India -522302

e-mail.ravipatkartheek@gmail.com

2.Dr.Kumara Swamy Ravipati, Asst. Prof. of English

Koneru Lakshmaiah Education Foundation (KLEF), Vaddeswaram, Green fields, Guntur,
Andhra Pradesh, India -522302

e.mail.rkumaraswamy42@gmail.com

DOI : 10.48047/IJFANS/11/ISS4/128

Abstract

AI stands for artificial intelligence, a computer-based replication of human intelligence meant to act like humans. AI is one of the driving forces making teaching and learning more accessible in educational institutions. AI technology brings an opportunity to enhance English linguistic competence. Students may comprehend language more quickly as many different learning technologies are accessible. They could access a wide variety of apps that are built on AI technology. AI systems use machine learning to carry out specific tasks, such as providing feedback on learners' written work, translating a written text, administering automated tests or providing structured conversation practice via a chatbot app. The practice of Artificial intelligence technology to study a language both inside and outside the classroom keeps students motivated. AI technology can be used in pronunciation improvement by the Pronounce app, equipped with Chat GPT technology. It goes beyond being a pronunciation checker as it serves as a valuable partner in regular English- practice. It also provides learners with immediate feedback, interactive discussions. It can examine learners' speech forms, and boosts articulation and accent. This new approach supports learners sound more fluent in pronunciation and speech practice. AI can help with vocabulary extension, grammar rectification, and language usage. This paper shows the use of AI technologies to attain language proficiency at all levels and backgrounds.

Key words: Artificial Intelligence, Technology, Approach Language Skills.

1.Introduction

The rapid advances in Artificial Intelligence of the past few months are likely to transform the ELT class room and revolutionize the way in which dialects are taught and learnt more generally. Chat GPT uses AI to generate human-like responses to text-based queries, provided that quick and enlightening reactions. From chatting to trivia and creative content, it's shifting the way we interact with technology. The merger of Artificial Intelligence (AI) technologies into various facets of education has received a lot of attention in current years. Outdated methods to foreign language education have often been proved sub-standard curriculum, one-size-fits-all instructional approaches, and limited personalization. Learners face difficulties in terms of individualized pacing, practice opportunities, and fast feedback, all of which are critical for

active language learning. These limits have incited a search for advanced methods that employ the control of AI to brush up learning skills.

AI technologies have altered many segments, including education. AI has opened a new era of adapted learning, data-driven insights, and adaptive training. Large amounts of learner data can be examined by machine learning algorithms to identify patterns, preferences, and areas for perfection. This allows educators to custom content, delivery, and valuation, improving learner's outcomes. These technologies can stretch learners' real-time feedback on their pronunciation and grammar, allow for interactive practice with AI agents, and even simulate reliable language practice. AI can enhance the language learning experience by providing tailored, interactive, and effective language instruction to learners of all levels and backgrounds. This study briefly examines how AI can transform non-native language attainment.

Limitations of the Study:

1. To compare and contrast the efficacy of AI-driven language learning platforms to traditional methods.
2. To examine the effect of personalized AI-based instruction on student language acquisition.
3. To explore the potential of artificial intelligence (AI) technologies for improving Second language (English) outcomes.

2. Literature Review:

AI technologies have reshaped language teaching and learning with its innovative tools to develop lingua skills. AI tools can provide immediate feedback, gifted content references, and modified data. For instance, Duolingo, a common verbal education app, uses AI algorithms to adapt exercises based on learners' progress and performance, resulting in a personalized learning experience (Dodigovic, 2005; Last, 1989; Seda, 2022).

The effectiveness of AI-powered language learning platforms has been proved by research. A study into the effect of an AI-based language learning app on learners' proficiency was conducted by Al Ayub Ahmed et al. (2022) and Alvons Habibie IAIN Sultan Amai Gorontalo (2020). When compared to traditional classroom methods, the app significantly improved learners' vocabulary retention and speaking skills. Likewise, Granados-Bezi, E. (2015) found that learners exposed to AI-supported instruction demonstrated higher motivation and performance outcomes. AI technologies enable personalized learning experiences by analyzing learner data and adapting content delivery accordingly. Peng et al. (2019) and Schwartz et al. (2014) emphasized importance of AI in facilitating differentiated instruction that appeals to learners' strengths.

3. Lesson Planning- Chat GPT

Teachers are vastly skilled professionals with industry involvements have been wisely considered to train them in the identification of learners' needs and the shaping of lessons to meet these. The feat of such an approach is based on effective planning, and this is a skill that teachers spend years evolving ChatGPT. It can, to some extent, do all these things in the wink of an eye. So, it seems like an apt moment to reflect on how different industries will adapt to this new reality, and important to imagine the implications of AI for our own ELT sector. However, Chat GPT does have the potential to backing new teachers in lesson planning and to speed up the process for

others. Chat GPT is also accomplished with interacting in real time with learners and of revising their language errors. The software therefore has the potential to become an invaluable tool for learners hoping to improve their writing or general language skills, giving them a companion with whom they can chat any time and to whom they can ask questions about grammar or vocabulary as they arise. It certainly seems wise for teachers to begin harnessing that potential, setting homework, for instance, that makes use of the learner's new personal tutor.

4. Writing Skills

An AI writing tool is a software application that utilizes artificial intelligence algorithms. It assists users in generating, editing, and enhancing written content. Quill Bot is a tool of paraphrasing will rephrase your sentence, paragraph, essay, or article to perfect the text. It quickly rephrases and improves the writing skills with fluency, and unlimited styles of writing with new vocabulary with synonyms, and tone of language. It can be accessed with different dialects. It saves the writers time by providing a middle ground between changing the input text and keeping its meaning. It improves language and fixes grammatical errors. It also rewrites ideas in more scholarly and professional way which presents the text the way more people can comprehend. It also conveys the text with conciseness and clarity. QuillBot has several other tools which helps the users experience of a smooth writing. These tools utilize natural language processing (NLP) and machine learning techniques to analyze and understand the context. AI assistance in various aspects of writing, helping users improve their writing skills, enhance content quality, and save time in the writing process. Besides choosing the right AI tool, you need to learn how to use it and the ways it can help you to improve your everyday writing.

The following are some of the practical strategies for an effective writing:

4.1 Lexis Expansion:

AI-powered writing tools facilitate words expansion by providing a vast array of synonyms and alternative word choices. This enables writers to have a collection of words to use and avoid monotonous repetition, resulting in more captivating and dynamic content.

4.2 Plagiarism Detection:

With the assistance of AI, writers can effectively detect and eradicate unintentional plagiarism. AI tools compare written content against a comprehensive database of published works. As a result, they can swiftly identify any instances of copied material. By rectifying these issues, writers can ensure originality, integrity, and credibility in their work.

4.3 Alternate the Piece of Content:

With the different paraphrasing modes available for the writers, they will have an opportunity to write the same piece of content differently. Among the top AI rewriting tools available, Paraphrasingtool.ai features the maximum rewriting modes as shown in the figure below: It provokes creativity and versatility in writers. It can ensure that they will have different sentence structures, word choices, and phrasing options with AI tools.

4.4 Refining Content Value:

AI allows writers to improve the quality of their content by offering valued insights and references. These tools analyze the context, purpose, and tone of the target audience. In return, it provides ideas to refine the structure, clarity, coherence, and overall efficacy of the writing.

4.5 Shortening Complex Sentences:

AI tools help writers streamline their writing by identifying and simplifying complex sentence structures. They are trained to shorten convoluted sentences into concise and easily digestible components. It helps writers to enhance readability, ensuring that their ideas are effectively communicated and understood.

4.6 Detecting Errors in Content:

AI assists in meticulously scanning written content, identifying errors and inconsistencies. For any grammatical mistakes or factual inaccuracies in formatting or tone, AI paraphrasing tools help writers maintain accuracy in their work. Revising tools foster a habit of critical self-review and error detection. Prompt feedback and suggestions for improvement encourage writers to carefully review their write up. This process cultivates a keen eye for detail and a commitment to creating high-quality content.

Quick Redrafting of already written content streamline the process by providing different ideas and phrasing options. It enables writers to effortlessly rework their content, making it more engaging, coherent, and impactful, all while saving time and effort.

4.7 Writer's Block:

An AI writing tool provides a source of inspiration. It generates writing prompts or suggesting topic ideas based on popular trends or user preferences. As well, the tool's ability to offer stylistic recommendations helps writers break free from the constraints of their current writing patterns. Unparallel writing assistance provided by AI rewriting tools cannot be denied. It is up to the writers to learn how to get maximum benefits from an AI system. According to the writing experts, the above-mentioned tips are the most effective for learning to write better. Whether you are a beginner or a professional and want to opt for AI tools for writing.

5. Freshness in Articulation

AI in Pronounce provides the unique opportunity to elevate the way we approach English pronunciation and speaking. Its competence to analyze your speech, identify potential areas of improvement, and provide real-time feedback takes English pronunciation, especially the American accent, to a new level. It prompts a shift from merely identifying the correct pronunciation to ideating on how to speak English in the most impactful manner.

By offering the ability to record your voice, engage in conversational practice with a GPT-powered chat, and read aloud various text types, pronounce paves the way for a comprehensive English conversation practice. The Pronounce app is akin to a knowledge-work collaborator, fueling your progress in English speaking practice and inspiring you to ask questions, which leads to deeper learning.

With Pronounce, you're not only improving your English pronunciation and refining your American accent but also redefining the boundaries of your language skills. For instance, pronounce doesn't merely stop at grammar and vocabulary. It also recognizes accents,

encouraging you to repeat words after a native speaker, fostering an authentic, immersive language learning experience.

6. Linguistic Knowledge:

AI algorithms are used by adaptive learning platforms to create customized learning practices for distinct learners. Through incessant study of their communications with the content, these daises assess learners' strengths, weaknesses, and learning styles. These platforms provide a customized learning path that maximizes engagement and mastery by changing the strain level, content type, and marching of drills (Peng et al., 2019; Schwartz et al., 2014). Platforms such as Babbel and Rosetta Stone, for example, use AI-driven adaptive learning with dynamism to adjust content delivery based on learner presentation, ensuring that they take embattled practice wherever required.

7. Discussion

Artificial intelligence and language learning blend naturally when it come to virtualteaching. By now a crucial factor of segments such as eCommerce, FinTech, and marketing, AI is rapidly fetching typical training in educationsegment. Virtual study has turned out to be a revolution with the fast-tracked outline of AI to English language learning, which is trendy and a big shift. AI-powered language studying combined with the use of neural network capabilities is resulting in a new era of education for scholars and teachers alike. Mastering a non-native language can be problematic. Especially when traditional methods of teaching have parameters that make it tougher for learners to bloom. Textbooks, videos, and audio recordings include useful content but lack personalization. This may result in students progressing to the next level before they meticulously comprehend the material. Lecture learning also has complications. Although a teacher or an out-sourcing expert may modify the curriculum to each student, linguistic learners often face anxiety when speaking a non-native language. In schools, speaking in front of the same age group increases this anxiety and can hinder the process for pupils who may otherwise be effective. AI technology can solve these issues. Language learning apps and online programs can be used in privacy and at a pace that suits each student. However, many apps and programs apply a one-size-fits-all approach that doesn't customize the content, goals, or schedule to each learner. AI technology promise a new turning point. A language learning chatbot can respond to messages with adapted, appropriate data. Language learners can use a chatbot to practice conversations without the anxiety they may feel when chatting with individual.

Machine Translation

AI technologies such as neural machine translation advance the quality of translations and support the foreign languages. One method known as machine translation as a bad model aids scholar find and fix errors in the machine-translated text. In due course, this allows students to learn more about the language and improve comprehension, writing, and vocabulary.

Advantages

AI offers several benefits in language learning, making the process more efficient, engaging, and effective. Here are some of the key advantages: AI can adapt to the individual learning needs and pace of each student. It can create personalized learning paths and provide customized content based on the learner's proficiency level, strengths, and weaknesses. AI-driven language learning resources are available 24/7, allowing learners to practice and study whenever and wherever they

want. This accessibility makes it easier for individuals to fit language learning into their busy schedules. AI can make language learning more engaging through gamification, interactive lessons, and chatbots. These features can make the learning process fun and motivating, which can help learners stay committed to their studies.

AI can generate language drills, quizzes, and practice materials, ensuring a constant supply of fresh and relevant content. This variety keeps learners engaged and prevents boredom. AI-driven language learning tools can leverage NLP to analyze and understand the context of sentences, making lessons more contextually relevant and improving comprehension. AI can support the learning of multiple languages simultaneously, allowing learners to explore different languages at their own pace. Virtual reality and AI can create immersive language learning experiences, where learners can interact with native speakers and practice in realistic environments. Overall, AI enhances the language learning experience by tailoring it to individual needs, providing immediate feedback, and making learning more engaging and accessible. It has the potential to transform the way languages are taught and learned.

Machine Learning

Machine learning (ML) is a branch of AI that allows systems to become more effective at performing tasks and making decisions over time. Deep learning is a type of machine learning that uses algorithms designed to replicate the human brain. Each algorithm learns from a vast dataset. Dimensionality reduction algorithms make these datasets more manageable. Hundreds of dimensionality reduction algorithms exist for mastering foreign languages. For example, the Decision Tree algorithm helps AI systems make smart, data-driven decisions. The K-Means and Naïve Bayes algorithms help AI classify data. Natural language processing (NLP), Collocation Extraction, and Point Mutual Information (PMI) are three of the main algorithms used for language learning. NLP allows machines to read and understand human language. Collocation extraction is used to retrieve information, classify documents, and solve language generation problems, while PMI measures the probability of two words occurring together. For learning a language with AI, chatbots are indispensable. Prime examples of deep learning, they become increasingly familiar with users' speech and text patterns over time. By replicating aspects of a human tutor's role, such as by holding interactive conversations, a chatbot offers a level of personalization that other teaching methods lack.

AI Boosts the Learning skill

AI plays a significant role in accelerating language learning. Students will flourish with personalized content, instant feedback, and adaptation to individual needs. Meanwhile, the teacher's role is made easier with the help of language bots, machine translation, and customized textbooks. AI algorithms can adapt to individual learners' needs and proficiency levels. These algorithms should continuously assess a learner's progress and adjust the difficulty of lessons accordingly. Implement speech recognition technology to assess and improve learners' pronunciation and speaking skills as well as writing skills. AI can compare a learner's speech to native speakers' pronunciation to offer targeted feedback. AI develop interactive language exercises and activities that engage learners and encourage active participation. It offers a diverse range of content, including texts, audio, video, and interactive materials, to cater to different learning styles. AI-powered language learning platform is accessible across various devices and operating systems, making it convenient for learners to access lessons anytime,

anyplace. AI can complement traditional language instruction. AI can assist teachers by providing data on individual student progress and suggesting customized materials.

AI Incorporated by Global Universities

Lingua skill is an online English test developed by experts by Cambridge University that uses artificial intelligence capabilities to make sure that test content is tailored to a candidate's specific performance. It also includes a high-tech auto marking feature. Lingua skill is a quick and convenient online test to help organizations check the English levels of individuals and groups of candidates, powered by Artificial Intelligence technology. It tests all four language skills - speaking, writing, reading and listening - in modules. Cambridge Assessment English's cutting-edge English test for corporates, schools and universities and other organizations.

6. Findings

The current study's findings highlighted AI-driven language learning's promising future. As AI technologies advance, they have the potential to improve personalized learning experiences even further. With improved natural language understanding and generation, AI systems will be able to engage learners in more complex and nuanced conversations, simulating real-global language. The combination of AI and Virtual Reality (VR) and Augmented Reality (AR) could result in immersive language learning environments that allow learners to practice language skills in realistic contexts. Furthermore, collaborative AI platforms could enable peer-to-peer language exchange, connecting learners with native speakers all over the world (Peng et al., 2019; Schwartz et al., 2014).

AI-powered language learning can encourage all-time learning. Learners can continue to practice and improve their language skills even after finishing formal language courses. AI-powered language learning tools can be more cost-effective than traditional language courses or tutoring, making language learning accessible to a wider range of people. Learners admired the instant feedback provided by AI-driven exercises, saying it enhanced their self-confidence and motivation to practice. Conversations with language learning chatbots were particularly well-received, with learners praising the interactive nature of the dialogues.

When AI-assisted learning compared to traditional methods, it was clear that AI incorporation was preferable. Learners who used AI tools exhibited improved speaking and writing abilities, which can be attributed to the real-time feedback provided by speech recognition technology (Granados-Bezi, 2015; Mohan, 2018; Bhavsar et al., 2022). AI technologies can supplement and potentially beat traditional approaches to personalized learning practices. The study revealed several advantages of AI-based language learning. Personalization emerged as a significant strength, allowing learners to engage with content that is appropriate for their level of proficiency and learning pace (Dodigovic, 2005; Last, 1989; Seda, 2022). AI technologies' real-time feedback addressed learners' immediate needs for correction and improvement. Moreover, AI promotes creative review by producing unique, possibly transformative questions. These queries stimulate a deeper empathy of the English language and foster innovative approaches for language perfection.

This study provides a complete outline of the incorporation of artificial intelligence (AI) in language education, mainly in the context of foreign language learning. It highlights the potential profits of AI-driven language learning daises, such as personalized learning experiences, direct

feedback, and adaptive content delivery. The study also underscores the positive impact of AI on learners' proficiency, especially in speaking and writingskills. The key findings of this study suggest that AI can pointedly improve language learning includes the following:

- 1.AI can complement human instructors by automating administrative tasks, grading, and data analysis, allowing teachers to focus on mentoring and coordinating learning processes.
2. AI algorithms can analyze learner data and tailor content and exercises to individual needs, pacing, and preferences. This personalized approach enhances engagement and mastery.
- 3.AI-based platforms provide immediate feedback on pronunciation, grammar, and language usage, allowing learners to correct mistakes in writing as well as speaking. It regularly updates and improves the AI system based on user feedback and advances in AI technology.
4. Learners often report increased motivation and engagement when using AI-driven language learning tools, particularly chatbots and interactive dialogues.
5. AI-powered language learning can include real-world applications like translation and conversation simulations. Learners can practice their language skills in practical scenarios, preparing them for real-life interactions.
- 6.AI can assist learners in understanding spoken language by providing transcriptions, translations, and explanations. This is particularly helpful for learners to improve their listening skills.

Conclusion:

Thus, AI can enhance the language learning experience by providing tailored, interactive, and effective language instruction to learners of all levels and backgrounds. It's time to see AI not merely as an automation tool but as a partner in our drive towards effective communication and innovation.AI offers support for multiple languages, allowing learners to choose the language they want to learn and switch between languages as needed. The study suggests that as AI technologies continue to advance, language learning to the next level. The integration of AI with virtual realityand augmented reality may create immersive language learning environments, and collaborative. AI platforms could facilitate global language exchange.The collaboration of AI and human interaction in tools like QuillBot signifies a big shift in the realm of speaking and writing in English. This collaborative interaction between humans and AI has the potential to unlock untapped innovative possibilities.

Acknowledgements

This work would not have been possible without the cooperationof English Department of KLEF Deemed to be University. We thank the HOD English Dr. Vishnu Divya for her support to promote Lingua Skills in the aspect of English. We sincerely thank the other colleague Dr. Madhu Murthy, Associate Professor of English for his guidance to choose the topic.

References

1. Mohan, D. (2018). Flipped classroom, flipped teaching and flipped learning in theforeign/second language post–secondary classroom. *Nouvelle Revue Synergies Canada*, 11. <https://doi.org/10.21083/nrsc.v0i11.4016>

2. Granados-Bezi, E. (2015). Strategies to transform the foreign language classroom and increase learning outcomes with the flipped model. In *Implementation and Critical Assessment of the Flipped Classroom Experience* (pp. 60–73). IGI Global. <http://dx.doi.org/10.4018/978-1-4666-7464-6.ch004>
3. Heift, T., & Schulze, M. (2007). *Errors and Intelligence in Computer-Assisted Language Learning: Parsers and Pedagogues*. Routledge.
4. Dodigovic, M. (2005). Artificial intelligence in second language learning: Raising error awareness. *Multilingual Matters*.
5. Last, R. W. (1989). *Artificial intelligence techniques in language learning*.
6. 15.S. Yin, C. R. Johnson, and Y. Wang, "Adaptive low noise amplifier design for SDR and cognitive radios," in *Proceedings of the 2010 IEEE Radio and Wireless Symposium, 2010*, pp. 65-68.
7. 16.P. D. Wang, C. W. Chen, and Y. W. Wu, "A 2.4 GHz low noise amplifier with an adaptive digital gain control for 802.11b WLAN," in *Proceedings of the 2003 IEEE Radio Frequency Integrated Circuits Symposium, 2003*, pp. 19-22.
8. 17.C. C. Lee, W. P. Lin, and Y. L. Chang, "A novel adaptive RF low noise amplifier for wideband applications," in *Proceedings of the 2008 Asia-Pacific Microwave Conference, 2008*, pp. 1-4.
9. 18.H. Kim, S. Cho, and J. Kim, "A reconfigurable low noise amplifier with an adaptive bias control for multistandard wireless receivers," in *Proceedings of the 2008 IEEE Radio and Wireless Symposium, 2008*, pp. 463-466.
10. 19.C. Y. Chen and S. W. Tang, "A 2.4 GHz low noise amplifier with adaptive bias current for IEEE 802.15.4 application," in *Proceedings of the 2007 Asia-Pacific Microwave Conference, 2007*, pp. 1-4.
11. 20.M. Liu, L. He, and M. D. Shao, "Adaptive linearization of a low noise amplifier," in *Proceedings of the 2013 IEEE Radio Frequency Integrated Circuits Symposium, 2013*, pp. 51-54.