

BENEFITS AND CHALLENGES OF ARTIFICIAL INTELLIGENCE (AI) IN ENGLISH LANGUAGE LEARNING

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ABSTRACT

Artificial intelligence has become a paradigmatic shift in education generally, while simultaneously offering individualized experiences in English language learning. A discussion is presented on how AI is being applied in personalized English language learning, while particular attention is paid to the various tools created to support this initiative, such as adaptive learning systems, chatbots, and automated feedback platforms. Key technologies machine learning and natural language processing-enable these tools to provide learners with customized content, real-time feedback, and ample opportunity for interactive language skills practice. This research also underlines the major benefits of AI in improving engagement, increasing accessibility, and enhancing learning efficiency. However, it also brings forth key challenges related to persistent data privacy, socioeconomic barriers in accessing technology, and overdependence on AI tools. This paper outlines the potential of AI in bringing about a revolution in English language learning by underlining its limitations, which, in turn, call for human intervention. This study, in its final arguments, advocates for ways the complete potential of AI could be realized and proffers a strong argument for a hybrid model in which the traditional pedagogy should meet AI pedagogy to ensure the inclusion and effectiveness of learning. Artificial Intelligence is transforming language learning, making it more efficient and accessible. This article explores how AI can personalize lessons, enhance conversations, and provide real-time feedback to help learners improve faster.

KEYWORDS: *Artificial Intelligence, English Language Learning, Adaptive Learning Systems, Interactive Language Skills Practice*

Introduction:

In 2004, John McCarthy defined artificial intelligence (AI) as the science and engineering of making intelligent machines, especially intelligent computer programs. However, much before this definition was coined, the birth of AI was marked by Alan Turing's seminal work, 'Computing Machinery and Intelligence,' published in 1950. Alan Turing, also known as the 'father of computer science,' raised questions like 'Can machines think?' in this paper. Continuing with his work, he later proposed the 'Turing Test,' where a human interrogator would try to distinguish between a computer and human text response. Few languages that are popularly used to code AI applications are R, Python and Java.

From a layman's view, artificial intelligence (AI), simply means the intelligence demonstrated

by machines that help them to mimic the actions of humans. AI simulates natural intelligence in machines that are programmed to learn from experiences, adjust to new inputs and perform human-like tasks. From a researcher's view, AI is a set of algorithms that generates results without having to be explicitly instructed to do so, thereby making machines capable of thinking and acting rationally and humanely. Most AI examples, from chess-playing computers to self-driving cars, heavily depend on deep learning and natural language processing techniques. AI applications perform specialized tasks by processing large amounts of data and recognizing patterns in them. Besides learning from experience, AI applications can recognize objects, understand and respond to language and make decisions to solve real-world problems.

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AI perform tasks that normally require human intelligence. The main focus of this technology is to build machines and algorithms which are capable of performing computational tasks that would otherwise require human-like brain functions. While computers execute certain tasks like sorting, computing, memorizing, indexing, finding patterns, etc. far better than humans, they still cannot beat human skills for identifying emotions, recognizing faces, communication and conversation. This is where AI will play a crucial role to enable machines achieve human capabilities.

NITI Aayog: The National Strategy for Artificial Intelligence has defined AI as follows:

AI refers to the ability of machines to perform cognitive tasks like thinking, perceiving, learning, problem solving and decision-making. Initially conceived as a technology that could mimic human intelligence, AI has evolved in ways that far exceed its original conception. With incredible advances made in data collection, processing and computation power, intelligent systems can now be deployed to take over a variety of tasks, enable connectivity and enhance productivity.

How to Use AI to Learn Languages Online Smarter

Artificial Intelligence (AI) has brought a significant revolution in every field. Particularly, the educational landscape is constantly seeing a meaningful and positive reformation. For instance, language learning methods are now more efficient, accessible, and personalized. However, in order to gain the maximum benefits, one must know how to use AI effectively and proficiently in language learning. Mastering prompts, using GenAI in real conversations for immersive learning are key to getting most out of AI; also using a VPN for privacy protection is crucial. This article will show you how to use AI tools for language learning, to tackle common challenges, make the process easier, and get better results.

Solving Common Language Learning Challenges with AI

Language learning involves mastering the four essential skills: listening, reading, writing, and speaking. However, when learning a language, there are challenges that slow down our progress in acquiring those skills.

Benefits of AI in English Language Learning

AI has transformed English learning environment through a suite of tools that better engage, more efficiently and personally support learners. This section discusses the various

aspects in which AI benefits learners and educators to increase autonomy, motivation, and accomplishment.

1. Personalization and Adaptivity:

AI provides a tailor-made learning experience, thanks to adaptive systems that adjust the difficulty level of content according to progress. In contrast to the uniform approach of traditional language teaching, AI tools now offer personalized dashboards and exercises tailored to individual needs. In the same line of thought, platforms like Grammarly and Write & Improve use AI to identify where learners struggle and provide feedback on grammar, syntax, and vocabulary (Chen et al., 2021). Further, adaptive tools track behavior and offer personalized suggestions for skill acquisition (Fang et al., 2018). Personalization involves speaking and listening activities. The technology in speech recognition allows for immediate feedback in pronunciation and fluency for improvement in real-time (Nurjannah et al., 2023). This type of personalized approach boosts the learner's confidence and fills the gap in the traditional classroom where an instructor can hardly be able to meet all students' needs (Gelan et al., 2018).

2. Enhanced Feedback Mechanisms:

AI tools give instant, actionable feedback, which is quite vital in language learning. AWE systems, reviewed by Fan and Ma (2022), are used to assess writing for coherence, grammar, and relevance. Unlike human instructors, AWE tools can provide immediate feedback, enabling much quicker progress. Advanced generative AI, GenAI, can enhance learning because it clarifies mistakes and suggests corrections through dialogue-based feedback (Jacob et al., 2023). For example, users of chatbots receive instant assistance in order to correct mistakes and fine-tune their language skills while promoting independent learning.

3. Improved Motivation and Engagement:

AI technologies utilize gamification and interactive elements to enhance learner motivation. Badges, progress tracking, and adaptive challenges make learning rewarding and engaging (Chang et al., 2022). Chat bots and virtual tutors mimic human interaction, providing conversation practice that encourages active participation and improves speaking skills (Zou et al., 2023). Research proves that students using AI tools feel more satisfied and confident due to immediate feedback and personalized support (Chen et al., 2021). Such motivation leads to improved results; hence, students are more inclined to persist in achieving their target language goals.

Challenges of AI in English Language Learning

1. Lack of Personalization:

One of the most common hurdles in educational systems is the lack of personalized instruction and student-centered methods. There are a lot of well-thought-out strategies by educators. However, those methods often lack attention to individual learners' learning styles, proficiency levels, or preferences. Consequently, this lack limits the progress of many students. So, how can instructors and students bring AI into the picture to overcome this hurdle? AI allows language instructors and learners to tailor textbooks to fit students' needs. AI can filter the online global data and generate different textbooks for individual purposes. AI systems can also generate student-centered exercises and lesson plans. They can be based on individual preferences, priorities, and needs.

2. Absence of Verbal Communication:

Without interactive practice, learning a second language becomes much harder. This is particularly true for individual learning and self-tutoring. Learners who skip interactive speaking practice often struggle with pronunciation and fluency. As a result, conversing and speaking, which is one of the four skill sets of mastering a language, remains unaddressed in most cases. Here is how AI can help us hone our conversation skills when learning a language. AI chat bots help learners practice conversations. This can be done when native speakers of the language they intend to learn are unavailable. AI chat bots are designed to engage in real-life dialogue anytime. AI creates a safe environment where you can practice speaking skills without being judged. It also provides instant feedback and corrects your mistakes. As a result, learners build their confidence without fearing judgment from a human native speaker.

3. Repetitive Exercises:

Often, language learning platforms use the same exercises and lessons over and over. This can get boring and make students lose interest. Interacting and engaging activities keep students motivated and help them retain what they learn. AI can be used to make interactive strategies for an engaging learning experience. AI can replace boring lessons with interactive exercises, quizzes, and activities. This way, the language learning process remains engaging. AI-generated learning activities offer a range of interactive experiences. They can simulate real-life conversations, provide voice recognition games to improve pronunciation, and adapt quiz difficulty based on learner performance. Personalized stories can also

help expand vocabulary, along with many other engaging tools.

4. Limited Progress Tracking:

Without effective progress tracking, learners may struggle to see their growth and identify areas for improvement. Clear feedback and progress checks are important for setting goals and measuring language skills. AI, with its evolved algorithm, can provide you with an accurate and reliable tracking method: AI-powered systems use Machine Learning (ML) for constant innovation and upgrading. This means that language learning tools become more precise in adapting to individual progress and providing more accurate feedback. AI uses Natural Language Processing (NLP) to understand human speech and writing. Collocation extraction analyzes word patterns. Together, these technologies help AI track progress, suggest improvements, and personalize lessons based on real data.

Key Considerations

AI has become a valuable tool for language learning. However, there are certain factors you must keep in mind when you are using AI for learning. Here are three key considerations:

Privacy and Data Security:

AI-powered language learning platforms collect user data to personalize learning. We can use a reliable VPN to protect such information, hide IP addresses, and ensure data encryption. It is also important to choose an AI platform and VPN services that have strong security policies.

Accuracy of AI Feedback:

Unreliable AI tools sometimes provide incorrect or unnatural language suggestions. It is crucial to invest wisely in subscribing to the services of a reliable AI tool with positive and authentic feedback from users.

Balancing AI and Human Interaction:

AI is undoubtedly a revolution in language learning. However, it lacks human traits such as cultural and emotional depth. To balance AI interaction, it is important to also engage with native speakers or language communities.

Conclusion

The integration of AI in personalized English language learning is a significant educational technology development that offers unparalleled opportunities for tailored instruction but also introduces important challenges to be addressed carefully. Evidence reviewed suggests that AI-based tools can be effectively used in supporting various aspects of language acquisition, from

automated writing assessment to conversation practice. The research equally underscores the issue of learner characteristics and needs toward successful integration of AI in the learning of the English language. Evidence from a variety of studies suggests that while AI-based tools can elevate learners' self-efficacy and motivation, these benefits generally accrue to learners who already have strong regulation skills and a high level of intrinsic motivation.

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