

# AI's Revolution in Language Learning: Overcoming Linguistic Barriers

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## Abstract

The "4th Industrial Revolution" is characterised by the rapid advancement of digital applications and technology, which is altering how we work, live, and study. It's a revolution propelled by the combination and amplification of recent advances in robotics, automation, and artificial intelligence, magnified by the extensive connectivity between billions of people via mobile devices that provide previously unheard-of access to information. Artificial Intelligence (AI) has the potential to provide individualised learning experiences, improve language evaluation through automated grading and feedback, and provide immersive language practice via chatbots and language processing technologies. Artificial intelligence is removing obstacles to learn English by making things more inclusive and accessible.

The capacity of AI to enhance listening and speech abilities is one of the main advantages of utilising it to learn English. AI tools frequently have speech recognition built in, so students may interact with the AI and get immediate feedback on how they pronounce words, which helps them practise listening skills. This paper's objective is to examine the ways in which artificial intelligence (AI) technology might facilitate cross-cultural communication and language learning, as well as the ways in which it might alter language education and advance intercultural competency in the modern world. Consider the possibility that self-regulated learning chances could be improved with the use of AI tools. By using AI technology, language teachers may provide students personalised learning experiences that are tailored to their particular needs and preferences. This article will highlight the advantages of AI in depth, including how it may facilitate adaptive learning, offer customised feedback, and give students access to both native and non-native speakers of the language they are studying.

**Key Words** – digital application, amplification, artificial intelligence, obstacles.

## **Introduction**

At its core, learning a language is a sociocultural process. Language instruction has changed over the past few decades because of the integration and applications of information and communications technology (ICT). The 21st century's technologies have also given ICT a social component that permits what is known as Networked Learning (NL). By providing individualised learning experiences, real-time feedback, a variety of learning resources, adaptive methods for overcoming language hurdles, and interactive technologies, artificial intelligence has truly changed language learning. The importance of employing AI apps for creating written texts, increasing students' skills in constructing sentences and building up texts, and practicing writing and reading skills. In a similar line, it was mentioned that using intelligent dialogue boxes in AI applications aids in the development of linguistic communication and English language proficiency. A range of intelligent sources, windows for dialogue and discussion, intelligent tools for communication, programmes that create texts for reading, and programmes that extract information from reading passages all improve language development processors. These accessories improve understanding of what you read. A proposed plan for the use of AI applications in the field of English teaching has been envisioned. It covers the fundamentals, goals, content, processors, and methods of evaluation. The value of employing AI apps for creating written texts, increasing students' skills in constructing sentences and building up texts, and practicing writing and reading skills. In a similar line, it was mentioned that using intelligent dialogue boxes in AI applications aids in the development of linguistic communication and English language proficiency. A range of intelligent sources, windows for dialogue and discussion, intelligent tools for communication, programmes that create texts for reading, and programmes that extract information from reading passages all improve language development processes. These accessories improve understanding of what you read.

## **The Importance of AI and Its Justifications:**

Learning a language has always been crucial for developing oneself, one's job, and one's understanding of other cultures. Traditional language learning techniques, however, can be laborious and ineffective at times. Artificial intelligence (AI), which is transforming language learning through rapid technological breakthroughs, is making language acquisition more approachable, effective, and pleasurable. Learning a new language used to usually entail going to classes, studying textbooks, and getting practice with native speakers. Although these techniques have the potential to be successful, they frequently call for a substantial investment of time, energy, and money. The development of digital technology and the internet has given language learners new options. Learning has become more convenient and accessible thanks to smartphone apps, online classes, and language exchange websites. However, by offering individualised and immersive experiences, AI is raising the bar for language learning. The potential to design individualised learning experiences is one of the main advantages of AI in language acquisition. With the use of AI, an app may assess a user's strengths and shortcomings and modify the content and level of difficulty to better meet their needs.

This focused approach facilitates learners' faster and more efficient growth. Because AI-powered language learning apps can adjust to the needs and preferences of specific learners, they are growing in popularity. These applications make learning more effective and interesting by using machine learning algorithms to assess users' progress and offer tailored comments and recommendations. By offering immediate feedback, recognising problem areas, and modifying the learning materials accordingly, AI-powered language learning technologies can dramatically accelerate the learning process. This enables students to concentrate on their areas of weakness and advance quickly. Learning pronunciation and accent is one of the hardest parts of learning a language. Real-time pronunciation feedback can be obtained using AI-powered systems, which help learners improve their pronunciation and acquire a more natural accent. Gamification and personalised feedback are common features of AI-powered language learning programmes, which can assist maintain students' motivation and interest. Maintaining a long-term commitment to language learning requires this in particular.

### **Overcoming Language Obstacles in the AI Age:**

Language limitations are a big obstacle for businesses looking to go abroad in the current global economy. Prior studies indicate that businesses encounter obstacles in international trading because of language and cultural barriers. Remarkably, obstacles arise for English-speaking businesses as well when trying to expand internationally. Beyond simple communication problems, language constraints impair teamwork, sour consumer relations, and prevent international growth. It is therefore critical to find practical ways to close these gaps and enhance communication in a multilingual workplace. We learn more about Artificial Intelligence (AI) and how it can transform linguistic communication by dismantling these obstacles. Businesses may overcome linguistic barriers, improve teamwork, and promote fruitful cross-cultural exchanges by utilising AI technologies. In light of the fact that language barriers continue to be a significant obstacle, artificial intelligence (AI) presents a revolutionary solution. AI technologies open a world of opportunities for smooth language communication. AI tools have revolutionised transcription, translation, and natural language processing, offering precise and effective language solutions. They can translate text instantly, transcribe audio, and analyse linguistic nuances, facilitating successful cross-cultural communication. Additionally, AI's adaptive capabilities have made language learning easier, enabling people to pick up new languages and modify their communication style to fit any situation. As we embrace the AI frontier, we witness its potential to bridge language gaps and foster meaningful connections in the global business arena. At Premier English we are looking into all the innovative tools to help our clients, and we will continue exploring AI's impact on overall language acquisition.

## **AI Applications to Get Past Language Barriers**

AI writing assistants provide users with real-time suggestions and edits while they compose messages or papers by connecting with communication platforms. This offers immediate grammar, vocabulary, and tone assistance, assisting users in overcoming language hurdles. AI provides a variety of techniques designed to get around language obstacles in different commercial contexts. Instantaneous communication is made possible by real-time translation systems, which offer correct language translations instantly. Imagine overcoming language barriers and forging closer bonds with colleagues and clients wherever in the world.

1. **Customised Education** - To begin with, the capacity to tailor the learning process to each student's needs is one of the most persuasive advantages of utilising AI in language acquisition. AI systems have the capacity to collect and evaluate information on a student's areas of strength and weakness, enabling more specialised language training.
2. **Effective Reaction** - The effective feedback AI offers students is yet another important benefit in language acquisition. AI systems have the ability to evaluate student performance and deliver immediate feedback, which helps students make corrections more rapidly and saves time. When practicing speaking and writing, when students need to get rapid feedback to get better, this instant feedback is quite helpful. AI systems can monitor a student's development and offer data-driven perspectives into their path through language learning. This entails determining one's strong and weak points as well as the efficiency of various language learning techniques. Achieving language learning objectives is made simpler with this data-driven method, which supports learners' motivation and allows them to monitor their advancement over time.
3. **Easily Accessible Education** - AI platforms also make language learning more accessible to learners around the world. Traditional language learning methods often require learners to attend classes or hire private tutors, which can be expensive and time-consuming. With AI, however, learners can access language learning materials and tools from anywhere at any time, as long as they have an internet connection and a device. AI language learning apps can provide learners with a wide range of resources, including vocabulary lists, grammar explanations, listening exercises, and interactive activities. These resources are often available in multiple languages, making it easier for learners to understand and engage with the materials.
4. **Increased Involvement** - The use of AI in language learning can increase students' motivation and level of involvement. Conventional language learning techniques can be boring and monotonous, which makes students disengaged and uninterested. On the other hand, dynamic and interactive language learning environments offered by AI systems keep students interested and motivated.

Using gamification and virtual reality technology, AI can produce engaging and dynamic learning environments. AI platforms can offer practice having conversations with virtual assistants, which are interacting more and more like humans and are getting more complex. Through gradual confidence and fluency building, learners can hone their speaking abilities in a relaxed setting with this conversational practice. Additionally, virtual assistants can adjust to the learning style and level of the user, offering individualised and stimulating dialogues that help users stay motivated and engaged.

## **Conclusion -**

The use of AI in education improves everyone's educational experience. AI is a major factor in the acceleration of language learning process since it is changing the way teachers and users learn. Personalised learning materials, prompt feedback, and needs-based customisation will help students thrive. Meanwhile, machine translation, personalised textbooks, and language bots support teachers in their work. But effectively utilising AI tools requires more than just asking students to download and open an app. To create and execute the best solutions, human input from specialists is necessary. You can collaborate with an AI software development business to create a clever instructional app that is customised to the unique requirements of your company. Engage a seasoned firm for advice and create instructional materials that can propel your school, business, or online learning programs into the future. According to this assessment, artificial intelligence (AI) is a technology that can evaluate natural human speech, apply the flipped learning method to language instruction, and help students become more competent and productive. Overall, the research reinforces the notion that, because of its many advantages, artificial intelligence is essential to language teaching and learning. Teachers planning to use AI in the classroom will find the findings interesting. However, since the review of previously discussed publications focused on the use of AI for speaking and listening only, the study is constrained by the lack of knowledge on its applications in other language skills, specifically reading and writing. Therefore, a follow-up analysis could evaluate

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