

## USE OF TECHNICAL INTELLIGENCE IN ENGLISH TEACHING AND LEARNING

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### Abstract:

Artificial Intelligence (AI) is a human intelligence simulation based on computers and designed to function as human beings. AI is one of the drivers of the 4.0 industrial revolution to facilitate education in teaching and learning. Artificial intelligence is trying to create robots with artificial intelligence that's similar, even more than the intelligence that humans possess. It is expected that artificial intelligence will be able to do so. Starting with the natural language, do a lot of things that will make life easier for people. Processing, in terms of perception, reasoning, movement and manipulation of objects, knowledge, and also learning. The paper explores the role of artificial intelligence in ELT and how it can be used to develop AI technologies. The growth of digital platforms has made learning English easier. Both the application of artificial intelligence and the ability to extend skills to a larger global population will be made possible by advancements in computer and mobile technologies. Individualized. Digital learning technology also relies heavily on content. We now have access to an artificial intelligence and big data driven adaptive system. We may choose the best English language learning method based on each user's demands and timetable.

**Key Words:** Artificial Intelligence (AI), English Language Learning, ELSA, Orai, English Able.

Intelligence is the cornerstone to AI technology. Whitby claims that AI investigates intelligent behaviours in people, animals, and robots in an effort to discover solutions. The word AI consists of the words "artificial" and "intelligence". The word "artificial" is something that is not real, simulated, but not completely fake, considering it a scam. Although "intelligence" is something that can replace real objects, because the former has better properties in a given context. Intelligence is a very complex concept. This includes various forms such as reasoning, self-awareness, emotional awareness, preparation, awareness and creativity.

As one of the most sophisticated information systems in the world, artificial intelligence technology investigates how a robot can perform intelligent job that is currently limited to human completion. Additionally, technology advances in which it advances and facilitates our ability to perform certain tasks, including teaching and learning English. Artificial intelligence technology is one that is widely debated in the general public. Numerous new opportunities for language acquisition are being made possible by technology. According to Luo & Cheng, artificial intelligence (AI) technologies are what power language instruction abroad. Artificial Intelligence can be an effective solution to the problems of short instructional hours, restricted space, limited resources, and a tedious measurement procedure.

According to Thornton, practically all artificial intelligence (AI) algorithms and technologies can be considered to be solving problems in some way. As a result, artificial intelligence (AI) is a wide field of study that takes into account this flexible approach to tackling problems and our innate ability to understand behavior and intention. Artificial intelligence (AI) aims to build intelligent computers that mimic human thought and behavior, mimicking intelligence and making decisions through a process akin to human reasoning. Multiple data sets, repeated processing, and clever algorithms are the three main components of artificial intelligence. As a result, the program is able to automatically learn from the patterns or other features present in the data.

Artificial intelligence (AI) encompasses a wide range of ideas, approaches, technologies, and subfields, such as computer vision, machine learning, neural networks, cognitive computing, and scientific language processing. When people converse with one another through language, they could use a very simple method or one that is incredibly intricate and still little understood. Therefore, developing a computer system that can generate and comprehend snippets of the English language has proven to be quite challenging. The fact that language evolved as a means of communication among intelligent beings is one factor contributing to the problem.

Using AI techniques to learn English has the following advantages: AI is capable of tasks that humans are unable to complete, such as analyzing English phoneme-by-phoneme and determining how quickly your language abilities have improved over time. Anytime, anyplace that they are actually reachable. An easier and more effective option are AI programs for learning spoken English. They can serve a lot more students than people can since they are more scalable. They can quicken learning through higher instruction levels, since learning from human teachers alone is getting harder and harder all the time. AI tools provide an environment free of pressure for learners, even for people who don't trust their ability to communicate.

AI contributes to the effective communication of a variety of information and enhances the English language learning process. The availability of a variety of educational technologies facilitates these students' comprehension of the teacher's explanations. Even when they are not in close contact with their teachers, children can still learn easily. Both English language teachers and students/learners can utilize the plethora of Artificial Intelligence (AI)-based language learning programs available. The following are a few instances of AI technology that can be applied to English language learning:

English ABLE is an assessment-based learning environment for the study of grammar: Zapata Rivera et al. 2007 invented this technology. Assessment-based learning environments (ABLE) use assessment knowledge to direct instruction from a variety of sources. In the context of teaching and learning English, it refers to a learning environment that focuses on tests to help ESL learners learn English grammar. English ABLE uses a TOEFL CBT job library to build new sets with improved assignments

aimed at unique ELL component skills. An adaptive, scaffolded learning environment, also offers packages for learners to help students master facets of English grammar.

ORAI is an ideal way to speak publicly. It can be used not only for the support of teachers but also as a teacher. It been thoroughly reviewed and is quite popular with users. It is user-friendly. Improving your oratory skills is a quick, self-directed strategy. Concerning teaching and learning English, its strengths are being able to detect how many words we say to detect how many fillers we say while we speak. Using Orai in class, the teachers can combine it with English speaking subject matter at that time, such as describing people, then give students about 15 minutes to use Orai and after that choose randomly to come forward to practice speaking immediately.

It provides a number of features that aim to improve the communication skills of students, such as lessons, practice, progress and recording. The content of each feature is interesting, and you may study it repeatedly in order to improve your ability to speak. Orai will provide a series of tools to improve the students' speaking skills, such as lessons, practice, progress and recording. In order to improve these speaking skills, each of the main features has interesting content and can be studied over and over again. You can learn and practice your speaking skills on the content provided in the "Lessons" feature. Each lesson is composed of three content stages that need to be completed before you can access the next set of lessons.

English Learning Speech Assistant (ELSA) and designed by Vu Van in 2015, and is based in San Francisco, United States. Artificial intelligence is being used in this application. Intelligence (AI) and speech recognition to help improve and perfect English pronunciation. ELSA (English Learning Speech Assistant) Speak is an application for learning English that applies artificial intelligence and speech recognition. This technology allows for two ways of learning. For instance, users are allowed to say Some words or sentences, then the system will analyse them and give correction input. The ELSA framework has been designed to take voice data from people speaking English. Multiple accents, distinguishing them from most other speech recognition technologies, in order to recognize the speech patterns of nonnative speakers. To determine the level of competence, users are assessed.

ELSA's scores range from zero to 100, with most native speakers reaching 95 or higher. The results will help ELSA customize the user's learning path, highlighting which sounds are hitting the spot, and what else needs to be adjusted. According to the user's ability, ELSA makes suggestions for specific lessons. Concerning ESL teaching and learning, applications ELSA Learning English speech assistant Speak is an application for learning English that uses artificial intelligence and speech. Recognition to help students learn English so that they can speak it better. This technology allows. For example, users may pronounce certain English words in the course of a two-way learning process. The system analyses and provides corrective input, or sentences.

Duolingo is an Internet site for learning foreign languages. Duolingo is a language learning application that uses the game method to match words and fill in missing parts of sentences. The aim of this method is to teach the grammar, words and phrases that are needed in a sentence. Concerning teaching and learning English, any student at any level of English can learn a new science with Duolingo.

Duolingo users They'll know what level of English they have. Duolingo will then offer the user English content that has been adapted to his or her ability. Not just the grammar, but also that. Learning vocabulary, terms, and so on is also provided by Duolingo. Duolingo's method of teaching English is also intended to be "gamelike" and "competitive" with other users. This way, users of this application will see the development of their English language skills that they've learned so far.

Nexgen English Online (NEO) Co., a U.S. based company specialising in the development of English applications The neo application, a global English language learning system, has been launched by the States. To obtain English proficiency, Neo is a mobile learning solution that can be adapted to user development through Artificial Intelligence and Voice Recognition Systems. To learn English, Nexgen Neo is a new solution. For users with active lifestyles, Neo is an application that works efficiently, flexibly and easily on your computer. Neo also provides a different experience for each user with an easy to use interface, adaptive learning system based on international standard English language technology and certificates.

In order to provide content that automatically adapts as users progress, Artificial Intelligence (AI) in the neo-Study application analyses user behavior and data on a regular basis and provides content that automatically adapts as users progress. As if accompanied by an experienced private tutor, Neo will help users improve their English skills more quickly. As if accompanied by an experienced private tutor, Neo will help users improve their English skills more quickly. Through the neo-Study application, users will use the advanced speech recognition feature which trains them to correct the pronunciation of each word until they become proficient in speaking English.

The goal of artificial intelligence is to create robots with intellect on par with or even higher than that of humans. The first of many tasks that artificial intelligence is anticipated to be able to perform that will benefit humans is natural language processing in the areas of perception, logic, object manipulation and movement, knowledge, and learning. This complex machine was created with the intention of cutting down on working hours to improve productivity. Artificial intelligence reduces the cost of human decision-making and task completion.

AI provides a real simulation conversation platform such as English and adds practical skills such as writing skills. This increases the ability of students and optimizes the impact of English language teaching in ELT. Learning English is getting easier as technology and platforms evolve. Artificial intelligence technology offers an opportunity to improve English language skills. The presence of different teaching techniques makes it easier for students to understand the English language. Many ELT applications are based on artificial intelligence technology that students can use. These technologies as intelligent machines that think and behave like humans and that can simulate intelligence and make decisions identical to human reasoning through a process used in both computers and mobile phones, such as Google Translate, text-to-speech. (TTS), English Able, Orai, Elsa, Chatbot, Duolingo, Neo platforms and many others. The industrial age influenced everyone to adapt to rapid changes. Globalization and the Industrial Age 4.0 have created new creativity, opportunities and challenges, for example in the field of technology. Therefore, technology plays a very important role in communicating information in the form of text, image and sound. Technology was created to facilitate human jobs and activities.

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