The Interaction of Artificial Intelligence In Languages: Traditional Learning Practices

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ABSTRACT:

The interaction of Artificial Intelligence (AI) in languages has the potential to revolutionize traditional learning practices, face to several challenges such as resource optimization, communication skills, and sustainability. This research paper explores the important role of AI in languages, focusing on its application in grammar improvement, effective report creations, predictiveanalytics, and autonomous tools. The development of technology increases interest in self-learning, AI-driven technologies offer solutions to enhance learning, reduce time, and minimize resources impact. The study examines AI tools such as machine learning algorithms, computer vision, and robotics, which aid in character recognition, grammar errors, and simplification in languages conversation. Furthermore, the paper highlights these technologies use machine learning and natural language processing to adapt to individual learners, improve efficiency, and make language acquisition more accessible. While the integration of AI shows positive impacts on proficiency and engagement, it's essential to consider challenges like data privacy and maintaining human interaction in learning. The use of AI in predictive modeling for subject patterns, enhance engagement, and improve proficiency, helping users make creations of reports through writing assistance, chatbots, voice recognition technology. Through a critical analysis of case studies and empirical data, this research underscores how AI not only enhances efficiency but also contributes to sustainable language improvement by reducing dependency on finding errors, it is helpful for cognition and personality develop-

ment.The paper concludes by discussing the limitations of AI adoption, particularly language improvement, and suggests rec–ommendations for overcoming these challenges to unlock the full potential of AI in languages learning and improvement.

KEYWORDS:

Technology, language, Artificial Intelligence, Learning, Educa–tion.

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Introduction:

Language has been a part of human civilization since ancient times, it has been very helpful in building his life and he has been living through communication regarding food, developments, and other things necessary for life. In addition, as the world has grown, various languages have grown. There are approximately 7100 to 7150 languages in the world. Thus, each language has its own his–tory, language is a link between humans, states, countries and for–eign countries by playing an important role in communication, business, employments, etc. Artificial intelligence is very helpful for humans to gain all kinds of knowledge in different languages, es–pecially in English. The reason is that when we observe in our daily life, many people in some rural areas do not speak English properly. Modern technology can undergo important self–learning or transformation in language.

Language is a medium of symbols designed for information communication. A medium that humans use to exchange or share ideas, such as feelings, thoughts, and ideas with others. According to linguist Susko, "language" is not just a memory of sounds, a memory of sound waves, a word that refers to an object, but a con–cept.

How did language originate?

The Sanskrit grammarian Panani thought about this in the 7th and 8th centuries AD and wrote a grammar book called Ashtad-hyayī, which Bloomfield called the most complete grammar book in the world. This grammar, written between 350–250 BC, is the best monument of human intelligence and has not been described in any other language so far.

Language is a way of communication to share information and resources to one person to another or devices.It is play import-ant role for communicate each and everyone through different lan-guages or actions. Each language has its own pattern like writing, speaking, creations of sentence etc. It encompasses a vocabulary and grammar that allows for the creation of an infinite number of sentences. The key components for communication include phonol-ogy (sound systems), morphology (word formation), syntax (word order), semantics (meaning), and lexicon (vocabulary) of language.

Artificial intelligence in languages:

Artificial Intelligence is the creation of software that imitates human behaviors and capabilities. It includes machine learning, anomaly detection, computer vision, natural language processing, knowledge mining, speech recognition and analysis etc.

How the ai works in languages?

In this modern era, technology is developing in a great way, in which Artificial Intelligence technology is being valued at a high level, and technology is being used more and more day by day. How it works is? AI is the integration of data, algorithms, and computing power to imitate human intelligence functions like Learning, rea-soning, and problem-solving. Through Artificial Intelligence, ma-chines are able to process data, identify patterns, and make deci-sions like the human brain has come a long way from rule-based

programs to cutting–edge algorithms performing real–world appli–cations like auto–complete emails, translating text, transcribing vid–eos, and generating reports.

Discussion:

The discussion section reviews the analysis and interpretation of the findings presented in the study, linking them to the research objectives and broader implications for language learning. This study provides a detailed examination of how artificial intelligence (AI) is interacting in language learning practices, identifying key trends, challenges, and future opportunities. It compares the study's findings and learning through online learning with existing litera–ture, and highlights progress and improvement in language learning.

Artificial intelligence tools for language learning:

Using AI tools in languages can help improve speaking, writing, and reading skills. It provides new ways to manage their own learning. AI has emerged as a valuable resource in education, especially for language teaching and learning. It's true! According to a study by Crompton and Burke (2023), language learning dom–inates the application of AI in the educational sector. AI tools are revolutionizing the way we approach work, study, communication, health, and travel. This can lead to new approaches in our teaching methods and increase interest in learning among students. The above points show that AI has a lot of potential. So, through the use of the following software, we can improve our speaking, writing, and reading skills in various languages.

ChatGPT:

Overview: ChatGPT, developed by OpenAI, is a versatile AI large language model that can assist language teachers in a multi–tude of ways. It's capable of generating lesson plans, creating en–

gaging learning mate

1. **Lesson Planning:** Input topics or learning objectives, and ChatGPT can generate detailed lesson plans, complete with activities and discussion questions.

2. **Material Creation:** Generate reading passages with accompanying comprehension and vocabulary activities, writing prompts, conversation starters, questionnaires, information gaps – anything you can think of – tailored to your students' proficiency levels.

3. **Question &Answer:** Use ChatGPT to answer students' questions about grammar, vocabulary, and language usage, providing instant, detailed explanations.

Twee for Teachers:

Overview: Twee is an AI tool designed specifically for English language teachers. It allows educators to create a wide variety of tailor–made tasks and activities instantly. It works especially well with authentic materials e.g. videos from YouTube or Ted Talks.

How to Use It:

1. Create comprehension questions, transcripts and gap fills for any YouTube video in just a few seconds. Simply copy the URL from the video you want to use and instantly create activities you can use in class alongside the video. I like to use newsreels from the national Irish news broadcaster to give students practice in listening to various Irish accents.

2. Generate dialogues, stories, letters or articles on any topic and for any level.

3. Quickly create multiple choice questions, open questions, and True/False statements

4. Brainstorm vocabulary related to the topic and create fill–in–the–gap and open–the–brackets vocabulary exercises.

5. Simplify or upgrade the language in a text instantly.

Wordwall for Teachers:

Overview: Wordwall is a versatile tool that allows teachers to create interactive and engaging activities for language learners. Whether you want to create a quick quiz, a matching game, or a word search, Wordwall has you covered with a wide array of templates that can be easily customised to suit your lesson objectives.

How to Use It:

1. **Interactive Games:** Transform your vocabulary lists into fun and interactive games like "Match Up" or "Whack–a–Mole," which can be used in class or assigned as homework.

2. **Quizzes:** Create quick quizzes to check comprehension and reinforce learning. These can be multiple choice, true/false, or short answer formats.

3. **Printable Activities:** Generate printable worksheets and activities that can be used for in–class exercises or take–home assignments.

4. **Bonus Tip:** Combine Word wall with Chat GPT for even greater efficiency and creativity. Use ChatGPT to generate lists of definitions and vocabulary, or a series of questions and answers, then copy and paste them into a Wordwall activity template. This integration can save you time and help you create more detailed and comprehensive learning materials tailored to your students' needs.

As some of the examples above show, we can increase our learning capacity by using AI tools. We can expect more changes

in AI technology in the future and by implementing them, we can increase our knowledge. However, we may have to face some challenges during learning. Some of the challenges are mentioned below.

Challenges in AI Adoption in language learning:

In this era of technology, the use of AI in computers and mobiles has become a part of human daily life, not only does AI technology help in accessing information in various fields easily, but it is important to observe it properly and use it in a useful way. Artificial Intelligence (AI) has emerged as a ubiquitous tool in language teaching or learning (and in every sphere of life). It is radically transforming not only the way languages are learned but also how they are taught. However, its development has highlighted several challenges for AI in language teaching, which require constant attention and proactive attitude from education professionals.

The reliability of AI systems used in language learning is crucial, as any errors or mistakes can have a significant impact on learners' understanding and progress. In addition, keeping users' data private is a fundamental aspect that must be strictly protected. It is very important that sensitive information is not compromised or misused without damaging the reputation of the person, school, academy, etc.

Student motivation is also an important factor to consider, as introducing AI into the classroom can change traditional teaching dynamics, in addition to losing own learning knowledge or becoming dependent on AI and, in some cases, challenging student participation and engagement. It is therefore imperative that teachers carefully assess the benefits and impacts of integrating AI into everyday education, ensuring that they maximize its potential while effectively addressing the relevant challenges.

Key Challenges:

Lack of Human Interaction and Cultural Nuance: AI systems often struggle to replicate that a human teacher provides.

Contextual understanding: AI may struggle to understand the subtleties of human language or may lead to misunderstandings.

Data Privacy and Bias:Collecting and analyzing student data for AI–powered learning raises significant privacy concerns, sometimes it leads to discriminatory outcomes.

Lack of Localized Content:Many AI tools are primarily designed for native English speakers or major languages, making them less accessible and effective for learners of other languages or regional dialects.

Cost and Accessibility:Network issues can make it difficult to complete tasks via the internet and devices, especially in rural areas.

Need for Educator Training:Many educators lack the necessary skills and training to effectively integrate AI tools into their language

Resistance to Change and Student Engagement:

Some educators may resist adopting new AI technologies, preferring traditional methods. Low student motivation can also hinder AI's effectiveness if the content isn't engaging.

Reliability and Accuracy:Teachers need to be aware of the limitations in AI's current capabilities, as its accuracy and reliability can still be inconsistent.

Recommendation:

AI implementation in language learning can be enhanced by focusing on the educational value of the application, providing

hands–on training to reduce ambiguity and demonstrate clear bene–fits, and offering courses and workshops dedicated to teaching how to use AI for language tasks, encouraging active, critical engage–ment in this learning, and designing activities to critique and fact–check AI–generated text. While communication between educators and developers is essential to ensure data privacy and ethical stan–dards, and to implement strict data protection measures such as encryption and clear data management policies to protect informa–tion, these AI tools can help improve language learning by under–standing and meet real–world needs.

Conclusion:

As Artificial Intelligence is an ever–evolving science, there are signs that AI applications in language learning and teaching are emerging. This research supports the idea that AI is essential in language teaching and learning, due to its many advantages. New tools are always being developed in AI software. It is expected that the future of language learning will be significantly influenced by AI as it develops. It is imperative to emphasize that it is a powerful tool that can be used to enhance language acquisition for students of all ages and proficiency levels. This artificial intelligence (AI) can help students learn a new language more quickly and success–fully by offering personalized learning, real–time feedback, adapt–ability, access to resources, and cost–effectiveness. However, tech–nology is unlikely to ever completely replace instructors. Teachers possess a combination of special abilities and characteristics that cannot be duplicated in the use of AI, including emotional intelli–gence, the ability to adapt to different needs, creativity, relation–ship–building, and judgment.

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