

Artificial Intelligence in Undergraduate English Language Teaching: A Comprehensive Review of Pedagogical Applications, Challenges, and Future Directions

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Abstract- Given that there have been many advances in the area of Artificial Intelligence (AI) technologies lately, much has changed in the realm of educational processes in terms of how English is taught in many parts of the world. In connection with this point, this work discusses how AI technologies can be applied in teaching English to undergraduate students in universities and investigates their possibilities, challenges, advantages, disadvantages, and future developments. Specifically, while focusing on recent scientific works concerning Computer-Assisted Language Learning (CALL), Second Language Acquisition (SLA), and educational innovations, this investigation considers various aspects connected with the advantages and disadvantages of using AI technologies in developing the ability to communicate, personalizing the learning process, evaluating learners' results, empowering learner autonomy, and facilitating interactions in the classroom setting of the English language classes. Furthermore, in this paper, there is a discussion about ethical problems, educators' preparedness, and other obstacles associated with applying AI technologies in English language education in universities. As a result, this work shows on the basis of empirical data collected and analyzed that AI technologies have a great potential to positively affect language skills, motivation, involvement, and interactions among learners. The objective of this paper is to conduct an evaluation of the use of artificial intelligence technology in teaching English as a foreign language by assessing existing trends, strengths, weaknesses, and pedagogical implications.

Keywords: Artificial Intelligence, English Language Teaching, Undergraduate Students, CALL, Higher Education, Language Learning, AI Tools

I. INTRODUCTION

The most important technological advancement that has impacted today's educational system greatly is artificial intelligence (AI). There has been an increase in the use of various AI-based programs for language learning including intelligent tutoring systems, speech recognition technology, automatic writing assessment, chatbots, adaptive learning systems platforms have become ubiquitous within the realm of language teaching. One field of study where significant changes have occurred lately is the field of English language teaching (ELT). The education of the English language is surrounded by several challenges especially where it is taught as a foreign language (EFL). Fluency in speaking, pronunciation, academic writing skills, building vocabularies, and communication skills pose various challenges to students. Traditional methods of teaching have not proved effective in addressing learner's differences, providing timely feedback or motivating learners. This has led to researchers trying out new technologies especially in relation to the use of artificial intelligence as a way of enhancing the learning process of the English language. Some of the advantages of using artificial intelligence technologies in language learning include personalizing learning, providing instant feedback, analyzing performance, developing autonomous learning skills, and making the learning process interactive. Some examples of AI technologies employed in higher education include ChatGPT, Grammarly, Duolingo, Google Translate, speech

recognition technology, and intelligent writing assistants can be mentioned. Nevertheless, the application of artificial intelligence technology in teaching English implies several challenges relating to academic integrity, ethical issues, teachers' roles, privacy, digital divide, and over-reliance on computerization. As such, evaluating the impact of artificial intelligence technology in teaching English to non-native speakers has become imperative for university instructors, curriculum developers, and policymakers.

II. STUDY OBJECTIVES

The purpose of this paper is to:

1. Examine the contribution of AI technology in teaching English to undergraduate students in universities.
2. Examine the popular AI technologies used in teaching the English language.
3. Highlight the strengths of artificial intelligence technology in language teaching and learning.
4. Identify the challenges faced in using AI technology in teaching English.
5. Suggest pedagogical considerations for the implementation of AI technology in higher education institutions.

III. STUDY QUESTIONS

The questions for this paper include:

1. What is the role of AI in the teaching of English language in higher institutions?
2. What are the benefits of AI technology to university English language learners?
3. What are the challenges of adopting AI by teachers and students in English language teaching?
4. How can AI applications enhance English university courses?

IV. LITERATURE REVIEW

4.1 Artificial Intelligence in Education

Artificial intelligence implies the application of computers that are capable of doing actions performed by a human being, such as learning, reasoning, problem-solving, understanding language,

and decision-making. As far as the implementation of artificial intelligence technology within education is concerned, the following areas may be considered, namely, learning, assessing, and improving educational processes. Scientists claim that AI technology will enable a transition from conventional educational systems to intelligent educational systems taking into account the requirements of each individual learner. The use of AI technologies concerns the analysis of data about learners, determination of their deficiencies in studying, and offering of individually tailored teaching materials. During the COVID-19 pandemic period, AI application within the field of education has gained popularity due to the development of distance learning technology in numerous universities. (Russell & Norvig, 2021; Holmes et al., 2019; Luckin, 2018; Zawacki-Richter et al., 2019)

4.2 AI in English Language Teaching

Much attention has been paid by scholars to the application of AI technologies in the context of English language instruction in recent years. AI technologies are used in developing four skills associated with English proficiency: listening, speaking, reading, and writing. With the use of these technologies, students can learn new words, correct mistakes, train their pronunciation, and work on conversational skills. The use of AI technologies such as natural language processing, machine learning, and speech recognition allows students to communicate with artificially intelligent machines that simulate human interaction. This means that learners can have personalized lessons and receive constant feedback. There are many studies proving the positive effects of AI usage on student motivation and language performance. Thus, using intelligent tutoring systems, instructors can teach their students how to use grammar and vocabulary through interactive exercises; meanwhile, speech recognition systems can be used to develop pronunciation skills among students. Finally, the generative model of AI such as ChatGPT enables learners to practice language and write essays and get explanations on linguistic topics. (Huang et al., 2021; Xu & Ouyang, 2022)

4.3 Theoretical Foundations

4.3.1 Computer-Assisted Language Learning (CALL)

CALL theory emphasizes the role of technology in assisting language acquisition. The use of artificial intelligence in language acquisition may be considered the logical evolution of CALL due to the possibility of personalization and interactivity. Current approaches to CALL stress the importance of autonomous, collaborative, and communicative approaches in teaching languages. AI technologies correspond to these approaches, providing interactive educational environments for learners. (Levy, 1997; Warschauer & Healey, 1998; Bax, 2003; Beatty, 2013; Egbert, 2005; Hubbard, 2009; Ahmad et al., 1985)

4.3.2 Second Language Acquisition (SLA)

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V. AI TOOLS USED IN TEACHING ENGLISH

Numerous AI-powered tools are currently used in undergraduate English education. These tools differ according to their functions and instructional purposes. (Luo, 2016)

AI Tool	Main Function	Language Skill Supported
ChatGPT	Conversational practice, writing support, explanations	Speaking, Writing
Grammarly	Grammar and writing correction	Writing

Duolingo	Adaptive language learning	Vocabulary, Grammar
Google Translate	Translation and comprehension support	Reading, Vocabulary
Speech Recognition Apps	Pronunciation analysis	Speaking
QuillBot	Paraphrasing and summarizing	Writing
Elsa Speak	Pronunciation improvement	Speaking
Kahoot AI Features	Interactive quizzes and assessment	Vocabulary, Grammar
AI Chatbots	Simulated conversation practice	Speaking
Automated Essay Scoring Systems	Writing evaluation	Writing

These tools support both classroom instruction and self-directed learning outside the classroom.

VI. BENEFITS OF AI IN TEACHING ENGLISH

Many benefits are offered by the application of artificial intelligence in the domain of education, and it has already influenced the process of teaching the English language at universities. The use of educational technologies based on artificial intelligence enables applying learner-focused approaches, facilitating interaction, giving individual feedback, and ensuring flexibility of learning. All these advantages become even more important for English classes at university because of the diverse backgrounds and language skills of undergraduates. Using AI in English language teaching positively impacts not only the quality of teaching but also the process of language acquisition for undergraduate students by enabling adaptive learning, regular practice, and constant assistance. (Krashen, 1985; Ellis, 2008; Swain, 1985)

6.1 Personalized Learning

The first crucial benefit of AI technology in education is related to the possibility of creating a

personalized form of teaching and learning process that takes into account personal needs, learners' level of proficiency in the language, learning preferences, and educational background. Conventional classes imply the application of teaching techniques and materials equally for everyone who attends such classes. Meanwhile, artificial intelligence technologies allow one to analyze the results of learners' work and create customized teaching content depending on learners' weak and strong points. Learning platforms with the implementation of AI technology can analyze students' progress, determine how fast students learn, evaluate their knowledge about vocabulary, grammar, and communication skills. Thus, students will receive custom-tailored tests, comments, and instructions that will contribute to an effective learning process. Personalized approach in teaching helps students to work on problematic areas, which contributes to their academic success significantly. Moreover, advanced learners may get more complicated tasks while struggling students will have additional assistance and simplified instructions. Personalized instruction has a particularly high value in university settings when students are characterized by different English proficiency.

6.2 Immediate Feedback

Feedback provided by artificial intelligence tools comes immediately in terms of grammar, pronunciation, vocabulary use, structure of the sentence, and organization of writing. Instant feedback allows students to detect and correct mistakes faster compared to the delayed approach traditionally used. In a standard educational environment, students have to wait for days until they get feedback from their teachers. However, when working with artificial intelligence tools, learners' answers are analyzed in real-time and corresponding feedback is delivered. For instance, grammar checkers like Grammarly find any language-related mistake made by a student and propose solutions to correct it. Likewise, speech recognition programs estimate the accuracy of learners' pronunciation and correct errors during the process. Continuous feedback fosters language acquisition since learners can notice and rectify their mistakes during communication activities. Moreover, AI-based

feedback decreases students' anxiety since they can practice independently.

6.3 Enhancement of Speaking Skills

The acquisition of oral communication skills is among the toughest aspects for undergraduate EFL students when learning the English language. A large number of learners face problems such as speaking anxiety, fear of making mistakes, a small vocabulary pool, and lack of confidence while communicating orally. AI technologies come in handy in dealing with these problems since they create a conducive and low-anxiety speaking environment. The AI chatbots, virtual conversational agents, and speech recognition software facilitate the process of practicing oral English via simulations, role plays, interviews, and group discussions. Learners have the opportunity to practice their speaking skills repeatedly without being subjected to judgment from peers and tutors. AI-powered speech recognition technology helps learners correct their pronunciation, stress patterns, and fluency. They also enable learners to develop their listening skills and understanding of the language as well as diverse accents.

6.4 Improvement of Writing Skills

Another domain where AI applications can greatly assist in education is academic writing. Numerous students face difficulties with grammar, the proper use of vocabulary, organization of sentences, coherence, and other aspects of academic writing. Using AI writing aids can help students overcome challenges during the writing process as AI applications will assist them in organizing their thoughts, correcting errors in grammar, improving vocabulary, clarifying sentences, and ensuring coherence. Applications like Grammarly, QuillBot, or generative AI tools give students tips on how to organize sentences, paraphrase, punctuate, or style sentences appropriately. Thus, students can efficiently work on the processes of drafting, revision, proofreading, and editing their papers. The use of AI also promotes process-based writing practices since students are provided with instant feedback during writing activities rather than after completing the assignment. Besides, using AI tools, students learn to write independently and develop an understanding of academic language conventions.

Nonetheless, teachers need to instruct students on appropriate use of AI writing applications.

6.5 Increased Learner Motivation and Engagement

The learning environment created using artificial intelligence incorporates various features like interactive elements, multimedia elements, gamified elements, and adaptive and personalized elements that motivate and engage learners. Conventional language education might be perceived by university students as repetitive and passive. The use of AI in the learning environment ensures active participation of learners through engaging them in various tasks, virtual interactions, quizzes, simulations, and stories in a digital format. The use of gamified learning tools motivates students through various means such as points, badges, progress monitoring, and achievements. Artificial intelligence helps keep the students engaged through offering them appropriate challenges that are suitable for their proficiency and progress level. Students are also able to engage in authentic language learning tasks using various means such as videos, podcasts, and virtual interactions with real-life conversations. With increased engagement, learners can be motivated to learn and practice consistently. (Stockwell, 2013)

6.6 Support for Autonomous Learning

Among the most revolutionary impacts of AI in higher education is its capacity to foster autonomous or self-directed learning. With the help of AI-powered technology, students are able to learn English in an autonomous way and at any point in time using mobile applications, online systems, intelligent tutoring systems, and conversational chatbots. Autonomous learning is particularly significant for undergraduate students since higher education demands more from the learner than before. (Godwin-Jones, 2018; Kukulska-Hulme, 2020; Reinders & White, 2016)

The use of AI provides students with an opportunity to:

- PRACTICE English skills autonomously.
- HAVE access to individualized learning materials.
- MONITOR their progress in learning.
- STRENGTHS and weaknesses.

- REVIEW learning materials over again.
- Learn at their own pace.

In other words, AI allows students to become active participants in their education process rather than solely relying on teachers' input. Additionally, AI fosters lifelong learning by helping students continuously engage with English practice even outside the classroom. Besides that, students benefit from the acquisition of academic skills through autonomous learning.

6.7 Accessibility and Inclusive Learning

AI systems have the potential to enhance accessibility and create an inclusive learning environment for learners with varying educational needs. For instance, speech-to-text software, automatic subtitling, translation software, and adaptive learning software help students who have problems with languages or need extra assistance in academics. Learners with varying degrees of proficiency can have access to learning materials that match their capacity to participate in class activities. In addition, AI-powered learning environments make it possible for learners from distant regions or areas affected by crises to access educational content when conventional learning tools are unavailable.

6.8 Efficient Assessment and Progress Monitoring

The application of AI technologies enhances the efficiency of the assessment process through such benefits as automatic testing, grading, performance analysis, and provision of individual feedback. With AI applications, instructors can monitor the progress of their learners' language acquisition and determine any skills which need improvement. Performance analysis tools help educators assess learner performance based on data collected and provide information necessary for instructional decision making. Moreover, automated assessment systems will reduce administrative activities on the part of instructors and allow them to interact more with their learners. (Wang & Petrina, 2013; Siemens & Baker, 2012)

6.9 Promotion of Collaborative and Interactive Learning

Although AI is often associated with individualized learning, many AI-supported educational tools also encourage collaboration and interaction among students. AI-enhanced learning environments may include discussion forums, collaborative writing platforms, peer-review systems, and group-based digital projects. Students can collaborate in virtual learning spaces, exchange feedback, and engage in cooperative problem-solving activities. Such collaborative learning experiences improve communication skills, teamwork, creativity, and intercultural understanding. Engaging students in interactive activities through AI-supported tools further promotes active involvement and the use of the language. Generally, the advantages of using AI in English teaching prove that AI offers substantial benefits that may be harnessed in language learning in order to ensure positive results, increase access to quality education, and facilitate innovative teaching techniques at the higher education level.

VII. CHALLENGES OF AI INTEGRATION IN ENGLISH TEACHING

Despite having numerous advantages from implementing AI in ELT, the adoption of AI systems in institutions of higher learning poses several challenges as well. They may have an impact on how efficient the utilization of AI solutions will be, as well as what type of experience the students will gain through interacting with AI systems.

7.1 Lack of Teacher Professional Development and Digital Literacy

The key barrier to implementing AI solutions in ELT lies in low digital competence of the majority of foreign language instructors. Some of them lack skills needed for operating innovative teaching tools, creating innovative tasks, and assessing the quality of AI resources. Language specialists prefer established ways of doing things and experience great difficulty in applying innovations due to the changes that will occur in their work. This may be caused by a variety of reasons, among which are reluctance to work with sophisticated tools, inability to control students' performance, and transformation of the teachers' roles. At the same time, the lack of adequate professional development prevents language

instructors from gaining skills necessary for working with AI technologies. As a result, teachers apply innovations superficially without considering the pedagogical value of their actions.

7.2 Technological Infrastructure Limitations

The successful implementation of AI technology in teaching English involves a reliable technological framework. Various universities, particularly those found in developing nations and regions that experience civil wars, face certain problems related to internet connectivity, electricity outages, outdated computer rooms, and insufficient technological resources. Furthermore, some students face certain difficulties while utilizing AI applications due to their financial constraints and limited technological resources in their households. These conditions deny students access to AI resources consistently and autonomously. Additionally, some AI applications contain advanced technology and are sold at certain prices, which makes them unavailable to particular institutions or students.

7.3 Academic Integrity and Plagiarism

The advent of generative AI technology poses many threats in relation to the issue of academic integrity at college and university level. The use of such technologies allows developing academic essays, summaries, assignments, and translation papers almost without any human intervention. As a result, some students will tend to abuse the use of AI by writing their papers using such technologies instead of engaging in real academic activities. Excessive reliance on AI-generated content is likely to lead to deterioration of writing skills, critical thinking, creativity, and problem-solving skills. Standard assessment techniques will face certain difficulties in identifying plagiarism cases. To solve this problem, all educational institutions need to develop proper ethical policies concerning the use of AI in academic works. (Li, 2023)

7.4 Overreliance on Technology

The second important issue that poses another challenge to students is the dependency on AI technology when it comes to learning languages.

Although AI technology plays an important role in helping students learn languages, too much dependency on AI can lead to decreased engagement and cognitive activity from the learners. Students who depend on grammar correction applications and AI-generated responses will not find any motivation to undertake independent writing and analyzing tasks. In addition, students might become dependent on applications that translate and forget about memorization of words and contexts.

7.5 Data Privacy, Security, and Ethical Concerns

The use of AI in educational technology leads to the accumulation of huge data regarding the learners, which include personal data as well as performance-related data in terms of language proficiency, communications, and behavioral analysis. The misuse of this data could expose students' privacy and confidentiality to risks. It is important for educational institutions to guarantee compliance of AI technology with ethical principles, legal requirements in terms of data security, and cybersecurity requirements. Algorithmic biases is another issue related to ethics, where algorithms are developed through big data sets that could incorporate cultural, social, and linguistic biases. This might lead to inaccurate or unethical results of AI in providing feedback, especially in terms of language recognition.

7.6 Inequality of Access and the Digital Divide

All students do not have an equal opportunity to access digital technology, internet connection, and modern electronic gadgets. As such, digital disparities among students impact their participation in AI-based education systems. Poor students may find it challenging to have access to AI apps, internet services, or laptops. Such discrepancies can deepen the gap in education and make it difficult for students to have equal learning opportunities. For instance, in countries facing educational challenges due to financial crises or wars, learners may experience difficulties in accessing educational technologies. Governments and universities must ensure that equal opportunities are available to access educational technologies.

7.7 Lack of Human Interaction

Language acquisition is essentially a social and communicative phenomenon involving real interactions among humans. Even though chatbots and virtual assistants can simulate conversations, they do not suffice as substitutes for actual human-to-human interactions in the learning environment between teachers and learners. Teachers are needed to provide the emotional connection, cultural perspective, empathy, and natural interaction necessary for successful language acquisition. Over-reliance on AI technology can lead to less interaction and collaboration among students and with their teachers. Thus, AI should be utilized solely as a supplementary aid in education.

7.8 Resistance to Educational Change

Opposition from the institution against technological advancements is also one of the barriers in the implementation of artificial intelligence in education. The institution can oppose the implementation of AI in education owing to financial limitations, administration-related factors, or lack of faith in the efficacy of education. Similarly, opposition against the implementation of AI in education could be based on fears of obsolescence, technophobia, and concerns about the usage of computerized content.

7.9 Reliability and Accuracy of AI Systems

Despite the constant improvement of AI solutions, their imperfection cannot be ruled out. Generative AI may provide wrong interpretations, inaccuracies, imaginary citations, and incorrect usage cases. Unconditional trust in AI without any critical analysis may cause confusion and misinterpretation of the language use by students. In this way, educators should encourage analytical thinking and help students check the information received from AI. Overall, the issues associated with the integration of AI into education reveal the importance of introducing this technology responsibly and ethically. Solving these issues requires cooperation from various parties, such as educators, institutions, policymakers, and software developers.

VIII. ETHICAL CONSIDERATIONS IN USING AI FOR ENGLISH LANGUAGE TEACHING

There have been many ethical issues that have come up regarding the use of artificial intelligence technology within English language teaching. It is important to note that even as this new technology offers great benefits within education, it should not be implemented without consideration of ethical issues.

8.1 Academic Integrity

One of the ethical issues raised by artificial intelligence includes academic dishonesty. Using generative AI, students can write an essay or summary, make a translation, or submit an assignment automatically without putting in their efforts for independent learning. The university needs to have academic policies about using artificial intelligence. It is essential to develop an authentic task that encourages critical thinking and originality of language.

8.2 Data Privacy and Security

Personal details, learning behavior, and writing produced by students can all become a subject of interest for educational platforms with AI assistance. Inappropriately handling this information can result in a violation of students' privacy. Institutions implementing artificial intelligence should guarantee compliance with ethical and international standards regarding data protection and privacy. Information on how data are handled should be transparent for students.

8.3 Bias and Fairness

AI is designed through big data which can have some cultural or social biases. This means that feedback and recommendations given by AI technologies can sometimes be biased or lacking cultural sensitivity. English teachers should analyze the generated data and make sure that language education is inclusive and culturally appropriate.

8.4 Equity and Accessibility

AI technology, internet connectivity, and digital devices may not be equally available to all university students. Inequity in access could exacerbate educational inequalities among students from diverse economic classes. Equitable access to educational technology must be encouraged in universities

through the provision of digital materials, education, and technical assistance for all students.

8.5 Human Teachers' Roles

While AI technology can aid in teaching languages, it is not intended to displace human teachers. Learning languages requires empathy, culture, and social skills that cannot be provided by machines alone. Teachers will continue to be at the center of the learning experience in facilitating, mentoring, and guiding students ethically

8.6 Responsible Use of Generative AI

Students and educators alike must receive training in using generative AI effectively and critically. AI-generated information could be inaccurate, misleading, or include false references. In such cases, the information must be verified and evaluated from a critical perspective. In conclusion, the introduction of ethical AI within ELT raises questions regarding transparency, accountability, justice, and ethics in education. The need arises for educational institutions to establish ethical guidelines that will maintain a balance between technological progress and academic traditions.

IX. PEDAGOGICAL IMPLICATIONS

A successful integration of artificial intelligence into ELT entails a series of pedagogical considerations. Although AI technology opens up new avenues in language education, its pedagogical value lies in how it is incorporated into meaningful educational settings. AI should not substitute the instructor's role in designing an appropriate lesson plan. Human connection, emotional engagement, communication in class, culture-specific awareness, and pedagogical judgment are key features of an effective language teaching process. Thus, the successful implementation of AI necessitates developing a learner-centered pedagogy combining technological innovation with human intervention. These pedagogical considerations are especially relevant to undergraduate ELT.

9.1 Teacher as Facilitator

The traditional roles of teachers in classrooms supported by artificial intelligence shift drastically

from that of the sole provider of knowledge to that of facilitators, mentors, guides, and coordinators of learning. Language learning classrooms are typically characterized by the use of teacher-centered approaches where learners simply receive information from the teacher. On the other hand, AI technology gives learners an opportunity to gain knowledge and information, practice language skills, and obtain instant feedback from digital sources. Therefore, teachers are not necessarily confined to the process of imparting information. Rather, teachers facilitate the use of AI technology to aid learning, identify appropriate learning sources, critically analyze digital information, and apply language skills. (Vygotsky, 1978; Harmer, 2007; Richards & Rodgers, 2014)

Emotional and Motivational Support

Language learning is associated with emotional, psychological, and social aspects, which are achieved through interpersonal relationships among humans. There are cases where undergraduate learners face anxiety, low confidence, fear of being wrong, or lack of motivation when learning English. The instructors encourage and motivate the learners to build confidence in their language learning process.

Critical Thinking and Reflection

While artificial intelligence is capable of fast information generation, it is unable to completely teach learners how to think critically and learn reflectively. The teacher must help students examine material generated by artificial intelligence, detect any false statements within that material, and compare the different perspectives involved.

Cultural and Contextual Understanding

Language learning is intrinsically linked to culture, communicative conventions, and socialization processes. Educators aid students in comprehending cultural connotations, pragmatics, intercultural communication, and appropriate use within a context. Additionally, human teachers can alter their teaching based on the classroom environment, students' emotional states, and social contexts to a degree that artificial intelligence cannot accomplish entirely.

Ethical Guidance

Educators must educate students about the proper use of AI and ethics. Educators assist students in addressing ethical concerns such as plagiarism, misinformation, integrity, and digital citizenship. Therefore, the educator's function becomes more intricate and intellectually taxing in the presence of AI-assisted education.

9.2 Blended Learning Approaches

The integration of AI in ELT through the use of blended learning could be considered one of the best pedagogical approaches because it combines both traditional teaching methods and digital technologies for learning purposes. Instead of replacing classroom instruction, AI can complement conventional lessons with supplementary activities and opportunities for practice, interaction, evaluation, and personalized learning.

Benefits of Blended Learning in ELT

Blended learning is beneficial to undergraduate learners of English language for several reasons.

Flexibility and Accessibility

Students are able to learn using AI technology outside the classroom whenever they want. This gives them more opportunities to train in English language outside class time and at their own pace.

Increased Participation and Engagement

Gamified learning, interactive software applications, multimedia learning activities, and online discussions increase student engagement. Many learners are less hesitant to engage with language training in digital form before they do so in classroom-based interactions.

Personalized Learning Opportunities

Based on the learner's level, preferences, and learning outcomes, AI personalizes content and activities for each student. This allows teachers to offer more differentiated lessons to blended learning students.

Continuous Feedback

The AI systems offer instant feedback on pronunciation, grammar, vocabulary usage, and writing activities. This ensures that there is continual

improvement and that students become aware of areas of weakness early.

Classroom Applications of Blended Learning

Blended learning can be adopted in undergraduate English lessons through the following ways.

- Flipped classes whereby learners interact with AI-aided learning materials before going to class.
- Online discussions using AI bots and conversational agents.
- Writing workshops that leverage AI writing tutors.
- Grammar and vocabulary interactive practices.
- Hybrid discussions and projects.
- Formative assessment with the help of AI technology.

Instructors will be able to maximize class time in terms of focusing on communication, collaboration, problem-solving, and other cognitive activities while regular practice is handled by the AI system.

Challenges of Blended Learning

Even with all the benefits that it offers, blended learning is not without its drawbacks. These include technology reliance, digital divide, and the requirement of good self-regulatory skills on the part of the learners. Some learners might find it difficult to manage their time, study independently, or deal with technology issues.

9.3 AI Literacy for Students

As AI technologies continue to gain prominence in education and work environments, university students need AI literacy skills in order to use these technologies appropriately, critically, and efficiently. AI literacy involves learners' ability to comprehend how AI systems operate, critically analyze AI-produced outputs, recognize their constraints and biases, and deploy AI technologies in academic settings and beyond ethically. The focus of English language education needs to shift from basic technological use to fostering responsible digital citizenship.

Components of AI Literacy

Undergraduate English language learners can develop a number of elements that contribute to AI literacy.

Technical Understanding

Learners must be aware of the fundamental knowledge about how AI systems work, including machine learning, natural language processing, data analysis, and generative AI technologies. While students do not need advanced knowledge of technicalities, basic understanding will make them better users of AI technologies.

Critical Evaluation Skills

AI-generated information is not necessarily accurate, reliable, or impartial. For that reason, it is important for students to be taught how to critically assess the information, evaluate the information provided by multiple sources, detect disinformation, and judge AI-generated responses.

Ethical Awareness

As a component of AI literacy, there is an understanding of various ethical matters connected with plagiarism, copyright, cheating, privacy, and proper digital conduct. Students need to realize that the use of AI can facilitate their learning process but not serve as its substitution.

Skills of Digital Communication and Collaboration

Since AI-based learning contexts demand efficient communication and collaboration within the digital space, the development of such skills is an important part of AI literacy.

Strategies for Developing AI Literacy

Several pedagogical approaches can be implemented by educators to promote AI literacy.

- Creating opportunities for AI ethics discussion in English classes.
- Fostering reflective learning through the use of AI content.
- Conducting assessments and projects that require critical evaluation of AI answers.
- Teaching citation methods and referencing rules when using AI.
- Organizing projects that rely on digital technology.

- Making students aware of misinformation and AI algorithms' bias.

Importance of AI Literacy in Higher Education

Learning AI literacy makes college students better prepared to continue their academic journey and work-related activities that would entail the use of AI technologies. This knowledge allows the learners to be self-directed learners, critical thinkers, ethical users of technologies, and effective communicators. Therefore, there is need for AI literacy to be an important component of English studies today.

9.4 Curriculum Development

For AI technology to be used in the process of teaching English language education, there is a need for extensive work to be done regarding curriculums and education programs development. Traditional curriculums of English language education that were designed using the traditional teaching approach and textbook exercises may not fulfill all needs of today's undergraduates. In this regard, the curriculums of English language education in universities need to adopt AI-driven learning practices, technology skills, AI-assisted assessments, and independent learning experiences. Curriculum development should include not only English language development but also prepare the students for their future academic and professional life in the digital era. AI-driven curriculums should be consistent with the learning outcomes, pedagogical goals, and linguistic needs of the students. (Zhao, 2021)

How AI Can Be Integrated into English Language Curricula

There are various ways of implementing AI into the curricula for undergraduate English programs.

1. Incorporation into Oral Communication Course Curricula

The curriculum developers can include conversational practice with the help of AI-powered systems, speech recognition technology, and virtual speaking assistant programs in speaking classes. Students may engage in dialogic practices, role-playing, interviews, presentations, and debates with AI conversational assistants. Students can make use of speech recognition software to enhance

pronunciation, stress, intonation, and fluency. Students can participate in class exercises to examine AI conversations and evaluate the efficiency of communications.

2. Incorporation into Academic Writing Classes

AI tools can be included in academic writing classes to assist in writing, editing, proofreading, and revision. Students can utilize AI technologies to detect grammatical errors, restructure sentences, expand their vocabulary, and arrange academic essays better. Curricula should emphasize ethical use of technology. In writing classes, students may be asked to make a comparison between their writing and suggested AI solutions and provide reflection upon their writing. Educators must point out that AI is an assistant for writing process improvement, not writing replacement.

3. Integration into Reading and Vocabulary Instruction

AI-enhanced reading apps can offer adaptive reading content that is matched to learners' proficiency level and academic progress. Curriculum can feature adaptive reading activities, intelligent vocabulary games, and comprehension exercises facilitated by AI technology. Additionally, AI-based programs can recommend reading content that matches learner's preferences and language level. Applications for learning new vocabulary based on spaced repetition and adaptive technology can assist learners in retaining their lexical knowledge.

4. Integration into Listening Activities

There is the potential for AI to improve students' listening comprehension through the use of interactive audio content, transcription systems, and customized listening activities based on the level of comprehension of the learners. This technology enables the generation of podcasts, pronunciation guides, and listening simulations by AI, and also enables interactive listening tests.

5. Integration into Assessment and Evaluation

The process of developing curriculum should involve AI-assisted formative and summative assessments. The AI systems will be able to conduct online quizzes, monitor the learners' performance, perform

analysis, and provide feedback reports based on the results. Through this, the teacher will be in a position to establish what the learners are good at and their limitations. Besides, the curriculum designers will use the AI system to measure the efficacy of the learning content used.

6. Integration of Digital and AI Literacy Skills

In the modern English curriculum, it is necessary to incorporate digital literacy and AI literacy as key components of education. Students should be able to grasp the functioning of AI and how to critically analyze AI-generated material as well as how to utilize AI ethically for the purpose of academics. The subject areas could include topics such as ethical AI usage, academic dishonesty, etc.

7. Project-Based and Collaborative Learning

Collaborative and project-based learning methods may benefit from AI technology as well. This would mean that students can be engaged in collaborative activities such as creating presentations, conducting research via AI, creating digital stories, and analyzing AI-created texts. Through this process, critical thinking skills may be developed among others.

Principles for Effective AI Curriculum Development

When integrating the curriculum, some principles must be taken into consideration when creating the AI-supported curriculum:

- AI should assist learning objectives but not replace them.
- Learning tasks should foster creativity and critical thinking.
- Human interaction and communicative competence should be prioritized.
- Ethical usage of AI technologies should be considered.
- Evaluation procedures should encompass both AI-assisted and human-mediated assessments.
- Curriculum design should be dynamic and adjustable according to technological changes.

In conclusion, the design of curriculum for AI-supported English language learning should focus on the equal integration of technology, methodology, and personal interactions. Universities should create

their curricula wisely and prepare their undergraduate students for life in the modern world.

8. 5 Continuous Professional Development

University-organized workshops for teachers who can integrate AI technology into their instruction are required. The readiness of teachers is considered one of the most important factors in the successful integration of technologies.

X. Practical Applications in Undergraduate English Classrooms

Many ways can be used to practically apply AI technology for teaching undergraduate English.

10.1 Speaking Lessons

The teacher can utilize AI chatbot and pronunciation programs to support activities such as role-playing and simulations. Instantaneous pronunciation correction takes place, and students feel less ashamed to speak.

10.2 Writing Lessons

AI writing tutors will aid students in essay revision, improving their grammar, and developing academic writing abilities. AI software might also help instructors give feedback and minimize the amount of work involved in grading.

10.3 Reading and Vocabulary Building

Adaptive reading tools and AI-enabled vocabulary apps customize reading resources depending on each student's English skill level. Translation applications and intelligent dictionaries help with understanding and vocabulary learning.

10.4 Evaluation and Assessment

AI technology may automate quizzes, evaluate student performance, and produce progress reports. This helps educators track how well their students are doing.

XI. FUTURE DIRECTIONS OF AI IN ENGLISH LANGUAGE TEACHING

The future of AI technology in ELT is predicted to grow greatly because of the advances being made.

Possible applications for future AI programs include: (Yang & Wang, 2024)

- More sophisticated dialogue systems that interact like humans.
- The use of virtual and augmented realities for language learning purposes.
- The development of emotional recognition technology for personalized teaching.
- Smart assessment systems that measure communicative competence.
- Multilingual learning systems powered by AI.

However, ethical considerations should be an integral part of future developments.

XII. DISCUSSION

As can be seen from the results presented above, artificial intelligence has become a significant part of contemporary English language teaching in colleges and universities. Artificial intelligence tools help college and university students experience a highly interactive, flexible, and student-centered process of education that facilitates the development of language proficiency in many skills. As can be inferred from the discussion above, the use of artificial intelligence tools has a positive effect on students' abilities to speak, write, read, and learn new words. In particular, the use of applications based on artificial intelligence that include conversation chatbots, grammar checker software, voice recognition, and adaptive learning platforms creates conditions for ongoing practice and instant feedback. Among others, one of the most critical achievements of AI in the context of English language teaching is personalized learning. In many cases, students have different levels of proficiency, learning speed, and background in the traditional classroom at universities. AI technology assists in overcoming such differences due to the ability to personalize the content of instruction. This factor helps enhance students' motivation and active participation in the learning process. Undergraduate students learning English face speaking anxiety issues and lack communicative opportunities. Due to AI-based agents for conversation and speech training, students practice using English without experiencing embarrassing and judgmental situations. Moreover,

AI technologies aid in developing academic writing skills by helping students improve their grammar, develop vocabulary, organize ideas, and maintain consistency. These tools are highly useful for university students facing difficulties in using academic writing standards in English. However, there are multiple drawbacks related to the use of artificial intelligence for English language teaching that need to be mentioned. One of the most pressing issues is ethical problems associated with plagiarism, overuse of technological advancements, and academic dishonesty. Generative AI technologies may prompt students to overuse the opportunities of automatic content generation rather than develop critical thinking and writing skills. Besides, technological disparities are still impeding the implementation of AI in English language teaching as not all developing countries have access to the Internet. Additionally, teachers are rarely trained enough to implement AI successfully in classrooms. Another relevant problem concerns the role of a teacher when implementing technological innovations into English language teaching process. It should be noted that despite the capabilities of automation offered by AI tools, teachers are vital for offering students emotional, critical, intercultural, and decision-making assistance. Moreover, the analysis shows that there is a necessity to treat AI as an additional tool rather than an alternative for traditional approaches. For successful integration, there should be a conscious approach to pedagogical planning, control, readiness, and modification of the curriculum. Lastly, the increasing adoption of AI in higher learning calls for the need for English programs to accommodate technological changes while maintaining high-quality education and humanistic learning ideals. In the future, it will be expected for educational models to include AI-enabled learning environments alongside interactive pedagogies.

XIII. CONCLUSION

AI technology has developed into a revolutionary tool for English language instruction in undergraduate university settings. Artificial intelligence has many advantages for individualized learning, instant feedback, autonomous learning,

speaking skills, and writing skills. However, despite having several advantages for learners and teachers, several issues can be raised concerning artificial intelligence. Among those obstacles are poor preparation of instructors, technological barriers, ethical concerns, problems with academic integrity, and unequal access to technological sources. Consequently, the effective use of AI technology in English language instruction depends on a balance between pedagogy, institution, readiness of instructors, and regulations. In other words, AI should serve as a companion in the process of education that will contribute to making this process more effective rather than replacing humans.

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