

Navigating the Transformative Impact of Artificial Intelligence on English Language Teaching: Exploring Challenges and Opportunities

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Abstract

This study aims to examine the impact of artificial intelligence (AI) on English language teaching in higher education. The scope of the study was limited to the opportunities and challenges of English language teaching. This study was conducted using a mixed method of conducting surveys and in-depth interviews. A questionnaire link using Spreadsheet's Google Form was sent to the English lecturer through the WhatsApp group and personal contact number. The study sample consisted of 16 English lecturers. Analyzing the questionnaire and interview transcript indicates that the emergence of artificial intelligence (AI) technology has created opportunities and challenges for English language teaching and learning. AI has changed the landscape of English language teaching in higher education. English lecturers utilized different types of AI for various purposes, for example, asking and solving questions and checking for grammatical errors, checking plagiarism, paraphrasing, and reviewing literature. The study also revealed that AI has a variety of advantages for language teaching and learning, including the detection of plagiarism and grammatical errors. In addition, AI has created opportunities and challenges for the future of English language teaching. AI required digital literacy to utilize. The English teaching profession might be taken over by AI in the future, so English lecturers must continuously improve their digital literacy.

Keywords: Transformative Impact, Artificial Intelligence (AI), English Language Teaching

Introduction

These days, technology is used in education on a daily basis. We now have access to more exact information than ever before, thanks to the teacher. In fact, there's even a name for asking someone to look up specific information on Google: "google it." Learning gets more vivid and graphic, and the unanticipated struggle intensifies. As blended learning approaches become more prevalent in the classroom, a variety of technologies are integrated to offer students digital teaching and learning resources. Hence, it is essential to conduct study on the use of technology in education. Rauf et al., (2023) believe that as the development of educational technology is accelerating, it is necessary to design a concept or pedagogical approach suitable for online learning and academic settings.

Currently, the emergence of Chatbot artificial intelligence (AI) technology is significantly changing various aspects of human life, including learning and teaching in higher education (Popenici & Kerr, 2017; Zawacki-Richter et al., 2019), especially in teaching and learning English (Hockly, 2023). Artificial intelligence (AI) technology is now widely used in English language teaching and learning to help students and lecturers in higher education, especially in the post-COVID-19 pandemic era where online learning via digital learning platforms has become commonplace carried out by teachers and students all over the world. The discovery of new artificial intelligence (AI) chatbot technologies, such as ChatGPT, in early 2023 has triggered significant changes in English language teaching and learning (Moorhouse et al., 2023). English teachers have the opportunity to integrate artificial intelligence into learning, as AI offers many advantages, for example: applications powered by AI can help students learn languages and practice speaking every day (Huang et al., 2022) motivate students to learn the language (Gallacher et al., 2018; Kohnke, 2022). Based on preliminary studies, English lecturers in Indonesia have integrated artificial intelligence into English language learning which has become very commonplace after the emergence of ChatGPT in early 2023. Most English lecturers use various AIs for various purposes. For example, asking and solving difficult questions (ChatGPT), checking grammar errors (Grammarly). Checking plagiarism (Turnitin), paraphrasing (Quilbot), reviewing literature (Mendeley).

Education experts have been engaged in heated discussions and debates concerning the future of human teachers and artificial intelligence (AI) teachers in tandem with the period of rapid technological improvement on the performance of AI. The prediction that "the new technology will not change the work of the teachers fundamentally, but will, nevertheless, have a profound impact on how the various approaches to teaching can be implemented in radically different technological and organizational environments" (Ljoså, 1998) was made long before online learning platforms began to appear. However, other experts contended in a more recent study that technology will change the nature of human specialists' work, including that of teachers (Susskind & Susskind, 2015). They went on to explain that although AI teachers would eventually take over, human teachers will continue to function in parallel for the time being.

In the context of this research, there is an urgent need to examine the impact of artificial intelligence (AI) technology on English language teaching and learning in higher education institutions in Indonesia. In this study, we will explain the impact of AI technology on English language teaching in higher education, focusing on two main aspects: Opportunities and challenges in teaching English.

Specifically, this study identified the following research questions:

1. What is the impact of artificial intelligence (AI) technology on teaching and learning English at UIN Alauddin Makassar?
2. What are the opportunities and challenges of teaching English in the era of artificial intelligence?

Research Method

This study adopted a mixed methods research design (Creswell & Clark, 2017) in which quantitative data (The impact of artificial intelligence on English language teaching in higher education) was collected and analyzed. Then, we collected data from in-depth interviews with 16 English lecturers from various faculties. The survey yielded several impacts of the increasing use of artificial intelligence in English language teaching in higher education. This in-depth interview serves as a follow-up to provide a deeper and richer

understanding of how English language teaching has changed since the use of artificial intelligence in language teaching.

At UIN Alauddin Makassar, English lecturers must have at least a master's degree (S2) educational qualification. Apart from that, they must carry out Tri-Dharma education to obtain a competent lecturer certificate. For this research, the research respondents were thirty English lecturers who taught at UIN Alauddin Makassar. This survey was conducted for two weeks in June 2023 via English lecturers' contacts and WhatsApp groups.

Result and Discussion

Artificial Intelligence (AI) Most Frequently Used to Facilitate English Language Teaching and Learning

In the survey, lecturers were asked to list at least five artificial intelligence (AI) applications that are often used in language teaching and learning. The five most frequently used artificial intelligences to facilitate language teaching are presented in Figure 1. Overall, Grammarly was most frequently used to check student work for grammatical errors, with about 13 English lecturers choosing this app.



Figure 1. Artificial intelligence (AI) is most often used to facilitate English language teaching and learning

As shown in Figure 1, 14 English lecturers indicated that they use AI chatGPT to find quick answers to English language learning and teaching. However, chatGPT sometimes provides inaccurate information. For example, ChatGPT provides reviews or studies that are not in-depth. So, ChatGPT is only used to find references for ideas. The following is an extract from the transcript of an interview with an English lecturer regarding chatGPT.

X : Do you often use chatGPT in teaching and learning English?

Y : I often use chatGPT to search for information. However, GPT-chat provides answers or information that is unclear and not sharp, especially if we ask to write a paragraph for ideas for writing background studies in research at Doctoral Level (S3). We use chatGPT only to brainstorm main ideas.

Since artificial intelligence and machine learning have sufficiently matured, researchers have been examining their application in education. The main goal has been to help students and reduce repetitious tasks for teachers in order to improve the learning process. While Thunström and Steingrímsson (2022) utilized it to construct a whole scientific

paper (though it contains common problems such weak claims and inappropriate references), Dehouche (2021) demonstrates in his opinion paper on GPT-3 that it can generate academic papers that pass current plagiarism checks. According to Cotton et al. (2023), ChatGPT is an effective writing tool that may be used to produce a paper that seems credible. The other AI tools that the English lecturers commonly used are Grammarly, Quillbot (paraphraser), and Mendeley (reference manager) for writing assistance.

The Impact of Artificial Intelligence (AI) in English Language Teaching

One of the benefits of artificial intelligence (AI) in learning English is that we can choose English learning materials according to the material presented by artificial intelligence (AI). Example: If we want to check the plagiarism level of student work, we can use Turnitin, Quetext, Smallseotools, plagiarism detector and plagiarism checker. Additionally, Artificial intelligence (AI) has the potential to provide students with personalized learning experiences based on each individual's interests. This is relevant to Bhutoria (2022) who highlighted AI's effectiveness in meeting students' unique learning needs, learning preferences, and learning capacities while directing them down the most efficient learning paths in each of the three nations. Furthermore, it is clear from the research that AI enhances instructional content, tailors it to each individual based on their needs, and alerts users to potential learning challenges. This improves the teaching-learning environment and recalibrates the function of instructors to provide a better learning experience.

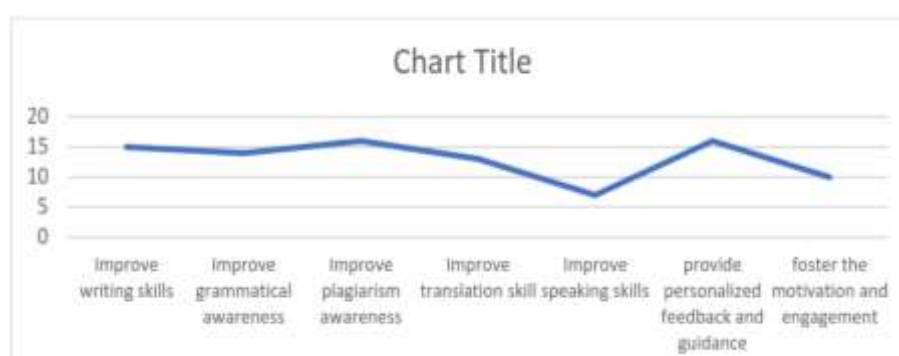


Figure 2. The impact of artificial intelligence (AI) in English language teaching

Based on table 2 above, artificial intelligence provides personalized feedback and learning, especially in learning to write in English. Our texts and discursive artifacts are being distributed more effectively through a variety of channels and networks as a result of our increasingly digital communication. As a result, there has been a specific need to more accurately scan our written discourse. A number of AI-powered writing tools, such as Grammarly (www.grammarly.com), have made their way onto the market. These programs provide features such as spelling and grammar checks, as well as analysis of a document's clarity, coherence, engagement, and delivery, enabling them to scan written content with more accuracy. Grammarly also provides linguistic recommendations and adaptations for a text based on specified register and delivery criteria, utilizing a huge corpus and algorithms.

Schmidt & Strassner (2022) stated that writing tools with AI capabilities, such as Grammarly or Language Tool, may aid in the learner's development of a particular understanding of a language's flexibility. The student may come to understand that language is much more dependent on context and coherence than it is on spelling and grammar alone. Grammarly provides linguistic feedback in addition to pointing out improper passages or expressions inside the content.

Opportunities and Challenges of Integrating Artificial Intelligence into Language Teaching and Learning



Figure 3. Opportunities and challenges of integrating artificial intelligence into Language teaching and learning

Based on Figure 3 above, the integration of artificial intelligence (AI) in English language teaching at UIN Alauddin Makassar creates opportunities and challenges. Artificial intelligence (AI) is very useful in English language learning and teaching. AI applications that continue to emerge create opportunities for teachers, lecturers and students to gain unlimited knowledge. Apart from that, AI can also help solve difficulties in learning languages instantly. Artificial Intelligence may play the function of a tutor. Students can talk about issues they've run into or suggestions they have for finishing the task. In the end, ChatGPT functions as a sophisticated rubber duck (Malinka et al., 2023) that aids professionals and students in resolving issues that arise. Chatbots with artificial intelligence have the potential to expedite the acquisition of new technologies by students. Since the chatbot may better explain the underlying concepts or provide sample in addition to the official documentation, well-prepared queries improve the effectiveness of the learning process. This also holds true for learning more about subjects that the student is not familiar with.

However, behind the various opportunities created by artificial intelligence (AI) in English language learning. There are challenges that English teachers and lecturers must face in the future. Based on data from Figure 3, as many as 12 lecturers chose that AI could replace the role of English teachers and lecturers in the future because the millennial generation is already proficient and technologically literate in operating artificial intelligence. Because of the digital barrier that exists between them and their teachers/lecturers, students may become frustrated (Lestari, 2020). When instructors are not using modern technology, they (especially those from the previous generation) may not have an adequate, if not equal, rate of digital literacy. Instead, they may rely on the university library, which has books discussing less relevant, older topics that students may not be able to relate to, rather than

using an open online library to find more recent facts about current issues in their field. These lecturers have frustrated the students instead of guiding their learning, which could cause mistrust and disrespect and prevent the students from learning from their lectures.

This study clearly shows the existence of a digital divide between instructors and students, which has resulted in a number of undesired outcomes. As a result, instructors should possess at least as much, if not more, digital literacy than their students in order to help them identify trustworthy sources of information, tell fact from fiction, and develop critical thinking abilities. Although students appear to possess greater digital literacy than their instructors, they nevertheless lack foundational content understanding and critical thinking skills. The inference is that English teachers must be inventive in order to fulfill their expected function as a guide for learning, particularly when it comes to making use of the various online learning tools that are available.

It's important for educators and students to use AI and similar tools in a balanced way. As was already mentioned, there are many advantages to proper utilization. Students' performance may improve if they use this technology sensibly. AI's potential to improve performance or create new curricula may also be advantageous to educators.

Conclusion

This research aims to identify the impact of artificial intelligence (AI) on English language teaching in higher education. From research results, artificial intelligence (AI) has changed the pattern of teaching and learning English in higher education. In addition, artificial intelligence (AI) creates opportunities and challenges for future English teachers and lecturers. Currently, the millennial generation is accustomed to using various types of artificial intelligence (AI) applications on a self-taught basis in various daily life activities, including studying English at college level. Therefore, English teachers and lecturers always increase their technological literacy (Digital literacy), especially artificial intelligence (AI), in order to meet students' needs and desires in learning English in the future. English teachers must be inventive in order to fulfill their expected function as a guide for learning, particularly when it comes to making use of the various online learning tools that are available.

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