

## *Advantages and Disadvantages of AI in the EFL Classroom*

Lidija Elliott, Kwansei Gakuin University, Japan

The Asian Conference on Education 2023  
Official Conference Proceedings

### **Abstract**

Undoubtedly, the conversation around artificial intelligence (AI) has recently intensified, fostered by the rapid development of technology. Learning institutions have joined in the debate, with teachers and learners on the frontline of this conversation. This study particularly explores the direct impact of AI applications such as chatbots (ChatGPT), personalized learning experiences, and predictive analytics on EFL classroom learning, outlining AI's advantages and disadvantages on foreign language learners and their teachers. It employs a qualitative approach to data collection and screening, utilizing surveys on a sample of students at the university level. Evidently, from the study findings, AI can potentially improve learning, especially among students in EFL classrooms. However, there is concern about AI inhibiting the development of learners' research and critical thinking skills. Largely, the findings recognize AI's value in EFL classrooms but appeal for caution from teachers in its application. This study offers valuable insights into AI's impact on EFL classrooms and offers possible changes that could help in its successful integration into EFL teaching practice.

Keywords: Artificial Intelligence, Teachers, Learners, EFL Learning

**iafor**

The International Academic Forum

[www.iafor.org](http://www.iafor.org)

## **Introduction**

The use of artificial intelligence (AI) technology in the educational sector has significantly increased over the last few years, and this trend is also present in EFL classrooms. Applications of AI that might improve language learning include chatbots, adaptive assessment, personalized learning environments, and predictive analytics (Sumakul et al., 2022). This article will investigate the effects of AI in EFL courses by weighing its benefits and drawbacks. It will examine how AI may boost language practice and feedback for learners of foreign languages and enhance learning results for these students. It will also highlight the possible disadvantages of AI, such as doubts about how it will affect research and critical thinking abilities, ethical issues with data protection, and the potential decline in human contact throughout the learning process. This article aims to provide helpful insights and suggestions for educators on successfully incorporating AI technologies into foreign language training by examining the efficacy of AI in the EFL classroom and outlining future developments in AI for language teaching.

## **Methods**

Participants were Japanese L1 speakers, and they ranged between 20–22 years of age. All questions and explanations were in English. An anonymous and voluntary questionnaire was prepared and distributed among these students to determine their outlook on artificial intelligence (AI) technology. It was written in English, consisted of twenty-two items, and was developed as the instrument for data collection. The study was conducted mid-semester, during the spring of 2023.

## **Research Questions**

The research was conducted to answer the following research questions:

RQ1: What are the advantages of AI in EFL Classrooms?

RQ2: What are the disadvantages of AI in EFL Classrooms?

## **Impact of AI in the EFL Classroom**

### ***Overview of AI Applications in EFL Classrooms***

Artificial intelligence (AI) has been integrated into EFL classrooms via a variety of cutting-edge technologies that have the potential to transform language instruction completely. One such technology is AI-powered chatbots, like ChatGPT, that let language learners connect and get immediate feedback. These chatbots replicate actual conversation situations, giving students highly accessible practice opportunities and personalized language support (Jeon, 2021).

Adaptive testing is a different AI application popular in EFL courses. Using AI algorithms, adaptive testing systems may evaluate learners' competence levels and customize the testing process to meet their unique requirements. These systems provide a more accurate assessment of learners' language skills by dynamically modifying content and the difficulty of test questions depending on learners' replies. By examining learner data like performance, interests, and learning preferences, AI also makes it possible to personalize learning experiences. AI systems may provide specialized information, exercises, and suggestions by

identifying individual strengths and weaknesses. This promotes a customized language learning method that meets each student's requirements.

Additionally, learner data is used by AI-powered predictive analytics to estimate future performance and pinpoint possible improvement areas. By examining patterns and trends in students' learning behaviors, AI can provide insightful recommendations that help instructors modify their support and teaching methods, ultimately accelerating student development (Rudolph et al., 2023). There are exciting possibilities for language learning with these AI technologies in EFL classrooms. Immersive conversational practice, individualized learning opportunities, and more precise evaluations of language competency benefit language learners. However, since they have repercussions for students and instructors, it is crucial to consider the possible drawbacks of integrating AI into EFL courses alongside the potential benefits.

## **Advantages of AI in the EFL Classroom**

### ***Personalized Learning Experiences***

The capacity to provide each student with a personalized learning experience is one of the significant benefits of using AI in EFL classrooms. AI algorithms, which analyze student data such as performance, interests, and learning preferences, can help to tailor material and activities to individual students (Vera, 2023). Due to this personalized approach, students may interact with resources relevant to their needs, interests, and learning preferences. Learners are more likely to remain motivated and advance in their language learning journey by getting information and activities that are relevant and appropriate for their level of skill. Additionally, AI-powered systems may provide students with tailored feedback, indicating areas for improvement and offering them specific coaching (De la Vall & Araya, 2023). This instant and detailed feedback encourages more effective learning and helps students quickly correct their weaknesses.

### ***Enhanced Language Practice and Feedback***

Chatbots and other AI tools in EFL classrooms promise to improve language practice and feedback. These AI-powered chatbots allow students to participate in engaging, realistic language discussions, allowing them to hone their speaking and listening abilities in a safe setting (Jeon, 2021). AI-powered chatbots provide students with genuine language usage experiences by imitating real-world communication situations, enhancing their capacity for comprehension and effective communication in various settings (Kim et al., 2021). Additionally, AI systems can provide learners with immediate, focused feedback while immediately detecting their mistakes and making recommendations for development. In addition to assisting students in real-time error correction, rapid feedback encourages students' language acquisition. EFL learners may benefit from opportunities to strengthen their language skills with individualized help by using AI for language practice and feedback, improving both competence and confidence in their language abilities.

### ***Adaptive Testing***

Due to its ability to customize tests for individual students, AI-driven adaptive testing offers significant benefits in EFL classrooms. These methods ensure that the assessment appropriately reflects the students' competence level by dynamically adjusting the test

questions' difficulty and substance depending on their replies. Instructors may use a personalized approach to ensure students are suitably challenged, preventing learners from becoming demotivated by overly challenging material or disinterested in simple assignments. Through adaptive testing, instructors may gather knowledge about their student's strengths and shortcomings to modify their teaching tactics, provide help where required, and enhance the learning process (Rudolph et al., 2023). The adaptive nature of AI-driven testing improves assessment accuracy and empowers instructors to provide more efficient and customized training to support language learning in the EFL classroom.

### ***Availability of Language Resources***

Students who take EFL classes with AI have access to a wealth of linguistic materials. Digital resources such as interactive exercises, authentic texts, multimedia resources, and language learning applications may all be found on platforms with AI capacity. These materials are accessible at any time and from any location, enabling students to pursue autonomous study outside the traditional classroom's boundaries (Voskoglou & Salem, 2020). AI technology makes it possible for students to study different language materials at their own speed, allowing self-directed learning and encouraging autonomy in the language learning process. Furthermore, the enormous variety of language materials enhances the learning process and allows students to investigate various subjects and situations, promoting a deeper comprehension of the language and culture.

### **Disadvantages of AI in the EFL Classroom**

#### ***Limited Human Interaction***

Despite the advantages of AI apps for language learning and assessment, it's critical to recognize that they may reduce face-to-face contact in EFL classrooms. For students to participate in genuine and meaningful dialogues, direct connection with instructors and peers is essential. AI chatbots can replicate discussions but cannot fully capture the subtleties and dynamics of interpersonal dialogue (Jeon, 2021). The capacity of learners to completely grasp the nuances of language, such as tone, body language, and contextual knowledge, might be hampered by the lack of face-to-face contact and nonverbal clues. Human connection offers a rich learning environment where students may practice active listening, meaning negotiation, and social interactions, improving communication abilities (Kim et al., 2021). Therefore, to provide thorough language learning experiences in the EFL classroom, it is crucial to establish a balance between AI applications and human engagement.

#### ***Risk of Overdependence***

Although AI applications offer automatic aid and convenience, relying on them too much in the EFL classroom might lead to passive learning experiences. Learning takes on a more passive quality when AI often gives pre-generated information and automated feedback (De la Vall & Araya, 2023). Developing higher-order cognitive abilities requires active involvement, critical thinking, and problem-solving, all limited by this passive learning technique. The capacity of learners to undertake independent research, think critically, and analyze material outside of the predetermined algorithms and replies offered by AI might be hindered by an overreliance on AI systems (Vera, 2023). AI-based tools and activities that promote active engagement, independent thought, and student-driven inquiry must be balanced to provide a well-rounded education.

## ***Ethical Concerns***

AI in the EFL classroom raises significant ethical questions about data security and privacy. AI systems gather and examine learner data, including performance and personal data. To preserve the privacy and rights of students, it is crucial to secure this data against unauthorized access or breaches. Algorithmic biases are another issue wherein AI systems could unwittingly uphold injustices or favor certain groups over others (Wang et al., 2023). To solve this, it is crucial to ensure that AI applications are fair and inclusive, actively minimizing biases and encouraging equal opportunity for all learners. Maintaining trust, protecting student privacy, and upholding ethical norms are crucial when integrating AI into EFL classrooms. These qualities must be continually worked towards.

## ***Technological Limitations and Accessibility***

Technology restrictions and accessibility issues may arise when using AI in EFL classrooms. AI systems often depend on specialized infrastructure, such as steady internet connections and suitable hardware, which may not be accessible everywhere in educational settings. A lack of technological access may lead to inequities, preventing some students from using AI-powered tools and experiences. Additionally, using AI technology necessitates a learning curve for instructors and students, requiring time and effort to become used to new resources and modify teaching strategies (Vera, 2023). The learning process may be interfered with, and the smooth integration of AI in the EFL classroom might be hampered by technical issues or dissatisfaction with AI technologies. To successfully integrate AI into the EFL learning environment, it is vital to provide equal access to technology, to offer instructors and students the required assistance and training, and to resolve any technical concerns quickly.

## **Effectiveness of AI in the EFL Classroom**

Empirical research has been undertaken to determine how well AI applications work in EFL classrooms. These studies examine how AI affects language acquisition abilities, including speaking, listening, reading, and writing. Personalized learning platforms, adaptive testing environments, and other technologies have all been studied by researchers. This research gathers information on learners' performance, engagement, and contentment and uses it to draw meaningful conclusions about the efficiency of AI in promoting language learning and enhancing learning outcomes. Empirical studies help us learn how AI may be best used in EFL classrooms via careful study and assessment.

The primary goal of assessing AI's effects on language learning outcomes is to assess the extent to which AI applications improve learners' competence and linguistic growth. Researchers assess learners' language proficiency before and after participating in AI-based treatments, comparing their development to that of students who received conventional classroom instruction (Wang et al., 2023). Language learners' performance, fluency, accuracy, and general language competency are assessed through summative and formative language tests. Additionally, the assessment considers variables like learner satisfaction, engagement, and motivation. Researchers learn more about the efficacy of AI in boosting language learning outcomes and its possible benefits over traditional teaching methods by analyzing the data gathered (Rudolph et al., 2023).

Comparative research has been done to determine how well AI compares to conventional EFL teaching techniques. These studies examine how students who use AI apps and those

who get conventional classroom teaching differ in their learning processes and results. Students' motivation, engagement, retention of information, and overall language ability are compared by researchers. These studies highlight AI's distinctive benefits, such as personalized learning experiences, adaptive evaluations, and fast feedback, by evaluating the strengths and disadvantages of both methodologies (Rudolph et al., 2023). They also emphasize the advantages of conventional teaching techniques, such as one-on-one instruction, instructor direction, and group projects. Comparative studies help to clarify the potential of AI as a supplemental tool in the EFL classroom and provide information on how it may be successfully incorporated alongside conventional teaching techniques.

We comprehend AI's efficacy in EFL classrooms by analyzing empirical data, assessing language learning results, and comparing it with conventional teaching approaches. These conclusions assist educators in making well-informed choices about incorporating AI technologies by pointing them toward pedagogically sound procedures that enhance language learning encounters and foster student success.

### **Future Trends in AI for EFL Teaching**

As it continues to develop, AI technology has significant potential to offer new opportunities in the field of EFL education. AI systems will be able to comprehend and produce language more like that of humans due to developments in natural language processing and creation. As a result, AI chatbots will have better skills, allowing more complex and engaging dialogues with students (Sumakul et al., 2022). Additionally, it is anticipated that adaptive and personalized learning platforms will develop further. These platforms will use AI algorithms to provide customized exercises, assessments, and information depending on the requirements of particular learners. This tailored method will raise interest and improve language learning results. A further development in AI-driven EFL instruction is the integration of apps for virtual reality (VR) and augmented reality (AR) (Sumakul et al., 2022). With the help of VR and AR, language learners may practice in simulated real-life settings and discover cultural backgrounds in immersive learning environments. Given these developments in AI technology, the potential for improving language learning experiences and encouraging student autonomy and engagement is enormous.

Future advancements in AI-based EFL instruction will substantially impact instructors and students. Students will gain more access to personalized and adaptive learning opportunities tailored to their unique requirements, preferences, and learning preferences. Immersive VR and AR environments that enable real-world language practice and cultural discovery may benefit learners (De la Vall & Araya, 2023). Language learning may be made more successful and efficient using AI technology that can continuously give feedback, monitor progress, and make tailored suggestions. AI-powered solutions for instructors may help with lesson preparation, give insights into student performance, and make tailored suggestions for differentiated education.

However, future AI breakthroughs in the EFL classroom also have difficulties and issues to consider. Teachers must acquire the essential skills and expertise to incorporate AI technology into their teaching practices successfully (Vogt & Flindt, 2023). They must also address moral concerns like data privacy, algorithmic biases, and AI-human balance. Access to AI technology and infrastructure must be equitable to avoid learning disparities.

## **Recommendations for Educators**

### ***Strategies for Integrating AI in EFL Classrooms***

AI technology should be used in EFL courses using the following methods. First, balance AI and traditional teaching methods. AI has numerous benefits, but human interaction still offers the best ways to learn (Voskoglou & Salem, 2020). To ensure students have adequate chances for direct interaction and collaboration, classroom activities may be augmented by AI technology. Second, professors should advise students about AI usage. This involves offering AI platform users precise instructions, assistance on effective usage, and supporting learner autonomy and responsibility. Finally, educators should stress study and analysis (Pokrivcakova, 2019). While AI may provide quick solutions and feedback, students must have the capacity for independent study, critical thought, and information evaluation. This may be accomplished by giving learners research-based assignments, fostering critical thinking, and providing instruction on how to use AI resources effectively.

### ***Professional Development for Teachers in AI Implementation***

Teachers should obtain sufficient professional development in AI implementation to properly integrate AI technology in EFL classrooms. First, instructors need to get training on AI tools and technology. Workshops, webinars, and courses that introduce instructors to the capabilities and uses of AI systems in language learning may be included in this training. Teachers must acquire the technical know-how required to traverse AI platforms with ease and effortlessly incorporate them into their pedagogical practices (Vogt & Flindt, 2023). Second, educators should be trained on ethical issues and data privacy. They must be aware of the effects of using AI technology, such as how crucial it is to safeguard learner data and deal with algorithmic biases. The best practices for protecting data protection, gaining permission, and upholding equity and inclusion in AI-based activities should be made known to teachers (Pokrivcakova, 2019). Last but not least, professional learning groups, conferences, and online forums may promote educator cooperation and the exchange of best practices. This enables educators to exchange successful practices, gain insight from one another's experiences, and collaboratively investigate the useful application of AI technology in the EFL classroom. By following these suggestions, teachers may successfully incorporate AI technologies into the EFL classroom, making the most of their advantages while ameliorating their drawbacks and ensuring students have a balanced and educational experience.

### **Limitations of the Study**

There are several limitations to the present study. First, data were only collected from four classes therefore, the size of the research is limited. Second, the data were collected in the mid-semester. Regular reflections throughout the year may reveal other information. Third, all questions and reflections were written by students in English. If they were allowed to write in Japanese, they might be better able to articulate their feelings.

### **Conclusion**

AI offers both benefits and drawbacks in EFL lessons. AI tools that provide personalized learning, improved language practice, focused feedback, and accurate assessments include chatbots, adaptive testing, and personalized learning experiences. However, there are issues

with the lack of human contact, the danger of dependency, moral issues, and technology constraints. Continuous research and development are essential if AI is to be used to its greatest potential in EFL classrooms. To ensure that AI tools are pedagogically sound and in line with best practices in language education, more research should be done to examine the efficacy and influence of AI on language learning outcomes. AI can improve language learning by providing individualized assistance, adaptive learning opportunities, and immersive language practice. In the EFL classroom, teachers may use AI technology to empower students and support their language growth by finding a balance between AI and human engagement.



## References

- De la Vall, R. R. F., & Araya, F. G. (2023). Exploring the benefits and challenges of AI-language learning tools. *Int. J. Soc. Sci. Humanit. Invent*, *10*, 7569-7576.  
<http://valleyinternational.net/index.php/theijsshi>
- Jeon, J. (2021). Exploring AI chatbot affordances in the EFL classroom: Young learners' experiences and perspectives. *Computer Assisted Language Learning*, 1-26.  
<https://doi.org/10.1080/09588221.2021.2021241>
- Kim, H. S., Cha, Y., & Kim, N. Y. (2021). Effects of AI chatbots on EFL students' communication skills. *□□□*, *21*, 712-734.  
<http://journal.kasell.or.kr/xml/30253/30253.pdf>
- Pokrivcakova, S. (2019). Preparing teachers for the application of AI-powered technologies in foreign language education. *Journal of Language and Cultural Education*, *7*(3), 135-153. <https://doi.org/10.2478/jolace-2019-0025>
- Rudolph, J., Tan, S., & Tan, S. (2023). War of the chatbots: Bard, Bing Chat, ChatGPT, Ernie and beyond. The new AI gold rush and its impact on higher education. *Journal of Applied Learning and Teaching*, *6*(1). <https://doi.org/10.37074/jalt.2023.6.1.23>
- Sumakul, D. T. Y., Hamied, F. A., & Sukyadi, D. (2022). Artificial intelligence in EFL classrooms: Friend or foe?. *LEARN Journal: Language Education and Acquisition Research Network*, *15*(1), 232-256. [EJ1336138.pdf](https://doi.org/10.11336138.pdf) (ed.gov)
- Vera, F. (2023). Integrating Artificial Intelligence (AI) in the EFL Classroom: Benefits and Challenges. *Transformar*, *4*(2), 66-77. <https://orcid.org/0000-0002-4326-1660>
- Vogt, K., & Flindt, N. (2023). Artificial Intelligence and the Future of Language Teacher Education: A Critical Review of the Use of AI Tools in the Foreign Language Classroom. *The Future of Teacher Education*, 179-199.  
[https://doi.org/10.1163/9789004678545\\_008](https://doi.org/10.1163/9789004678545_008)
- Voskoglou, M. G., & Salem, A. B. M. (2020). Benefits and Limitations of the Artificial with Respect to the Traditional Learning of Mathematics. *Mathematics*, *8*(4), 611.  
<https://doi.org/10.3390/math8040611>
- Wang, S., Sun, Z., & Chen, Y. (2023). Effects of higher education institutes' artificial intelligence capability on students' self-efficacy, creativity and learning performance. *Education and Information Technologies*, *28*(5), 4919-4939.  
<https://link.springer.com/article/10.1007/s10639-022-11338-4>