



The role of artificial intelligence in advancing English as a foreign language teaching at Saudi universities

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Abstract

This article presents findings from a comprehensive sequential explanatory mixed-methods study examining the perception of the transformative impact of Artificial Intelligence on English as a Foreign Language education at tertiary-level institutions. Through a 16-item psychometric scale purposefully designed survey, which was conducted with 192 EFL male and female teachers and in-depth, semi-structured interviews, insights were gathered into the challenges, opportunities, and evolving pedagogical approaches facilitated by AI-driven language learning platforms. Key findings indicate that AI-based applications and resources offer personalized learning experiences, catering to diverse learning styles, and enabling students to engage actively with language acquisition. However, while the majority of the teachers acknowledged the potential of AI to complement traditional instructions and pedagogies, enhancing individualized feedback and fostering EFL immersion some teachers expressed their reservations about students using AI in fear of academic dishonesty and disingenuity.

Keywords: Artificial intelligence; English as a foreign language; personalized learning; pedagogical innovation

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1. INTRODUCTION

The landscape of English as a Foreign Language (EFL) education has witnessed a major transformative shift with the advent and integration of Artificial Intelligence (AI) in second language acquisition (SLA) (Fitria, 2021; Li, 2022). This is particularly evident within tertiary-level institutions in the Kingdom of Saudi Arabia (KSA) (AbdAlgane & Jabir Othman, 2023). As such, the momentous for conducting this study is to explore the pivotal role that AI plays in revolutionizing EFL education, examining its impact, challenges, and implications in the Saudi higher education system.

The utilization of AI technologies, encompassing natural language processing, machine learning algorithms, and adaptive learning systems, has catalyzed a paradigm shift in the traditional methodologies of teaching and learning English as a foreign language (Ouyang & Jiao, 2021; Zhai & Wibowo 2023). At KSA's tertiary institutions, AI-driven platforms can have the potential to offer autonomous and personalized learning experiences tailored to individual proficiency levels, learning styles, and cultural contexts (Haque et al., 2023). These systems not only provide interactive and immersive language learning environments but also enable real-time feedback and assessment, fostering autonomy and engagement among EFL learners (Miladiyenti et al., 2022; Li & Wang 2023).

In a study by Dergaa et al., (2023), data was gathered via both, quantitative and qualitative data collection tools by adopting a mixed methods explanatory sequential mixed methods research design. The analysis of the data has showcased the perceptions and experiences of EFL teachers in utilizing AI technologies in EFL education in KSA. The main aim was to reflect upon the opinion of the EFL teachers and highlight their perspectives of AI in all its glory and concerns. Concerns may include the reservations that some teachers may have when students are utilizing AI in their studies and writing their assignments where the ever so apparent stigma of 'cheating' and 'academic dishonesty' can cast suspicions on students' work submitted to their teachers (Dergaa et al., 2023).

Despite the aforementioned advancements in recent AI platforms and applications, challenges persist in the integration of AI in EFL education within KSA's tertiary institutions. Issues such as access to technology, digital infrastructure, and the need for qualified educators to navigate these AI-driven tools remain prevalent (Alotaibi & Alshehri, 2023). Additionally, ethical considerations surrounding data privacy, cultural adaptation, and the human-computer interaction aspect in language learning environments warrant careful examination (Alsabhan, 2023).

The implications of AI in EFL education at the tertiary level in KSA extend beyond the boundaries of the classroom. The potential for AI to enhance language proficiency, cross-cultural communication, and global competitiveness among Saudi learners is substantial. However, achieving a balance between technological innovation and pedagogical integrity is imperative to harness the full potential of AI in advancing EFL education in Saudi Arabia's higher education landscape. This article serves as a starting point for further exploration and discourse on the multifaceted impact of AI on EFL education in KSA from the teachers' perspectives.

The Kingdom of Saudi Arabia (KSA) has been undergoing huge transformations in its educational landscape, particularly in the realm of English as a Foreign Language (EFL) education at tertiary-level institutions (Bunaiyan, 2019; Mitchell & Alfuraih, 2018). With the increasing importance of English in global communication and commerce, there is a growing emphasis on enhancing EFL proficiency among Saudi students (Alqahtani, 2022; Alshammari, 2022). This has led to the exploration and integration of innovative technologies, notably, and in recent years, Artificial Intelligence (AI), to revolutionize the process of second language acquisition (AbdAlgane & Jabir Othman, 2023).

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Historically, EFL education in KSA faced challenges, primarily stemming from traditional teaching methodologies and limited exposure to authentic English language environments (Barnawi & Al-Hawsawi, 2017; Hakim, 2020; Mohammed et al., 2024). However, recognizing the significance of English proficiency for economic diversification and international collaboration, the Saudi government has initiated various educational reforms, including the recent initiative to integrate AI into EFL instruction (Al-Mwzaiji & Muhammad, 2023; Alharbi, 2022).

AI's integration into EFL education offers multifaceted benefits (Adigüzel et al., 2023; Mageira et al., 2022). Firstly, AI-powered platforms provide personalized learning experiences, catering to individual student's needs and learning styles. These systems utilize adaptive algorithms to analyze students' strengths and weaknesses, offering tailored exercises, feedback, and resources (Chang et al., 2023). Platforms, such as language learning apps, AI chatbots, and intelligent tutoring systems, enable students to practice listening, speaking, reading, and writing skills interactively and engagingly (Lin et al., 2023; Mageira et al., 2022; Rusmiyanto et al., 2023; Atkinson et al., 2024).

Moreover, Virtual reality (VR) and augmented reality (AR) applications simulate real-world English-speaking environments (Divekar et al., 2022), allowing students in KSA to practice conversational skills with AI-generated characters or interact with native speakers globally. These immersive experiences bridge the gap between, fostering linguistic confidence and cultural understanding (Schmidt & Strasser, 2022). Furthermore, AI-driven assessment tools offer precise evaluations of students' language proficiency levels. Automated language assessment systems analyze linguistic patterns, pronunciation, grammar, and vocabulary usage, providing instantaneous and accurate feedback. This enables educators to track students' progress effectively and tailor instructions accordingly (Gayed et al., 2022).

The adoption of AI in EFL education at tertiary-level institutions in KSA is not without its challenges. One major concern is the digital divide, as access to technology and reliable internet connectivity varies among students, particularly in some rural areas of KSA. Addressing this gap requires concerted efforts by the government and educational institutions to ensure equitable access to AI-driven resources for all learners. Additionally, there's a need for teacher training and professional development to effectively utilize AI tools in EFL classrooms. Educators must learn to adapt to the evolving role of AI as a complement to their teaching methodologies, leveraging these technological advancements to enhance rather than replace their pedagogical expertise (Chan, 2023; Kohnke et al., 2023; Sengar et al., 2024).

Collaborations between academia, industry, and government bodies play a pivotal role in fostering the integration of AI in EFL education. Partnerships can facilitate the development of innovative AI-driven solutions tailored to the specific linguistic and cultural needs of Saudi students (Alshumaimeri & Alshememry, 2023). Additionally, research initiatives exploring the efficacy of AI in language learning and its long-term impact on students' proficiency levels are crucial for the continuous improvement and refinement of these technologies.

The future of EFL education in KSA holds immense promise with the continued integration of AI. Advancements in natural language processing, machine learning, and AI-driven adaptive learning systems will further personalize and optimize language learning experiences (Alhalangy & AbdAlgane, 2023). Moreover, the seamless integration of AI into EFL curricula will empower Saudi students to become proficient English speakers, be equipped to navigate a globalized world, and contribute meaningfully to diverse international settings. As AI continues to evolve, its role in revolutionizing EFL education will be instrumental in shaping a more linguistically competent and globally competitive workforce in the Kingdom of Saudi Arabia (Makhlouf, 2021).

Over the past three decades, with the advent and unprecedented spread of the internet and social media applications, there were, initially, various mixed reactions and responses to the utilization of such applications in education. While some saw various potentials of such applications in education (Rahman et al., 2020; Tess, 2013; Zachos et al., 2018), others expressed their resentment and reservations towards using social media applications and platforms in their classrooms since a large number of those skeptical teachers believed that the students may not use these applications properly and may occasionally resort to cheating (Alghamdi et al., 2016; Dyer, 2010; O'Connell, 2016). As such, many students might feel taken aback by the stigma that was tainting their sincere efforts to improve their language proficiency (Best & Shelley, 2018; Peytcheva-Forsyth et al., 2018). This is in addition to the fact that many students: "appear to have difficulty in differentiating what is acceptable about personal sharing in social situations is not necessarily ethical or professional in educational or organizational situations when the materials belong to someone" (Burnett et al., 2016). Notwithstanding such conclusions in previous research studies into this dilemma, it is evident that there have not been many studies that have focused on the accelerated and modern use of AI in education and whether it is possible to cast an unbiased view on such unprecedented use of AI technologies in education.

1.1. Theoretical framework

This research study lends itself to two main concepts: the Technological Pedagogical Content Knowledge (TPACK) principle (Schmidt et al., 2009) and the Diffusion of Knowledge model (Schmidt et al., 2009). The integration of both these theories provides a comprehensive framework for understanding the role of AI in advancing second language acquisition in universities in KSA. TPACK emphasizes the importance of integrating technological knowledge, pedagogical knowledge, and content knowledge in educational settings. In the context of EFL teaching, this framework suggests that successful integration of AI tools requires a deep understanding of how these tools can enhance pedagogical approaches and facilitate the learning of English language content.

On the other hand, the Diffusion of Innovations model complements TPACK by providing insights into the factors that influence the adoption and spread of AI innovations in educational settings. This model suggests that the adoption of AI in EFL teaching in KSA's universities will be influenced by various factors, including the perceived relative advantage of AI over traditional teaching methods, the compatibility of AI with existing teaching practices, the complexity of implementing AI tools, the trialability of AI tools, and the observability of their benefits. By combining TPACK and Diffusion of Innovations Theory, this study aims to explore how AI can be effectively integrated into EFL teaching practices in KSA's universities, with a focus on enhancing second language acquisition outcomes.

1.2. Purpose of study

This article presents findings from a comprehensive sequential explanatory mixed-methods study examining the perception of the transformative impact of Artificial Intelligence (AI) on English as a Foreign Language (EFL) education at tertiary-level institutions in the Kingdom of Saudi Arabia (KSA) context.

2. METHODS AND MATERIALS

2.1. Research design

The current study employed a sequential explanatory mixed-method research design since it offers a much wider and more comprehensive approach to understanding the perceptions of EFL teachers regarding the use of AI in education in the Saudi context. The study began with the quantitative phase since previous research by Ashraf et al. (2017) indicated that a quantitative research method proved increasingly relevant in achieving greater generalizability regarding social media use which this study has

depicted a similar foundation to that study. Hair Jr et al., (2021)'s recommendation to conduct a power analysis to determine sample size, a significant test threshold of 0.05 with an expected medium effect size f (0.30), as suggested by Cohen (2016), indicated that 127 participants were sufficient to detect large effect sizes at a recommended power of 0.95. With a response of $n=192$, the sample size exceeded the minimum requirement of 127 participants (Cohen, 2016). As such, a random sampling technique, ensuring a representative sample, was employed and the final sample of $n=192$ EFL teachers from diverse academic backgrounds participated in the survey. The participants were asked to complete a custom-designed survey to quantify their perceptions of AI in education. The survey was adapted from items in the previous two research studies by Roblyer et al., (2010) and Jomezai et al., (2021) which covered aspects such as familiarity with AI, perceived benefits, concerns, and experiences. The quantitative data provided statistical insights into the overall trends and patterns in participants' perceptions.

Following the quantitative phase, the study progressed to the qualitative phase, incorporating semi-structured, 35-minute interviews with EFL teachers. A total of seven teachers agreed to participate in the semi-structured interviews. The main rationale for conducting semi-structured interviews was to allow the participants to express their views on AI in greater detail and provide rich, nuanced insights into their perceptions. The interview questions explored the experiences of the teachers' participants as well as the challenges they thought were hindering the process of implementing AI in teaching and learning EFL. The mixed-method approach enabled the triangulation as well as the enhancement of the study's validity by cross-verifying findings from both quantitative and qualitative data sources (Flick, 2018; Olsen, 2022). This methodology ensured a holistic understanding of the perceptions of the teachers, and additionally, enriched the research with a depth of insights that may not be achievable through a singular method.

2.2. Participants

The current study consisted of both, male and female EFL teachers at two major universities in KSA. There were 192 EFL teachers (108 female and 84 male) who consented to participate in the survey. They were randomly selected, and no restrictions were placed on any of the teachers participating. In the qualitative phase, seven EFL teachers participated in 30-minute semi-structured interviews. Those participants were also selected at random where any of the EFL teachers, could participate in the study without any reservations.

2.3. Data collection tools

The 16-item survey was sent via email to the EFL teacher participants and data was gathered via an online survey-hosting website (Google Doc®). The administration and availability of the online survey occurred over ten weeks. Statistical analyses were conducted following these ten weeks. The semi-structured interviews were conducted via telephone and also, via face-to-face with EFL teachers at King Abdulaziz University (KAU).

The survey utilized for the current study was developed to assess the teachers' attitudes about how they perceived the newly available, AI resources and how strongly they believe such resources are beneficial or not. Survey items focussed on the perceptions of the teachers and on what constitutes cheating so that the respondents could provide their opinion of whether the statement was cheating (or not) using a Likert scale.

2.4. Data analysis

Construct and face validity were determined via a review of the items among four colleagues within the field. Those four professional colleagues reviewed the survey items to determine that major constructs were addressed, and questions were comprehensive and clear for the study. The reliability of the data was

measured via Cronbach’s alpha and the validity via piloting the survey with 10 EFL teachers whose gathered data from the survey indicated that there were no difficulties or issues with the clarity of the items of the survey. The data from the piloting stage were discarded and eliminated before starting to collect the main participants’ data. Data Analysis IBM SPSS, version 23®, was used to assess variables. Descriptive statistics were measured, and the results were presented via graphs, charts, and frequency tables. Anonymity was achieved within this study, as students were not asked to provide any identifying information, such as a name or student identification number.

Semi-structured interviews with EFL teachers were conducted by simply asking the five key questions relevant to the participants and allowing them the freedom to elaborate and discuss various relevant points to the main questions as they saw fit. The semi-structured interviews offered unique advantages for this line of inquiry in this research study. Wilson (2014) states that: “Semi-structured interviews are useful when you are working with a complex issue because you can use probes and spontaneous questions to explore, deepen understanding, and clarify answers to questions”.

The validity of the qualitative gathered data from the semi-structured interviews was assessed via respondent validation and re-visiting the initial responses of each participant and assessing whether there were any discrepancies or changes in those responses (Richards, 2020). The seven respondents had the same perspectives as their original account in the main interviews which assured the validity of the qualitative data.

3. RESULTS

3.1. Survey analysis

Before the main data analysis of the survey, the internal consistency was measured via Cronbach’s alpha coefficient, and the resultant value was 0.706 indicating a good level of internal consistency of the items of the survey (See Table 1).

Table 1

Cronbach’s Alpha Coefficient

Reliability Statistics	
Cronbach's Alpha	N of Items
.706	15

The gender and years of experience working in education are both indicated in Tables 2 and 3.

Table 2

Gender of the participants

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	Male	84	43.8	43.8	43.8
	Female	108	56.3	56.3	100.0
	Total	192	100.0	100.0	

Table 3

Years of experience in education

	Frequency	Percent	Valid Percent	Cumulative Percent	
Valid	0-5 Years	55	28.6	28.6	28.6
	6-10 Years	45	23.4	23.4	52.1

11-15 Years	32	16.7	16.7	68.8
16-20 Years	46	24.0	24.0	92.7
21-25 Years	14	7.3	7.3	100.0
Total	192	100.0	100.0	

As can be seen in Table 2, there was slightly a higher number of female participants than male participants and as can be seen in Table 3, over 40% of the participants had more than 10 years of experience working in education.

The Mann-Whitney U non-parametric test was conducted to compare the means of the responses of the male teacher participants to those of the female participants for the ordinal items: 4, 5, 6, 9, 12, 13, 15, and 16. The results of the critical values indicated that there was no significant difference between the responses of the male participants to those of the female participants.

With regards to the first construct of this study, items 3, 4, 5, 7, 8, 11, and 12 deal with the use and experience of AI by EFL teachers in their classrooms. Table 4 highlights the descriptive statistics of the mean of responses of the teachers to each item in this area.

Table 4

Mean scores of responses of the teachers to items 3, 4, 5, 7, 8, 11 and 12

	N	Minimum	Maximum	Mean	Std. Deviation
Have you ever used or integrated AI technology in your teaching practices?	192	1	2	1.79	.407
How would you rate your understanding of artificial intelligence?	192	1	4	2.26	1.150
How comfortable are you using AI technology in your teaching?	192	1	5	3.74	1.122
Have you ever integrated AI tools or applications into your lesson plans?	192	1	2	1.86	.343
Have you received any training on how to effectively use AI in your teaching practices?	192	1	2	1.85	.354
Have you ever collaborated with AI developers or experts to enhance your teaching methods?	192	2	2	2.00	.000

How important do you think it is for teachers to receive professional development related to AI in education?	192	1	5	2.47	1.121
Valid N (listwise)	192				

It is evident that the responses of the teachers to items 3 and 7 lean towards a 'No' answer (Means = 1.79 and 1.86, respectively) where the majority indicated that they did not use AI technology in their classroom. The teachers, while responding to item 4 indicating that their understanding of AI is somewhere between good and fair (Mean = 2.26), did not feel comfortable using AI in their classroom as their responses to item 5 (Mean = 3.74).

With regards to items 8, 11, and 12, the majority of the teachers responded with a 'No' answer to receiving training in AI (item 8, Mean = 1.85), and a 100% 'No' answer to item 11 indicating that none of the 192 teachers collaborated with an AI developer. Yet, the majority of the teachers responded with 'Very Important and Important' to item 12 regarding their perception of receiving professional development in AI.

With regards to the second construct deals with the teachers' perceptions of whether AI has a positive impact on their teaching and learning and whether their students believe that AI is beneficial to them. The mean score responses to items 6, 9, 10, 13, and 14 are illustrated in Table 5 below.

Table 5

Mean scores of responses of the teachers to items 6, 9, 10, 13, and 14

	N	Minimum	Maximum	Mean	Std. Deviation
Do you believe that AI has a positive impact on the teaching and learning experience?	192	1	5	2.39	1.403
How do you feel about the use of AI in grading and assessments?	192	1	3	2.26	.493
Have you noticed any changes in student engagement when using AI tools in your teaching?	192	1	2	1.86	.343
Do you think the use of AI technology has affected your workload positively or negatively?	192	1	2	1.94	.243
Have you gathered feedback from	192	2	2	2.00	.000

students about their experience with AI-integrated teaching methods?	Valid N (listwise)	192
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As can be seen in the mean score responses to item 6, the teachers still believed in the importance of using AI in their classrooms (Mean=2.39). The majority of the teacher responses to item 9 were between 'neutral' and 'negative' regarding the use of AI in assessment and similarly, the majority responded with 'no' (Mean=1.86) to item 10 regarding noticing any changes to the students' engagement using AI.

Items 15 and 16 relate to the third construct of ethics and the future of AI in education. The responses of the participants are shown in Table 6 below.

Table 6
Mean scores of responses of the teachers to items 15 and 16

N	Minimum	Maximum	Mean	Std. Deviation
How concerned are you about the ethical implications of using AI in education?	192	1	4	1.72
How optimistic are you about the future of AI in education?	192	1	3	1.78
Valid N (listwise)	192			

As can be seen from Table 6 above, the majority of the teachers expressed their concerns regarding AI ethics but were very optimistic about the future of AI integration in education.

3.2. Qualitative data analysis

The second phase of the data collection process was the semi-structured interviews and the gathered qualitative data. Following the transcription of the semi-structured interviews and audio-recorded data with the seven teachers who agreed to participate in the research, the coding analysis highlighted several emerging themes which the majority of the teachers gave a similar account for. The following extracts from the transcription of the audio-recorded interviews indicated that several teachers had reservations regarding the use of AI in education.

Teacher A stated:

As a teacher, I believe that while AI has its perks, it should never be a replacement for human educators. AI lacks the empathy and understanding that human teachers bring to the classroom. It may be able to provide information and answer questions, but it cannot truly connect with students on a personal level or understand their individual needs. Additionally, there is a concern that AI could lead to the depersonalization of education, where students are treated as data points rather than individuals. We must be cautious in integrating AI into education and ensure that it complements rather than replaces the role of teachers.

Also, teacher B stated:

While AI can be a useful tool in teaching English as a foreign language, it cannot fully replace the role of a human teacher. Language learning is not just about solving questions on grammar and vocabulary; it also involves cultural nuances, contextual understanding, and personalized feedback. AI might be able to assist with certain aspects of language learning, such as pronunciation practice or grammar exercises, but it cannot replicate the dynamic and interactive nature of a classroom with a qualified and skilled teacher. Moreover, there is a risk that over-reliance on AI could lead to a lack of critical thinking and creativity in language learning. Therefore, it is important to use AI judiciously and in conjunction with traditional teaching methods to enhance, rather than replace, the learning experience.

However, the other teachers expressed their support for utilizing AI resources in education in general and their EFL classrooms in particular. Teacher C states:

I believe that AI can greatly benefit the teaching of English as a foreign language. AI technologies, such as chatbots and language learning apps, can provide students with immediate feedback, personalized learning experiences, and additional practice outside the classroom. These tools can be particularly useful for students who may not have access to regular English-speaking environments. AI can also help teachers by automating certain tasks, such as grading multiple-choice quizzes or providing language exercises, allowing them to focus more on individualized instruction and student support. To be honest, I see AI as a valuable supplement to traditional teaching methods, enhancing the learning experience for both students and teachers.

Similarly, teacher D voiced a similar opinion to Teacher C in believing the numerous benefits of AI resources in EFL teaching and learning. She states:

I believe that AI has the potential to revolutionize the way we teach and learn English as a foreign language. With AI-powered tools, students can receive personalized lessons that cater to their specific learning needs and preferences. These tools can adapt to each student's pace, providing additional practice in areas where they struggle and advancing them quickly through areas where they excel. AI can also make learning more engaging and interactive, with virtual reality simulations, language games, and real-time language translation. By embracing AI in the classroom, we can create a more dynamic and effective learning environment for students, helping them to achieve greater proficiency in English.

Teacher E expressed her opinion by providing a balanced view on utilizing AI in EFL. She stated:

As a teacher, I see the potential benefits of integrating AI into education, especially in terms of personalized learning and efficiency. AI can help identify my students' strengths and weaknesses, allowing for targeted interventions and personalized learning plans. It can also automate routine tasks, freeing up more time for teachers to focus on meaningful interactions with students. However, I also recognize the limitations of AI, particularly in areas that require human empathy, creativity, and critical thinking. I believe that AI should be used as a tool to enhance teaching and learning, not as a replacement for human educators. Finding the right balance between AI and human interaction is key to maximizing the benefits of both.

Along similar lines to what teacher E stated, teacher F believes that:

As an English as a Foreign Language (EFL) teacher, I see both the potential benefits and challenges of incorporating Artificial Intelligence (AI) into language learning with my students. AI tools can offer personalized learning experiences, adapt to student's needs, and provide on-the-spot feedback, which can enhance students' language skills and motivation. However, there are also concerns about the overreliance on AI, which may reduce human interaction and the development of important socio-cultural skills. It is

essential to strike a balance, using AI as a complement to, rather than a replacement for, traditional teaching methods, to ensure a holistic and effective ESL learning experience.

Finally, teacher G who is a staunch supporter of the utilisation of AI in EFL, stated:

I cannot personally understand the objection to using AI in the EFL classroom since it is undoubtedly evident that the use of AI in teaching and learning English as a Foreign Language is its ability to provide personalized and adaptive learning experiences. AI technologies can analyze individual student's strengths and weaknesses, learning styles, and progress, allowing for the creation of customized learning paths tailored to each student's needs. This personalized approach can significantly enhance the effectiveness of ESL education by addressing specific areas where students require improvement, accelerating their language acquisition. Furthermore, AI can provide immediate and targeted feedback, which is crucial for language learning. Unlike traditional teaching methods where feedback may be delayed or generalized, AI can offer instant corrections and explanations tailored to the student's mistakes. This immediate feedback not only reinforces learning but also helps students correct errors and improve their language skills more efficiently as well as making our lives, as EFL teachers, much easier. Just imagine all those countless AI-powered tools that can offer a wide range of resources and learning materials, including interactive exercises, simulations, and multimedia content, which can make learning more engaging and effective. These resources can simulate real-life language use scenarios, which are extremely important for Saudi students, helping them develop practical language skills that are essential for communication in English-speaking environments.

4. DISCUSSION

In line with what the world has witnessed in the past 5 years with AI, it is clear that AI has impacted the education realm and in particular, it has impacted the perceptions and discernments of university teachers who, according to a few studies by Humble and Mozelius (2022), McGrath et al. (2023) and Svaricek (2024), have harbored skepticism about the benefits of AI and often express concerns rooted in uncertainties about the technology's impact on the traditional education landscape. Some teachers might feel a bit reluctant and apprehensive about the potential use of AI in education where they might see AI as a substitution for the human instructors, fearing that it might dilute the personal, empathetic connection between teachers and students. The skepticism may also stem from concerns about cheating and academic dishonesty since the powerful AI systems have the capabilities to provide state-of-the-art materials and task productions which the majority of the students cannot produce to a similar extent and quality. Additionally, some university teachers may question the effectiveness of AI in fostering critical thinking skills and creativity, essential elements of higher education that are traditionally believed to thrive through human interaction and mentorship.

Moreover, skepticism among university teachers may be fuelled by uncertainties about the adaptability of AI to the diverse and dynamic nature of academic disciplines. Concerns about the alignment of AI technologies with the nuanced requirements of different subjects or the potential bias in algorithmic decision-making, which many students could lack the accuracy in judgment on those algorithms, may contribute to a cautious stance. The unfamiliarity with AI, coupled with the rapid evolution of the technology, may leave some educators feeling uncertain about its practical applications in their specific domains. Despite these reservations, there is a potential for constructive dialogue and collaboration to address concerns, fostering a more informed and inclusive approach to the integration of AI in higher education.

On the other hand, university students who harbor reluctance to embrace AI technologies often do so out of fear of social stigmatization and concerns about being accused of academic dishonesty. The

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traditional academic setting has long emphasized individual efforts and achievements, and some students worry that relying on AI tools might be perceived as taking shortcuts or compromising the authenticity of their work. The fear of being stigmatized by peers and instructors for leveraging AI in their studies creates an inevitable hesitancy to openly engage with these technologies, even when they could potentially enhance learning experiences.

Furthermore, the concern about being accused of cheating or violating academic integrity is a significant factor contributing to students' reluctance to adopt AI tools. There may be a lack of clear guidelines or communication from educational institutions regarding the ethical use of AI in academic work, leading to uncertainty among students. The fear of facing consequences, such as being accused of plagiarism or academic misconduct, may deter them from exploring and leveraging the benefits that AI could bring to their educational journey.

5. CONCLUSION

This study underscores the transformative potential of Artificial Intelligence (AI) in revolutionizing English as a Foreign Language (EFL) education at tertiary-level institutions in the Kingdom of Saudi Arabia (KSA). The majority of the participants have expressed their beliefs that AI-driven tools can significantly enhance the second language acquisition (SLA) process by providing personalized learning experiences, catering to diverse learning styles, and enabling active engagement with language acquisition.

However, the study also highlighted the importance of strategic implementation and ongoing professional development to address concerns related to academic integrity and to fully optimize the benefits of AI in EFL education in KSA. These findings contribute to the growing body of research on the integration of AI in education and emphasize the need for further exploration and refinement of AI-driven pedagogical approaches to foster linguistic competence among Saudi EFL learners.

6. RECOMMENDATIONS

In working towards overcoming the aforementioned challenges of AI in education in general and EFL in particular, fostering a transparent and supportive environment that educates students about responsible AI use and encourages its integration into learning processes is crucial. Additionally, a code of practice aimed at the use of AI in education could be put in place and introduced to the new cohort of students at the beginning of the academic year.

Conflict of Interest: The authors declare no conflict of interest.

Ethical Approval: The study adheres to the ethical guidelines for conducting research.

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REFERENCES

- AbdAlgane, M., & Jabir Othman, K. A. (2023). Utilizing artificial intelligence technologies in Saudi EFL tertiary level classrooms. *Journal of Intercultural Communication*, 23(1). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4565768
- Adigüzel, T., Kaya, M. H., & Cansu, F. K. (2023). Revolutionizing education with AI: Exploring the transformative potential of ChatGPT. *Contemporary Educational Technology*. <https://ereseach.ozyegin.edu.tr/handle/10679/9079>

- Alharbi, M. (2024). The role of artificial intelligence in advancing English as a foreign language teaching at Saudi universities. *World Journal on Educational Technology: Current Issues* 16(3), 181-200. <https://doi.org/10.18844/wjet.v16i3.9311>
- Alghamdi, E. A., Rajab, H., & Rashid, S. (2016). Unmonitored students self-created WhatsApp groups in distance learning environments: A collaborative learning tool or cheating technique. *International Journal of Research Studies in Educational Technology*, 5(2), 71-82. <https://www.academia.edu/download/48662789/1604-5455-1-PB.pdf>
- Alhalangy, A., & AbdAlgane, M. (2023). Exploring the impact of AI on the EFL context: A case study of Saudi universities. *Alhalangy, AGI, AbdAlgane, M.(2023). Exploring The Impact Of AI On The EFL Context: A Case Study Of Saudi Universities. Journal of Intercultural Communication*, 23(2), 41-49. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4565786
- Alharbi, W. (2022). Students' Perceptions and Challenges in Learning Business English: Understanding Students' Needs and Job Market Requirements. *International Journal of Learning, Teaching and Educational Research*, 21(12), 65-87. <http://www.ijlter.myres.net/index.php/ijlter/article/view/1480>
- Al-Mwzaiji, K. N. A., & Muhammad, A. A. S. (2023). EFL Learning and Vision 2030 in Saudi Arabia: A critical perspective. *World Journal of English Language*, 13(2). https://www.researchgate.net/profile/Ahmad-Muhammad-6/publication/369034072_EFL_Learning_and_Vision_2030_in_Saudi_Arabia_A_Critical_Perspective/links/64065eba57495059456d43c5/EFL-Learning-and-Vision-2030-in-Saudi-Arabia-A-Critical-Perspective.pdf
- Alotaibi, N. S., & Alshehri, A. H. (2023). Prospers and obstacles in using artificial intelligence in Saudi Arabia higher education institutions: The potential of AI-based learning outcomes. *Sustainability*, 15(13), 10723. <https://www.mdpi.com/2071-1050/15/13/10723>
- Alqahtani, M. H. (2022). The Saudi 2030 Vision and Translanguaging in Language Learning in Saudi Arabia: Looking for Concord in the Future. *Journal of Language and Linguistic Studies*, 18, 556-568. <https://eric.ed.gov/?id=EJ1328442>
- Alsabhan, W. (2023). Student cheating detection in higher education by implementing machine learning and LSTM techniques. *Sensors*, 23(8), 4149. <https://www.mdpi.com/1424-8220/23/8/4149>
- Alshammari, H. A. (2022). Investigating the Low English Proficiency of Saudi EFL Learners. *Arab World English Journal*, 13(1), 129-144. <https://eric.ed.gov/?id=EJ1336255>
- Alshumaimeri, Y. A., & Alshememry, A. K. (2023). The extent of AI applications in EFL learning and teaching. *IEEE Transactions on Learning Technologies*. <https://ieeexplore.ieee.org/abstract/document/10272618/>
- Ashraf, M., Grunfeld, H., Hoque, M. R., & Alam, K. (2017). An extended conceptual framework to understand information and communication technology-enabled socio-economic development at community level in Bangladesh. *Information Technology & People*, 30(4), 736-752. <https://www.emerald.com/insight/content/doi/10.1108/ITP-03-2016-0067/full/html?fullSc=1&mbSc=1&fullSc=1&fullSc=1&fullSc=1>
- Atkinson, A. G., Lia, H., & Navarro, S. M. (2024). Advancing scientific writing with artificial intelligence: expanding the research toolkit. *Global Surgical Education-Journal of the Association for Surgical Education*, 3(1), 74. <https://link.springer.com/article/10.1007/s44186-024-00271-4>
- Barnawi, O. Z., & Al-Hawsawi, S. (2017). English education policy in Saudi Arabia: English language education policy in the Kingdom of Saudi Arabia: Current trends, issues and challenges. *English language education policy in the Middle East and North Africa*, 199-222. https://link.springer.com/chapter/10.1007/978-3-319-46778-8_12
- Best, L. M., & Shelley, D. J. (2018). Academic dishonesty: Does social media allow for increased and more sophisticated levels of student cheating? *International Journal of Information and Communication Technology Education (IJICTE)*, 14(3), 1-14. <https://www.igi-global.com/article/academic-dishonesty/205617>

- Alharbi, M. (2024). The role of artificial intelligence in advancing English as a foreign language teaching at Saudi universities. *World Journal on Educational Technology: Current Issues* 16(3), 181-200. <https://doi.org/10.18844/wjet.v16i3.9311>
- Bunaiyan, W. A. (2019). *Preparing the Saudi educational system to serve the 2030 vision: a comparative analysis study* (Doctoral dissertation, University of Denver). <https://search.proquest.com/openview/7675dbbf2b6505b7eac4802088d35180/1?pq-origsite=gscholar&cbl=18750&diss=y>
- Burnett, A. J., Enyeart Smith, T. M., & Wessel, M. T. (2016). Use of the social cognitive theory to frame university students' perceptions of cheating. *Journal of Academic Ethics*, 14, 49-69. <https://link.springer.com/article/10.1007/s10805-015-9252-4>
- Chan, C. K. Y. (2023). A comprehensive AI policy education framework for university teaching and learning. *International journal of educational technology in higher education*, 20(1), 38. <https://link.springer.com/article/10.1186/s41239-023-00408-3>
- Chang, D. H., Lin, M. P. C., Hajian, S., & Wang, Q. Q. (2023). Educational design principles of using AI chatbot that supports self-regulated learning in education: Goal setting, feedback, and personalization. *Sustainability*, 15(17), 12921. <https://www.mdpi.com/2071-1050/15/17/12921>
- Cohen, J. (2016). A power primer. <https://psycnet.apa.org/record/2015-32022-018>
- Dergaa, I., Fekih-Romdhane, F., Glenn, J. M., Fessi, M. S., Chamari, K., Dhahbi, W., & Saad, H. B. (2023). Moving beyond the stigma: understanding and overcoming the resistance to the acceptance and adoption of artificial intelligence chatbots. *New Asian Journal of Medicine*, 1(2), 29-36. <https://nasianjmed.com/index.php/najm/article/view/12>
- Divekar, R. R., Drozdal, J., Chabot, S., Zhou, Y., Su, H., Chen, Y., & Braasch, J. (2022). Foreign language acquisition via artificial intelligence and extended reality: design and evaluation. *Computer Assisted Language Learning*, 35(9), 2332-2360. <https://www.tandfonline.com/doi/abs/10.1080/09588221.2021.1879162>
- Dyer, K. (2010). Challenges of maintaining academic integrity in an age of collaboration, sharing, and social networking. In *TCC* (pp. 168-195). TCC Hawaii. <https://www.learntechlib.org/p/43770/>
- Fitria, T. N. (2021). The use technology based on artificial intelligence in English teaching and learning. *ELT Echo: The Journal of English Language Teaching in Foreign Language Context*, 6(2), 213-223. https://www.researchgate.net/profile/Tira-Nur-Fitria/publication/358746284_The_Use_Technology_Based_on_Artificial_Intelligence_in_English_Teaching_and_Learning/links/62138758eb735c508ae75db3/The-Use-Technology-Based-on-Artificial-Intelligence-in-English-Teaching-and-Learning.pdf
- Flick, U. (2018). Doing triangulation and mixed methods. <https://www.torrossa.com/gs/resourceProxy?an=5017985&publisher=FZ7200>
- Gayed, J. M., Carlon, M. K. J., Oriola, A. M., & Cross, J. S. (2022). Exploring an AI-based writing Assistant's impact on English language learners. *Computers and Education: Artificial Intelligence*, 3, 100055. <https://www.sciencedirect.com/science/article/pii/S2666920X22000108>
- Hair Jr, J., Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage publications.
- Hakim, B. (2020). Technology-integrated online classrooms and the challenges faced by the EFL teachers in Saudi Arabia during the COVID-19 pandemic. *International Journal of Applied Linguistics and English Literature*, 9(5), 33-39. <https://journals.aiac.org.au/index.php/IJALEL/article/view/6376>
- Haque, M. M., Jaashan, H. M., & Hasan, M. Z. (2023). Revisiting Saudi EFL learners' autonomy: a quantitative study. *Innovation in Language Learning and Teaching*, 17(4), 845-858. <https://www.tandfonline.com/doi/abs/10.1080/17501229.2023.2166512>
- Humble, N., & Mozelius, P. (2022). The threat, hype, and promise of artificial intelligence in education. *Discover Artificial Intelligence*, 2(1), 22. <https://link.springer.com/article/10.1007/s44163-022-00039-z>

- Alharbi, M. (2024). The role of artificial intelligence in advancing English as a foreign language teaching at Saudi universities. *World Journal on Educational Technology: Current Issues* 16(3), 181-200. <https://doi.org/10.18844/wjet.v16i3.9311>
- Jogezai, N. A., Baloch, F. A., Jaffar, M., Shah, T., Khilji, G. K., & Bashir, S. (2021). Teachers' attitudes towards social media (SM) use in online learning amid the COVID-19 pandemic: the effects of SM use by teachers and religious scholars during physical distancing. *Heliyon*, 7(4). [https://www.cell.com/heliyon/fulltext/S2405-8440\(21\)00884-7](https://www.cell.com/heliyon/fulltext/S2405-8440(21)00884-7)
- Kohnke, L., Moorhouse, B. L., & Zou, D. (2023). Exploring generative artificial intelligence preparedness among university language instructors: A case study. *Computers and Education: Artificial Intelligence*, 5, 100156. <https://www.sciencedirect.com/science/article/pii/S2666920X23000358>
- Li, F., & Wang, C. (2023). Artificial intelligence and edge computing for teaching quality evaluation based on 5G-enabled wireless communication technology. *Journal of Cloud Computing*, 12(1), 45. <https://link.springer.com/article/10.1186/s13677-023-00418-6>
- Li, Y. (2022). Teaching mode of oral English in the age of artificial intelligence. *Frontiers in Psychology*, 13, 953482. <https://www.frontiersin.org/articles/10.3389/fpsyg.2022.953482/full>
- Lin, C. C., Huang, A. Y., & Lu, O. H. (2023). Artificial intelligence in intelligent tutoring systems toward sustainable education: a systematic review. *Smart Learning Environments*, 10(1), 41. <https://link.springer.com/article/10.1186/s40561-023-00260-y>
- Mageira, K., Pittou, D., Papasalouros, A., Kotis, K., Zangogianni, P., & Daradoumis, A. (2022). Educational AI chatbots for content and language-integrated learning. *Applied Sciences*, 12(7), 3239. <https://www.mdpi.com/2076-3417/12/7/3239>
- Makhlouf, M. K. I. (2021). Effect of artificial intelligence-based application on Saudi preparatory-year students' EFL speaking skills at Albaha University. *International Journal of English Language Education*, 9(2), 36-57. <https://www.academia.edu/download/82516046/14563.pdf>
- McGrath, C., Pargman, T. C., Juth, N., & Palmgren, P. J. (2023). University teachers' perceptions of responsibility and artificial intelligence in higher education-An experimental philosophical study. *Computers and Education: Artificial Intelligence*, 4, 100139. <https://www.sciencedirect.com/science/article/pii/S2666920X23000188>
- Miladiyenti, F., Rozi, F., Haslina, W., & Marzuki, D. (2022). Incorporating mobile-based artificial intelligence to English pronunciation learning in tertiary-level students: developing autonomous learning. *International Journal of Advanced Science Computing and Engineering*, 4(3), 220-232. <https://www.ijasce.org/index.php/IJASCE/article/view/92>
- Mitchell, B., & Alfuraih, A. (2018). The Kingdom of Saudi Arabia: Achieving the aspirations of the National Transformation Program 2020 and Saudi Vision 2030 through education. *Journal of Education and Development*, 2(3), 36. <http://journal.julypress.com/index.php/jed/article/view/526>
- Mohammed, A. E. T., AbdAlgane, M., Balla, A. A. S., & Ahmed, A. O. A. (2024). Challenges Experienced by EFL Learners in the Context of the ESP Course at Qassim University, Saudi Arabia. *World Journal of English Language*, 14(1). https://www.researchgate.net/profile/Mohammed-Abdalgane-2/publication/377406908_Challenges_Experienced_by_EFL_Learners_in_the_Context_of_the_ESP_Course_at_Qassim_University_Saudi_Arabia/links/65a52f91d5ce0e3f94cc6343/Challenges-Experienced-by-EFL-Learners-in-the-Context-of-the-ESP-Course-at-Qassim-University-Saudi-Arabia.pdf
- O'Connell, J. (2016). Networked participatory online learning design and challenges for academic integrity in higher education. *International Journal for Educational Integrity*, 12, 1-15. <https://link.springer.com/article/10.1007/s40979-016-0009-7>
- Olsen, W. K. (2022). *Systematic mixed-methods research for social scientists*. Cham: Palgrave Macmillan. <https://link.springer.com/content/pdf/10.1007/978-3-030-93148-3.pdf>
- Ouyang, F., & Jiao, P. (2021). Artificial intelligence in education: The three paradigms. *Computers and Education: Artificial Intelligence*, 2, 100020. <https://www.sciencedirect.com/science/article/pii/S2666920X2100014X>

- Alharbi, M. (2024). The role of artificial intelligence in advancing English as a foreign language teaching at Saudi universities. *World Journal on Educational Technology: Current Issues* 16(3), 181-200. <https://doi.org/10.18844/wjet.v16i3.9311>
- Peytcheva-Forsyth, R., Aleksieva, L., & Yovkova, B. (2018). The impact of technology on cheating and plagiarism in the assessment—The teachers' and students' perspectives. In *AIP conference proceedings*, 2048(1). <https://pubs.aip.org/aip/acp/article-abstract/2048/1/020037/800484>
- Rahman, S., Ramakrishnan, T., & Ngamassi, L. (2020). Impact of social media use on student satisfaction in Higher Education. *Higher Education Quarterly*, 74(3), 304-319. <https://onlinelibrary.wiley.com/doi/abs/10.1111/hequ.12228>
- Richards, L. (2020). Handling qualitative data: A practical guide. <https://www.torrossa.com/gs/resourceProxy?an=5018096&publisher=FZ7200>
- Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., & Witty, J. V. (2010). Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites. *The Internet and higher education*, 13(3), 134-140. <https://www.sciencedirect.com/science/article/pii/S1096751610000278>
- Rusmiyanto, R., Huriati, N., Fitriani, N., Tyas, N. K., Rofi'i, A., & Sari, M. N. (2023). The role of artificial intelligence (AI) in developing English language learner's communication skills. *Journal on Education*, 6(1), 750-757. <https://www.jonedu.org/index.php/joe/article/view/2990>
- Schmidt, D. A., Baran, E., Thompson, A. D., Mishra, P., Koehler, M. J., & Shin, T. S. (2009). Technological pedagogical content knowledge (TPACK) the development and validation of an assessment instrument for preservice teachers. *Journal of Research on Technology in Education*, 42(2), 123-149. <https://www.tandfonline.com/doi/abs/10.1080/15391523.2009.10782544>
- Schmidt, T., & Strasser, T. (2022). Artificial intelligence in foreign language learning and teaching: a CALL for intelligent practice. *Anglistik: International Journal of English Studies*, 33(1), 165-184. https://www.researchgate.net/profile/Torben-Schmidt-3/publication/360638238_Artificial_Intelligence_in_Foreign_Language_Learning_and_Teaching/links/656ae2dbce88b87031281fd9/Artificial-Intelligence-in-Foreign-Language-Learning-and-Teaching.pdf
- Sengar, S. S., Hasan, A. B., Kumar, S., & Carroll, F. (2024). Generative Artificial Intelligence: A Systematic Review and Applications. *arXiv preprint arXiv:2405.11029*. <https://arxiv.org/abs/2405.11029>
- Svaricek, R. (2024). Skeptical teacher and silent students: a case study of teacher changes during a teacher professional development program. *Journal of Education for Teaching*, 50(2), 310-328. <https://www.tandfonline.com/doi/abs/10.1080/02607476.2023.2296459>
- Tess, P. A. (2013). The role of social media in higher education classes (real and virtual)—A literature review. *Computers in human behavior*, 29(5), A60-A68. <https://www.sciencedirect.com/science/article/pii/S0747563212003743>
- Wilson, C. (2014). Semi-structured interviews. *Interview techniques for UX practitioners*, 1, 23-41.
- Zachos, G., Paraskevopoulou-Kollia, E. A., & Anagnostopoulos, I. (2018). Social media use in higher education: A review. *Education Sciences*, 8(4), 194. <https://www.mdpi.com/2227-7102/8/4/194>
- Zhai, C., & Wibowo, S. (2023). A systematic review on artificial intelligence dialogue systems for enhancing English as foreign language students' interactional competence in the university. *Computers and Education: Artificial Intelligence*, 4, 100134. <https://www.sciencedirect.com/science/article/pii/S2666920X23000139>

Appendices:

APPENDIX 1 (Teachers' Survey)

1. **Demographic Information:**
 - Gender:
 - Years of teaching experience:
0-5 Years 6-10 years 11-15 years 16-20 years 21-25 years >25
Years
2. **Experience with AI:**
 - Have you ever used or integrated AI technology in your teaching practices?
 - Yes
 - No
3. **Perceived Understanding of AI:**
 - How would you rate your understanding of artificial intelligence?
 - Poor
 - Fair
 - Good
 - Excellent
4. **Comfort Level with AI:**
 - How comfortable are you using AI technology in your teaching?
 - Very Uncomfortable
 - Uncomfortable
 - Neutral
 - Comfortable
 - Very Comfortable
5. **Impact of AI on Teaching:**
 - Do you believe that AI has a positive impact on the teaching and learning experience?
 - Strongly Agree
 - Agree
 - Neutral
 - Disagree

- Strongly Disagree
6. **Integration of AI in Lesson Plans:**
 - Have you ever integrated AI tools or applications into your lesson plans?
 - Yes
 - No
 7. **AI Training for Teachers:**
 - Have you received any training on how to effectively use AI in your teaching practices?
 - Yes
 - No
 8. **Perception of AI in Assessments:**
 - How do you feel about the use of AI in grading and assessments?
 - Positive
 - Neutral
 - Negative
 9. **Student Engagement with AI:**
 - Have you noticed any changes in student engagement when using AI tools in your teaching?
 - Yes
 - No
 10. **Collaboration with AI Developers:**
 - Have you ever collaborated with AI developers or experts to enhance your teaching methods?
 - Yes
 - No
 11. **Professional Development on AI:**
 - How important do you think it is for teachers to receive professional development related to AI in education?
 - Very Important
 - Important
 - Neutral
 - Not Important
 - Not at all Important
 12. **Impact on Teacher Workload:**
 - Do you think the use of AI technology has affected your workload positively or negatively?
 - Positively
 - Neutral
 - Negatively
 13. **Student Feedback on AI Integration:**
 - Have you gathered feedback from students about their experience with AI-integrated teaching methods?
 - Yes
 - No
 14. **AI Ethics in Education:**
 - How concerned are you about the ethical implications of using AI in education?
 - Very Concerned
 - Concerned
 - Neutral
 - Not Concerned
 - Not at all concerned.
 15. **Future Outlook on AI in Education:**
 - How optimistic are you about the future of AI in education?
 - Very Optimistic

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- Optimistic
- Neutral
- Pessimistic
- Very Pessimistic

APPENDIX 2

Semi-Structured Interviews – Teachers’ Participants

1. Can you share specific examples of how you have integrated AI technology into your teaching practices? What impact, if any, have you observed on student engagement and learning outcomes?
2. In your experience, what challenges or barriers have you encountered while incorporating AI in your classrooms, and how have you addressed or overcome these challenges?
3. How do you believe AI tools have influenced your role as an educator and EFL instructor? Has it changed the way you plan and deliver lessons or assess student progress?
4. Have you received any professional development or training related to AI in education? How do you think ongoing training in this area could enhance your ability to effectively use AI tools in the classroom?
5. Considering both positive and negative aspects, what is your overall perception of the impact of AI on the education sector? How do you foresee the role of AI evolving in your teaching practices and the broader educational landscape in the future?

Key Elements for Discussion Articles: major theme, logical development of the theme, author's point of view, implications, inferences, or conclusions.

Key Elements for Systematic Reviews and/or Meta-syntheses: scope of the review, publication period, publication origin, types of documents reviewed, author's opinion of the reviewed literature, particularly unique or important research findings, and conclusions about the research trends.

Formatting your Document

Articles should be prepared in a single-column format suitable for direct printing onto A4 sheets of paper (8.3in x 11.7in/210mm x 297mm).

The body of the research article (Title, Abstract, Keywords, Introduction, Methods, Results, Discussion, Conclusion, Recommendations, Conflict of Interest, Ethical Approval, Acknowledgements, and References) should be typed in Calibri, font size 10. Use single-line spacing. The length of the article - including abstract, tables, and references - must be between 3500 and 10000 words. The article must be written in USA English and must be language-edited by a professional English language practitioner before submission. Each paragraph should be longer than three sentences and a maximum of six sentences.

Write and structure articles according to APA 7 (American Psychological Association).

Style and References:

Please adhere to APA 7 (American Psychological Association) style in your article. Guidelines on how to do so can be accessed from the following link:

https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/index.html