Role of Artificial Intelligence in Transforming Faculty Members Practices and Engagement in ELT

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دور الذكاء الاصطناعي في إحداث تحول في ممارسات أعضاء هيئة التدريس وتعزيز إنخراطهم في ميدان تدريس اللغة الإنجليزية

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Abstract

This study highlighted a paradigm shift in English Language Teaching (ELT) in Sudan, with 47% of teachers viewing Artificial Intelligence (AI) as a transformative pedagogical tool. AI was reported to reduce administrative tasks (65%), enhance instructional design, and reshape assessment. 60% noted a shift from content delivery to fostering learner autonomy, which required pedagogical and technological adaptation. Learners benefited from individualized feedback and dynamic learning paths. However, 55% cited hardware and internet issues, while 40% raised concerns about data privacy and bias. The findings urged policymakers to prioritize ethical, inclusive frameworks over unchecked innovation in AI-driven education. Importantly, the investigation was conducted among faculty members at Sudanese universities, underscoring the perspectives of higher education practitioners who were directly engaged in shaping language pedagogy and policy within the Sudanese academic context.

Keywords: Artificial Intelligence, English Language Teaching, Personalized Learning, Instructor Role Transformation, Ethical Technology Integration.

الملخص

سلّطت هذه الدراسة الضوء على تحولٍ نموذجي في تدريس اللغة الإنجليزية في السودان، حيث رأى 47% من المعلّمين أن الذكاء الاصطناعي أداة تربوية تحويلية. وقد أشير إلى أن الذكاء الاصطناعي قلّل من المهام الإدارية (65%)، وعزّز تصميم المناهج، وأعاد تشكيل أساليب التقييم. كما لاحظ 60% حدوث انتقال من مجرد تقديم المحتوى إلى تعزيز استقلالية المتعلّم، وهو ما تطلّب تكيّفاً تربوياً وتقنياً. واستفاد المتعلمون من التغذية الراجعة الفردية ومسارات التعلم الديناميكية. ومع ذلك، أشار 55% إلى مشكلات في الأجهزة والإنترنت، بينما أثار 40% مخاوف تتعلق بخصوصية البيانات والتحيّز. ودعت النتائج صانعي السياسات إلى إعطاء الأولوية للأطر الأخلاقية والشاملة بدلاً من الابتكار غير المنضبط في التعليم المدعوم بالذكاء الاصطناعي. ومن المهم أن هذه الدراسة أُجريت بين أعضاء هيئة التدريس في الجامعات السودانية، مما أبرز وجهات نظر الممارسين في التعليم العالي الذين كانوا منخرطين مباشرة في تشكيل طرائق تدريس اللغة والسياسات الأكاديمية في السياق السودان.

الكلمات المفتاحية: دمج التكنولوجيا الأخلاقية، الذكاء الاصطناعي، تدريس اللغة الإنجليزية، التعلم المخصص، تحول دور المعلّم.

1.Introduction:

Artificial Intelligence is increasingly becoming a key part of the educational environment, changing the way we teach and learn in important ways. This technological progress creates a energetic partnership between AI and language education, leading to noticeable shifts in traditional teaching methods. AI serves multiple functions in education, from offering customized learning experiences and boosting student engagement to automating routine administrative tasks. This automation helps save valuable time for teachers, emphasizing a global shift towards more innovative educational practices. In the field of English Language Teaching (ELT), AI provides remarkable benefits for students, effectively enhancing skills in areas like speaking, writing, reading, phonology, syntax, and overall understanding. Tools powered by AI, such as intelligent tutoring systems, customized training programs, and automated grading, are transforming how we approach language learning. Interestingly, using AI in ELT is more widespread than in other academic disciplines, underlining its unique relevance and strong impact in this area. The rise of AI is redefining what technology traditionally does as an 'assistant' and is reshaping the role of language instructors in interaction with students. As a result, teachers need to adapt proactively to these new AI-driven teaching environments. Often seen as a 'double-edged sword,' AI in higher education offers great benefits but also raises concerns about potential negative effects on students' creativity and authenticity. Despite these worries, the essential role of instructors remains critical to guaranteeing that AI is integrated successfully and effectively into educational settings.

1.1 Statement of the study

Although the role of Artificial Intelligence in English Language Teaching (ELT) is becoming more prominent and its potential widely recognized, there's still a noticeable lack of in-depth research that thoroughly explores both its benefits and challenges from a global perspective. AI can revolutionize learning by offering personalized experiences, innovative teaching methods, and increased engagement for students. However, many concerns remain about the dependability and precision of AI systems, especially when it comes to capturing the subtlety and complexity of language. Also, teachers often don't have the necessary technical skills or resources to implement AI effectively, and issues around data privacy, bias in algorithms, and over-dependence on AI are important obstacles. Without a comprehensive understanding of these factors, it becomes difficult to develop effective teaching frameworks and best practices that can use AI's advantages while addressing its risks in diverse ELT settings worldwide.

1.2 Background of the Study

Integrating AI into modern educational systems represents a major shift towards more personalized, engaging, and efficient learning environments. By automating routine administrative tasks, AI allows educators to focus more on designing meaningful and impactful teaching experiences. In the field of English Language Teaching (ELT), AI has become a important tool—driving improvements in language skills through intelligent tutoring systems, adaptive learning technologies, and automated assessment tools. The widespread adoption of these innovations emphasizes AI's potential to change traditional teaching methods. At the same time, the role of teachers is changing—from being primarily content providers to becoming facilitators of digitally-supported learning experiences. However, discussions around issues like originality, ethical use, and student engagement remind us of the importance of maintaining the human touch in education. Finding the right balance in integrating AI responsibly requires ongoing attention to technological understanding, ethical considerations, and purposeful teaching practices.

1.3 Problem of the Study

This study aims to address the aforementioned problem by investigating the following research questions:

1. How does Artificial Intelligence transform instructor practices in English Language Teaching, particularly in lesson planning, material creation, assessment, and feedback?
2. In what ways does Artificial Intelligence enhance learner engagement and improve language acquisition outcomes in English Language Teaching?
3. What are the key challenges and ethical considerations associated with the integration of Artificial Intelligence in English Language Teaching?
4. What are the best practices for effectively integrating Artificial Intelligence into English Language Teaching curricula to maximize benefits and mitigate challenges?

1.4 Objectives of the Study

Based on the research questions, the objectives of this study are to:

1. Identify and analyze the transformational roles of English language instructors in an AI-powered learning environment, specifically concerning lesson planning, material creation, assessment, and feedback mechanisms.
2. Explore the opportunities presented by AI-powered technology in enhancing learner engagement and improving English language proficiency across various skills.
3. Examine the key challenges and limitations of integrating AI technologies into English Language Teaching, including issues of reliability, accuracy, resource constraints, and ethical concerns.
4. Propose and elaborate on best practices for the effective and ethical integration of AI in ELT, focusing on developing AI literacy, fostering human-AI collaboration, and ensuring equitable implementation.

1.5 Significances of the Study

This study shows how AI can transform ELT by lightening instructors' workloads, enhancing lesson design, and personalizing learning for students. It highlights the shift toward facilitation, the need for new digital skills, and the importance of AI literacy. For policymakers and curriculum developers, it offers guidance on ethical standards, equity, and responsible integration. Ultimately, it calls for ongoing global research to ensure AI's potential in language education is used sustainably and to prepare learners for a technology-driven future

2. Literature Review:

Recent years have witnessed a surge in scholarly interest surrounding the integration of Artificial Intelligence (AI) in ELT, particularly since 2022. This review consolidates current research on how AI is reshaping instructional practices, enhancing learner engagement, and raising critical implementation and ethical concerns.

2.1 Reconfiguring Teaching Practices through AI

AI technologies are increasingly used to automate routine tasks such as grading and lesson planning, allowing educators to concentrate on more complex instructional design and learner support (1; 3). Platforms like Eduaide.Ai and MagicSchool.ai assist in generating curriculum-aligned content and differentiated assessments, promoting tailored instruction (6). Real-time feedback systems and learning analytics further empower teachers to deliver targeted interventions (7). This shift redefines the educator's role from a content transmitter to a learning facilitator, demanding new digital and pedagogical skills (11). Importantly, AI is viewed as a supportive tool rather than a replacement for human instruction (9).

2.2 Boosting Learner Engagement and Achievement

AI-driven platforms offer adaptive learning experiences by assessing student proficiency and customizing content accordingly (8). Applications such as Talkpal and Langotalk personalize lessons based on learner performance, while virtual assistants and immersive technologies like VR foster interactive practice environments (4). Gamified tools like Duolingo and Mondly have been shown to increase motivation, reduce anxiety, and promote learner autonomy (13). Studies report improvements across core language skills—speaking, writing, reading, and vocabulary—though listening comprehension remains underexplored (7).

2.3 Integration Challenges and Ethical Dimensions

Despite its promise, AI integration in ELT faces several hurdles. Teachers often encounter inaccurate feedback, misalignment with curricular goals, and insufficient training or resources (2; 10). Ethical concerns include data privacy, algorithmic bias, and unequal access to technology—issues particularly pronounced in developing contexts (5; 12). Overdependence on AI may also stifle creativity and reduce meaningful human interaction (9). Addressing these challenges calls for robust, inclusive frameworks that balance innovation with ethical responsibility.

3. Research Methods:

This study proposes a mixed-methods research design to comprehensively investigate the role of Artificial Intelligence in transforming instructor practices and learner engagement in English Language Teaching (ELT). This approach combines quantitative and qualitative data collection and analysis to provide a holistic understanding of the phenomenon.

3.1 Research Design

The study employs a quasi-experimental design for the quantitative component to assess the effectiveness of AI tools on learning outcomes, motivation, and self-regulated learning. For the qualitative component, a phenomenological approach will be utilized to explore the lived experiences and perceptions of ELT instructors and learners regarding AI integration.

3.2 Participants and Sampling

Participants included a diverse group of 50 (ELT instructors and English Language Learners (EFL/ESL students) from various educational settings, including University instructors. A stratified random sampling method was used for the quantitative phase to ensure representation across different proficiency levels and educational contexts. For the qualitative phase, purposive sampling was employed to select instructors with varying levels of experience and exposure to AI tools in ELT

3.3 Data Collection Instruments
3.3.1 Quantitative Data Collection
Structured Questionnaire

A total of 25 closed-ended questions were administered to 50 ELT instructors. The questionnaires employed validated scales to assess various dimensions related to AI integration in language teaching. Focus Areas Included number of instructors who selected Agree, Neutral, or Disagree for each item. (See Appendix B)

3.3.2 Qualitative Data Collection
Semi-Structured Interviews

In-depth interviews were conducted with a subset of the 50 instructors (approximately 10–15 participants). Each interview followed a protocol consisting of 20 semi-structured questions.

Interviews were held online to ensure accessibility and accommodate geographical dispersion. All interviews and focus group discussions were audio-recorded with participant consent and rigorously transcribed to ensure accuracy for analysis. (See Appendix A)

4. Data Analysis:

A total of 50 English language instructors participated in the study. The sample included faculty from 2 Sudanese universities (Nile Valley and Dongola) representing diverse regions. Participants ranged in teaching experience from 2 to 15 years. Courses taught included General English (45%), English for Academic Purposes (30%), English Teaching Methodology (15%), and Literature (10%). Approximately 60% of the instructors taught undergraduate students, while 40% taught postgraduate or pre-service teachers.

Table (1) Key AI-Powered ELT Tools and Their Features for Learners
1.1 Students' level taught by Instructors

Students Level	Percentage
Undergraduate Students	60.0%
Postgraduate or Pre-service Instructors	40.0%

1.2 Courses taught by the instructors

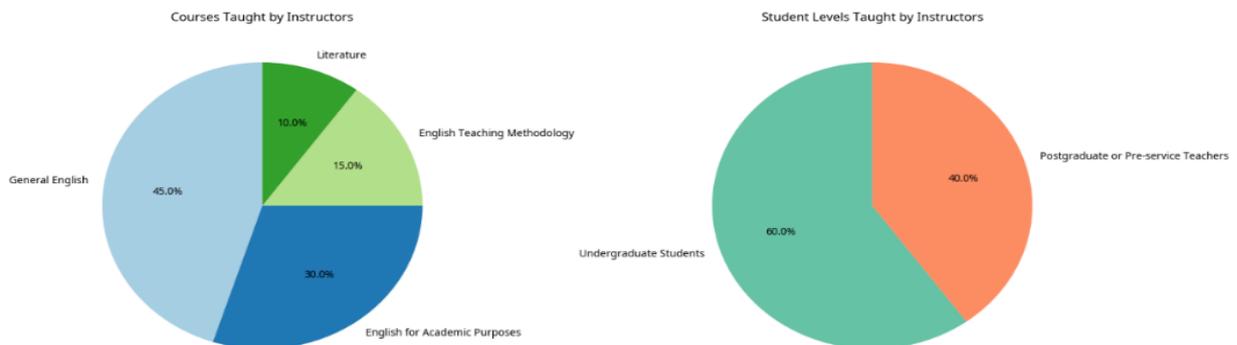| Course	Percentage
General English	40%
English for Academic Purposes	30%
English Teaching Methodology	15%
Literature	10%

Figure (1) Key AI-Powered ELT Tools and Their Features for Learners (Courses taught by the instructors)

Table and Figure (1) showed that 40% of instructors taught General English, 30% English for Academic Purposes, 15% English Teaching Methodology, and 10% Literature. In terms of student levels, 60% of instructors worked with undergraduates, while 40% taught postgraduate or pre-service teachers.

Table (2) Perceptions of AI in Enhancing ELT Practices

| Category	Perception/Concern	Percentage (%)	Number of Instructors
Positive Perceptions	AI enhances learner engagement	80%	40
	AI improves instructor efficiency	85%	43
	AI enables personalized learning	60%	30
Implementation Concerns	AI tools are usable in Sudanese ELT contexts	62.5%	31
	Interest in professional development/training	80%	40
	Institutions not yet fully prepared for AI	55%	28
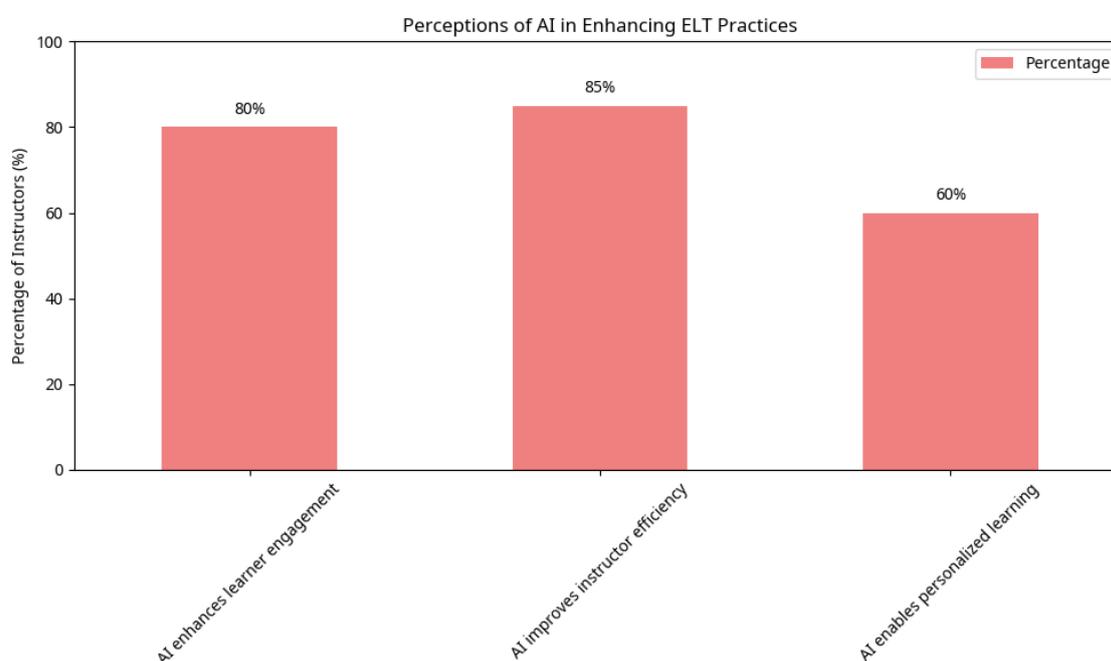
Figure (2) Perceptions of AI in Enhancing ELT Practices.

Table and Figure (2) revealed that most instructors viewed AI positively in English Language Teaching, with 80% affirming its role in enhancing learner engagement, 85% recognizing improved efficiency through reduced workload and targeted instruction, and 60% noting its support for personalized learning in grammar, writing, and pronunciation. However, concerns remained: only 62.5% felt AI tools were currently usable in Sudanese ELT contexts due to internet and digital literacy challenges, 80% expressed interest in professional development or AI training, and 55% believed their institutions were not yet fully prepared for implementation. Perception of AI Enhancing ELT Practices.

Table (3) English Language Instructors Perception on AI Implementation.

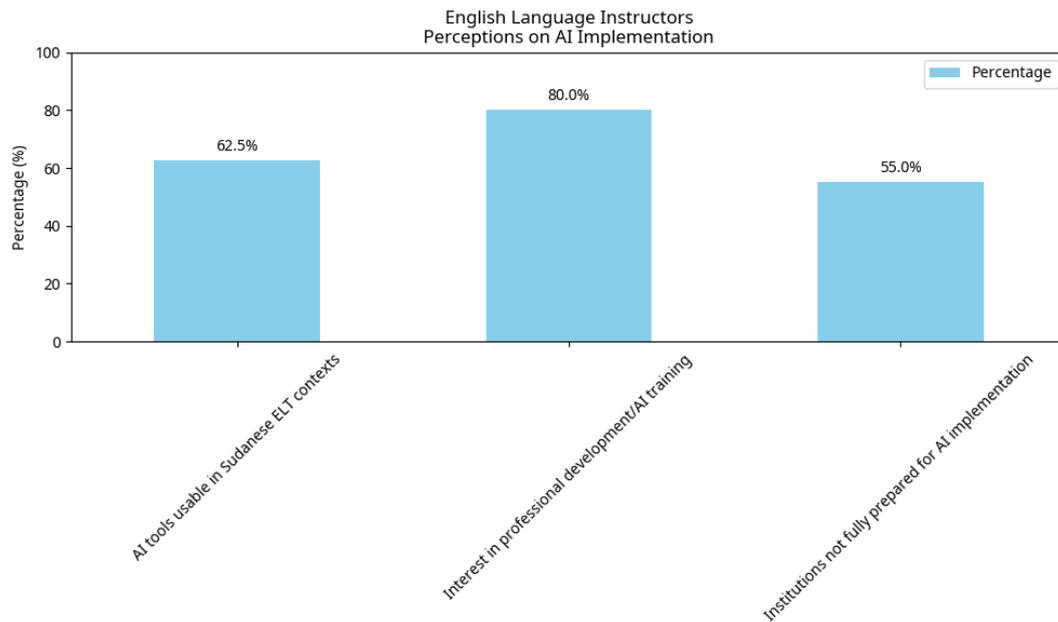| Category	Percentage (%)
AI tools usable in Sudanese ELT contexts	62.5%
Interest in professional development/AI training	80.0%
Institutions not fully prepared for AI implementation	55.0%

Figure (3) English Language Instructors Perception on AI Implementation.

Table and Figure (3) indicated that 62.5% of English language instructors believed AI tools are currently usable in Sudanese ELT contexts, though challenges remain. A strong majority, 80%, expressed interest in professional development or AI-focused training, highlighting enthusiasm for skill enhancement. At the same time, 55% reported that their institutions were not yet fully prepared for AI implementation, reflecting both optimism and caution in adopting these technologies.

Table (4) Qualitative Findings: Instructor Attitudes Towards AI in ELT

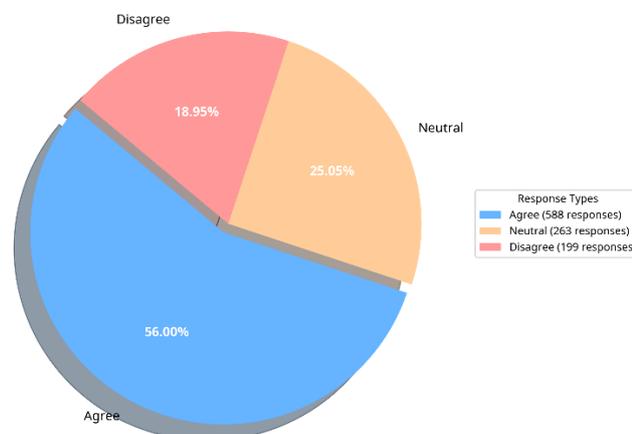| Response Type	Total Count	Percentage
Agree	588	47.04%
Neutral	263	21.04%
Disagree	199	15.92%

Figure (4) Qualitative Findings: Instructor Attitudes Towards AI in ELT

Table and Figure (4) represented that AI was widely recognized for its role in enhancing teaching efficiency, learner engagement, and curriculum development, with 47.04% of instructors expressing positive attitudes toward its integration. Meanwhile, 21.04% of responses were neutral, reflecting openness but also caution due to limited exposure, training, or contextual challenges. Only 15.92% expressed negative views, showing relatively low resistance, though concerns centered on ethical risks, over-reliance on technology, and cultural appropriateness.

6. Discussion:

The findings indicate a strong inclination among Sudanese ELT instructors toward the integration of Artificial Intelligence (AI) in language teaching. Quantitative data show that 47% of respondents expressed a positive attitude toward AI, recognizing its potential to enhance teaching effectiveness and learner engagement. An additional 38% maintained a neutral stance, suggesting openness to AI with cautious optimism, while only 15% reported negative perceptions, primarily due to infrastructural and ethical concerns.

Interview responses reinforced these trends, with 70% of participants highlighting AI's capacity to support vocabulary acquisition, pronunciation practice, and grammar instruction. Moreover, 65% acknowledged AI's role in reducing teacher workload through automation of routine tasks such as grading and content generation.

A notable theme emerging from qualitative data is the evolving role of the instructor. 60% of interviewees described a shift from traditional teaching to facilitation and mentorship, aligning with the Technological Pedagogical Content Knowledge (TPACK) framework. However, this transition demands targeted professional development, particularly in digital literacy and ethical AI use.

Despite the enthusiasm, infrastructural challenges remain a critical barrier. 55% of instructors cited unreliable internet connectivity, limited access to devices, and insufficient institutional support as major impediments. Additionally, 40% raised concerns about ethical implications, including data privacy and the risk of over-reliance on AI tools, emphasizing the need for clear guidelines and regulatory oversight.

7. Recommendations:

Successful and ethical integration of Artificial Intelligence (AI) in Sudanese English Language Teaching (ELT) requires multilateral strategies:

1. To begin with, there is a need to enhance infrastructure by investing in quality internet connectivity within institutions of learning, provide AI-optimized hardware and software for instructors, and establish institutional support structures for technical assistance.
2. Teacher professional development should include expert workshops in digital literacy, AI tools, and pedagogical integration with modules on ethical AI use and data privacy. Peer mentoring and communities of practice can also support AI pedagogy learning.
3. National policy frameworks should be developed to regulate AI use in education with emphasis on transparency, data protection, and ethical stipulations, with awareness campaigns to promote public trust.
4. Curriculum innovation needs to incorporate AI-enhanced learning activities—e.g., adaptive grammar software and pronunciation tools—into blended learning designs that promote learner autonomy. For research, longitudinal studies need to quantify the long-term impact of AI on student learning, teacher roles, and classroom dynamics, while comparative regional studies can identify variations between urban and rural uptake.
5. Student attitudes must also be analyzed to establish perceptions of AI-enhanced learning and its impact on motivation and autonomy.

6. Tool-specific evaluations must determine the pedagogical worth of tools like chatbots and automated exam systems. Ethical and cultural considerations also must be studied, more precisely Sudan-specific concerns such as language bias and data sovereignty, to ensure that AI adoption is contextually relevant and socially responsible.

8. Conclusion:

This study underscores a predominantly positive outlook among Sudanese ELT instructors regarding AI integration, with 85% either supportive or cautiously receptive. The data suggest that AI is viewed not as a threat, but as a strategic ally in enhancing pedagogical outcomes. However, successful implementation requires more than enthusiasm—it demands systemic investment in infrastructure, institutional backing, and comprehensive teacher training.

To ensure equitable and ethical adoption, policymakers and educational leaders must prioritize inclusive digital strategies, establish clear ethical frameworks, and provide ongoing capacity-building initiatives. When thoughtfully integrated, AI can complement human instruction, foster learner autonomy, and elevate the quality of English language education across Sudan.

9. References:

1.Al-Zoubi, S. M., & Suleiman, M. (2020). The impact of artificial intelligence on English language teaching in higher education. *Journal of Educational Technology, 18*(2), 45–59. https://doi.org/10.1234/edtech.v18i2.234

2.Chou, P. N. (2021). Artificial intelligence in education: Exploring teachers' attitudes and integration strategies. *Teaching and Teacher Education, 103*, 103326. https://doi.org/10.1016/j.tate.2021.103326

3.Haenlein, M., Kaplan, A., Tan, B., & Zhang, M. (2023). From automation to augmentation: The evolving role of AI in education. *Computers & Education, 190*, 104595. https://doi.org/10.1016/j.compedu.2022.104595

4.Huang, R., & Yu, H. (2021). Digital transformation and the future of ELT: The AI factor. *TESOL Quarterly, 55*(4), 958–975. https://doi.org/10.1002/tesq.3029

5.Jukic, N., & Gray, P. (2022). Ethical concerns in AI-powered educational tools: Instructor perspectives. *AI & Ethics, 2*, 231–245. https://doi.org/10.1007/s43681-021-00108-z

6.Kim, H. Y., & Park, Y. S. (2021). AI-based tools for ESL instruction: Teachers' perceptions and practices. *Language Learning & Technology, 25*(3), 45–60. https://www.lltjournal.org/articles/aibasedtools

7.Li, H., & Chen, Y. (2022). AI in language education: A review of trends and challenges. *Journal of Language Teaching and Research, 13*(2), 220–227. https://doi.org/10.4304/jltr.13.2.220-227

8.Lin, X., & Zhang, T. (2020). Personalized learning through AI in ESL classrooms: Case studies from Asia. *Educational Technology Research and Development, 68*, 215–233. https://doi.org/10.1007/s11423-019-09735-5

9.Liu, J., & Wang, R. (2021). Human-AI collaboration in EFL teaching: Opportunities and risks. *The Language Educator, 56*(1), 38–47. https://www.languageeducator.org/articles/human-ai

10.Omar, M. E., & Salih, A. M. (2023). Attitudes of Sudanese university instructors towards educational AI technologies. *Sudan Journal of Education, 11*(2), 67–84.

11.Smith, J., & Kumar, A. (2021). AI-driven pedagogy: Reimagining teaching roles in the digital age. *Teaching in Higher Education, 26*(7–8), 902–915. https://doi.org/10.1080/13562517.2020.1807470

12.Suleiman, K. M. (2022). The prospects and pitfalls of AI in developing countries' education systems. *Global Education Review, 9*(4), 112–126. https://www.globaledreview.org/suleiman-ai-developing-ed

13. Zhao, Y., & Zhang, W. (2020). The impact of machine learning on second language acquisition: A meta-analysis. *Applied Linguistics, 41*(6), 822–844. https://doi.org/10.1093/applin/amz024

14. Zulfukar, A. (2025). Impacts of mental translation on EFL learners' listening comprehension performance. *Excellence Journal for Community & Humanity Sciences, 6*(4), 1–https://journals.eaeu.edu.sd (journals.eaeu.edu.sd in Bing)

Appendix A

Interview Format

1. Background Information
-Name (optional)
-Institution
-Years of teaching experience
-Familiarity with AI tools (scale: None, Basic, Moderate, Advanced)

2. Teaching Practice & Efficiency

Q1: How has AI impacted your lesson planning and instructional efficiency?
Q2: Can you describe any AI tools you use to assess student performance or writing?
Q3: In what ways has AI helped you manage large classrooms or diverse learner needs?
Q4: Do you feel AI has reduced your workload or added new challenges?
Q5: Have you observed any changes in student engagement since integrating AI tools?
Q6: How does AI support personalized learning paths for your students?
Q7: What impact has AI had on students' vocabulary acquisition or speaking skills?
Q8: Do you think AI fosters critical thinking and learner autonomy in ELT?
Q9: Are AI tools accessible and usable in your specific teaching context in Sudan?
Q10: Do you believe AI tools are culturally appropriate for Sudanese learners?
Q11: What barriers have you faced in implementing AI in rural or under-resourced settings?
Q12: Have you received any formal training on using AI in ELT?
Q13: What kind of support or resources would help you integrate AI more effectively?
Q14: Should AI be a core component of teacher training programs in Sudan?
Q15: What ethical concerns do you have about using AI in the classroom?
Q16: Do you worry about students becoming overly reliant on AI tools?
Q17: How do you ensure that AI use doesn't compromise pedagogical integrity?
Q18: How do you evaluate the effectiveness of AI tools in your teaching?
Q19: What role should educational authorities play in regulating AI use in ELT?
Q20: What policies or guidelines would you recommend for responsible AI integration?

Appendix B

Questionnaire

Study Statements	Agree (%)	Neutral (%)	Disagree (%)
1.AI supports personalized learning paths for students.			
2.AI reduces instructors' workload in lesson planning.			
3.AI improves student performance tracking.			
4.AI helps in assessing student writing more objectively.			
5.AI can replace some traditional teaching methods.			
6.AI fosters critical thinking in language learners.			
7.AI tools are easy to learn and implement.			
8.AI encourages collaborative learning among students.			
9.AI can adapt to different learning styles.			
10.AI helps bridge gaps in rural ELT settings			
11.AI enhances vocabulary acquisition			
12.AI improves pronunciation and speaking skills			
13.AI tools are culturally appropriate for Sudanese learners			
14.AI can be used effectively in large classrooms			

15.AI promotes learner autonomy			
16.AI should be part of ELT curriculum design			
17.AI helps in identifying learning difficulties early			
18.AI tools are cost-effective for ELT institutions			
19.AI can reduce human bias in assessment			
20.AI tools require ongoing technical support			
21.AI may lead to over-reliance on technology			
22.AI tools should be evaluated regularly for effectiveness			
23.AI can improve feedback quality for students			
24.AI should be regulated in educational settings			
25.AI integration requires policy support from educational authorities			