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ARTIFICIAL INTELLIGENCE IN TESOL: A REVIEW OF CURRENT APPLICATIONS IN LANGUAGE EDUCATION AND ASSESSMENT

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Abstract

This study provides a comprehensive review of the current applications and implications of artificial intelligence (AI) within TESOL (Teaching English to Speakers of Other Languages), particularly in relation to classroom instruction and assessment practices. Drawing on recent empirical research and guided by Activity Theory, the review explores how AI technologies are transforming English language education through their integration into everyday learning tasks and assignments. The analysis highlights the growing use of AI tools such as automated writing assistants, grammar correction software, machine translation applications, and speech recognition systems in EFL/ESL settings. These tools are widely employed to support learners in producing written work, improving grammatical accuracy, expanding vocabulary, and enhancing self-regulated learning strategies. The review identifies several educational benefits, including immediate feedback on student assignments, personalized learning pathways, and greater learner engagement. However, it also draws attention to notable challenges, including AI's limited ability to foster real-time communicative competence and the ongoing need for teacher intervention to contextualize AI- generated feedback. The findings suggest that while AI can significantly enhance written and digital assignments in TESOL classrooms, it should be positioned as a supportive aid rather than a substitute for pedagogical instruction. Additionally, the study underscores the importance of aligning AI technologies with instructional goals, language proficiency standards, and culturally responsive teaching practices. For TESOL educators, the effective integration of AI requires digital literacy, critical engagement with AI outputs, and thoughtful scaffolding of assignments to ensure meaningful learning. Finally, the review calls for further

empirical research into AI's impact on learner motivation, assessment design, and the development of communicative skills, especially within diverse, multilingual classroom contexts. Overall, the study presents AI as a promising yet evolving resource in TESOL, capable of enriching English language education when used with pedagogical intent and teacher guidance.

Keywords: Artificial Intelligence, TESOL, Language Assessment, Writing Support, Activity Theory

Introduction

The integration of Artificial Intelligence (AI) into educational contexts has sparked significant transformation in teaching methodologies, particularly within TESOL (Teaching English to Speakers of Other Languages). As English language learners become increasingly immersed in digital environments, AI is reshaping how educators approach instruction, assessment, and student engagement. This shift is especially evident in the ways that AI tools are now used to scaffold written assignments, provide automated feedback, and support personalized learning pathways. While these innovations bring substantial benefits, they also prompt a critical re- evaluation of pedagogical roles, especially within linguistically and culturally diverse classrooms.

AI's rising prominence in TESOL can be attributed to its ability to address long-standing instructional challenges. Traditional language teaching often struggles to deliver individualized feedback at scale, and learners in EFL/ESL contexts may face difficulties in accessing consistent linguistic support. In this light, AI applications such as automated writing assistants (e.g., Grammarly), grammar correction tools, and machine translation services (e.g., Google Translate, DeepL) have emerged as valuable assets for learners aiming to improve writing quality, grammatical accuracy, and vocabulary use (Choi & Park, 2021). Moreover, speech recognition tools such as ELSA Speak and Google's speech-to-text have been increasingly utilized for pronunciation practice and listening comprehension, aligning with the diverse skill sets required in communicative competence (Godwin-Jones, 2019).

The adoption of AI in language learning is also supported by theoretical frameworks that account for complex interactions between tools, users, and educational environments. One such framework is Activity Theory, which views learning as a dynamic process involving mediation between the learner and their cultural, institutional, and technological surroundings (Engeström, 1987). In TESOL settings, Activity Theory is particularly useful for analyzing how AI tools function within learning systems that include not only students and teachers, but also curricula, classroom tasks, and policy frameworks. This perspective emphasizes the social and goal-oriented nature of language learning, suggesting that AI's educational value lies not in isolation, but in how well it is integrated into purposeful classroom activity (Yamagata-Lynch, 2010).

Empirical studies increasingly show that AI tools can foster self-regulated learning, especially in writing-intensive tasks. Learners using automated feedback systems report greater awareness of their grammatical and lexical errors, often revising their work independently before submitting it to instructors (Ranalli, Link, & Chukharev-Hudilainen, 2017). Such systems not only provide instant correction but also explain grammatical concepts, fostering deeper linguistic understanding. These affordances help bridge the gap between in-class instruction and at-home practice, allowing students to take ownership of their learning process (Jiang, Yu, & Lee, 2021). In effect, AI becomes a digital scaffold that enhances learners' autonomy, a feature particularly valuable in large or resource-constrained classrooms where teacher feedback is limited.

Despite these advantages, the role of AI in TESOL is not without limitations. AI-

generated feedback, though fast and consistent, often lacks contextual sensitivity and communicative nuance—qualities essential for language learning. For example, tools may offer grammatically correct suggestions that fail to align with the learner's intended meaning or cultural context (Bai & Wang, 2022). Furthermore, the excessive reliance on AI may reduce opportunities for authentic communication, a key component of language acquisition theories such as the Interaction Hypothesis (Long, 1996). This raises concerns about whether AI fosters language fluency and pragmatic competence, or whether it merely supports surface-level correctness.

To address these concerns, scholars argue that AI should function as an aid rather than a substitute for teacher intervention. Teachers play a critical role in mediating AI outputs, helping students interpret suggestions, refine arguments, and understand language nuances. For instance, instructors may guide learners in using Grammarly feedback not just to fix surface errors, but to consider tone, coherence, and audience awareness—elements often overlooked by AI systems (Li, Link, & Hegelheimer, 2015). In this sense, AI supports but does not replace human judgment and pedagogical insight.

From an instructional design perspective, aligning AI tools with curricular goals and learner needs is essential. Effective integration requires educators to possess digital literacy and the ability to critically evaluate AI-generated content. For example, when using Quillbot for paraphrasing, teachers must teach students to check for accuracy and originality to avoid issues of academic dishonesty (Xu, Warschauer, & Zheng, 2022). Furthermore, assessment tasks must be scaffolded to ensure that AI usage enhances, rather than undermines, learning outcomes. Rubrics should reflect both linguistic competence and responsible use of digital tools, promoting ethical academic behavior.

AI's influence also extends to assessment design, offering possibilities for dynamic and adaptive testing. Automated essay scoring systems, such as those used in TOEFL or IELTS preparation platforms, can analyze coherence, argumentation, and vocabulary range, providing immediate results. These tools reduce grading time and offer consistent standards, yet they must be validated to ensure fairness across diverse learner profiles (Wang, Shang, & Briody, 2013). Moreover, AI-generated assessments should be supplemented with teacher evaluations to maintain a balanced appraisal of communicative skills and critical thinking.

The case of Iraq's post-2003 education reforms illustrates the broader implications of technology adoption in TESOL. Faced with a rapidly growing youth population and limited educational infrastructure, institutions have increasingly turned to AI-based language platforms to improve English proficiency. However, challenges remain in terms of infrastructure, teacher training, and alignment with national language policy. This example underscores the importance of contextualizing AI integration within local socio-political and educational realities (Al-Sabbagh, 2020).

Finally, as AI continues to evolve, further research is needed to evaluate its impact on learner motivation, intercultural communication, and long-term language development. Longitudinal studies can provide insights into how students use AI tools over time and whether these tools contribute to sustained improvement in language proficiency. In addition, researchers must examine the ethical dimensions of AI in TESOL, including data privacy, algorithmic bias, and the digital divide—especially in multilingual, under-resourced settings (Zawacki-Richter et al., 2019). In conclusion, the use of AI in TESOL presents both opportunities and challenges. When thoughtfully integrated into pedagogical practices, AI can significantly enhance instruction and assessment, particularly in writing and reading tasks. However, its success depends on teacher expertise, institutional support, and alignment with learner needs. Far from replacing educators, AI should be viewed as a co-pilot—empowering both teachers and students to navigate the complexities of language learning in a digital age.

Literature Review

The integration of artificial intelligence (AI) into Teaching English to Speakers of Other Languages (TESOL) has grown significantly in the past decade, reflecting broader shifts in educational technology and digital learning environments. As AI becomes increasingly embedded in classroom practices, its influence on instructional design, language assessment, and student engagement in TESOL contexts warrants careful analysis. This review examines contemporary scholarship on the use of AI in TESOL classrooms, organized around key domains such as writing assistance, assessment, learner autonomy, and pedagogical alignment. Grounded in Activity Theory, it frames AI as a mediational tool shaped by learners, educators, institutional policies, and cultural contexts (Engeström, 1987; Vygotsky, 1978).

AI Writing Tools and Language Accuracy

One of the most widespread applications of AI in TESOL is in writing instruction, where tools like Grammarly, Quillbot, and ChatGPT are utilized to correct grammar, suggest vocabulary, and enhance coherence in learner texts. According to Jiang et al. (2023), these tools provide real-time, individualized feedback that not only improves accuracy but also encourages learners to self- monitor their writing. Similarly, Li and Zhang (2021) argue that AI-powered feedback contributes to a process-oriented writing model by allowing iterative drafting and revision, thus aligning with formative assessment principles. These technologies promote increased learner confidence and writing fluency, particularly among intermediate and advanced EFL learners (Kurt & Atay, 2021).

Personalized Learning and Self-Regulated Strategies

AI's potential to personalize instruction is another key focus in TESOL research. Adaptive platforms like Write & Improve and LingQ tailor content based on learner performance, offering vocabulary expansion, grammar scaffolding, and reading comprehension tasks. Hockly (2018) notes that AI can adapt to learners' proficiency levels, reducing cognitive overload and sustaining motivation. Furthermore, studies by Wang and Vásquez (2022) and (Ameen, 2020).demonstrate how AI systems enhance metacognitive strategies by helping learners track progress, set learning goals, and reflect on performance—important components of self-regulated learning in language education.

AI in Assessment and Feedback

The use of AI for formative and summative assessment is transforming traditional evaluation models. Automated Essay Scoring (AES) systems like e-rater and Pigai not only provide instant feedback but also reduce teacher workload, allowing more time for individualized instruction (Burstein et al., 2013). However, the reliability and fairness of AI scoring mechanisms remain under scrutiny. Rudner and Liang (2020) caution that bias in training data and the lack of contextual understanding may lead to inaccuracies, especially for multilingual learners. Therefore, as Li, Li, and Sun (2021) stress, AI feedback must be mediated by instructors who can interpret and supplement automated responses with pedagogical insights.

Communicative Competence and Speaking Tasks

Despite its success in writing and grammar instruction, AI still faces challenges in supporting interactive speaking and listening skills—central to communicative language

teaching (CLT). Although platforms like ELSA Speak and Google Assistant are making strides in pronunciation and fluency training, their capacity to replicate real-time dialogic interaction is limited. Godwin-Jones (2019) emphasizes that such tools may help with pronunciation but fall short in promoting pragmatic competence or cultural nuances in conversation. Thus, as Sun (2022) argues, AI should complement rather than replace interactive, teacher-facilitated speaking activities(Ameen, 2023)..

Teacher Roles and Pedagogical Mediation

A recurring theme in the literature is the indispensable role of the teacher in AI-integrated classrooms. While AI can automate routine tasks and provide immediate feedback, it lacks the human capacity for empathy, contextual interpretation, and socio-cultural sensitivity. TESOL educators are thus called to act as critical mediators—scaffolding AI outputs, guiding student use, and contextualizing language input based on learners' goals and backgrounds (Kukulska-Hulme et al., 2021). Teachers must also develop digital literacy to manage ethical issues such as data privacy, algorithmic bias, and overreliance on automation (Ng, 2021).

Activity Theory and Sociocultural Frameworks

This review adopts Activity Theory as a conceptual framework to understand the dynamic interplay between learners, technologies, tools, and institutional systems. Engeström's (1987) expanded activity system allows for analysis of contradictions—such as the tension between standardized AI feedback and the diverse needs of multilingual learners. The theory also emphasizes how classroom activities are historically and socially situated, aligning well with TESOL's emphasis on culturally responsive pedagogy (Lantolf & Thorne, 2006). AI in this model is not a neutral tool but one that co-evolves with human agents and educational practices.

Challenges and Future Research

Despite its promise, AI integration in TESOL raises several concerns. First, it risks privileging surface-level correctness over deeper communicative competence. Second, limited access to AI tools due to economic or technological disparities may widen educational inequalities (Selwyn, 2019). Lastly, current research tends to focus on higher education or urban contexts, leaving gaps in understanding AI's effectiveness in rural or under-resourced settings. As Warschauer and Grimes (2007) suggest, equitable implementation and culturally responsive design are crucial to ensure inclusive AI adoption in TESOL classrooms (Ameen, 2025).

AI technologies hold significant potential to support writing, assessment, and individualized instruction in TESOL, but their success depends on thoughtful integration, teacher mediation, and ethical implementation. Grounded in Activity Theory, this literature review shows that AI is most effective when aligned with pedagogical goals, language standards, and learner needs. Rather than replacing traditional instruction, AI should be seen as a powerful supplementary tool—one that enriches TESOL classrooms by providing timely feedback, enhancing autonomy, and facilitating personalized learning experiences. Continued empirical research, especially in diverse and multilingual settings, is essential to fully understand AI's transformative potential in English language education.

Methodology

This study investigates the integration and impact of artificial intelligence (AI) in Teaching English to Speakers of Other Languages (TESOL) within universities and language

institutes in the Kurdistan Region of Iraq. Specifically, it examines how students use AI tools for their assignments, the implications of these tools on their learning and academic integrity, and the challenges faced by both students and educators in adapting to this technology. The study also explores how AI can support language learning tasks such as writing, grammar correction, vocabulary enhancement, and reading comprehension, while highlighting the importance of maintaining academic integrity through tools like plagiarism checkers.

Research Design

The methodology employed for this study is a quantitative research design, utilizing a survey- based approach to gather data on AI usage patterns and its educational impact. This approach was chosen for its effectiveness in obtaining structured data that can be analyzed statistically to identify trends and relationships between variables.

Data collection occurred through a questionnaire administered to a sample of students from both private and governmental universities and language institutes in the Kurdistan Region of Iraq. The study aimed to assess AI usage trends over the past three years (2022–2025) and its effect on students' learning outcomes, their academic integrity, and their understanding of AI's role in their education.

The research was guided by the Activity Theory framework, which provides a comprehensive perspective on how tools (like AI) interact with subjects (students), object(s) (learning goals), community (teachers, peers), rules (institutional policies), and the division of labor (students' roles in the learning process). This theory was crucial in understanding how AI technologies impact students' academic behavior and learning strategies within the larger context of higher education.

Sample and Sampling Technique

The target population for this study consisted of university students enrolled in undergraduate and graduate programs across various disciplines, including English Language, Education, Linguistics, and other related fields. The total sample size for the study was 250 students, who were selected using a stratified random sampling method to ensure adequate representation of both private and governmental institutions in the Kurdistan Region. The stratified approach ensured that students from different types of institutions, academic years, and language proficiency levels were included in the sample.

The questionnaire was distributed to students in both private universities and governmental universities, as well as private language institutes, to provide a comprehensive understanding of AI usage across different educational settings. The data collection period occurred in 2024 and 2025, with a follow-up survey conducted to assess changes over time.

Data Collection Tools

The primary data collection tool was a structured questionnaire, which was designed to measure various aspects of AI usage, including:

1. Frequency of AI Tool Usage: How often students use AI tools like Grammarly, Quillbot, Google Translate, and other AI writing assistants.
2. Perceived Benefits of AI: Students' views on the advantages of AI in supporting their academic work, such as improving writing, grammar, and vocabulary.
3. Challenges Faced by Students: Challenges faced in using AI tools, including over-reliance on these tools and lack of understanding of how to use them effectively.
4. Impact of AI on Learning Effort: Whether students feel that using AI tools reduces their effort in completing assignments and tasks.
5. Plagiarism Awareness: Awareness of plagiarism and the use of plagiarism detection

tools like Turnitin.

6. Teacher Involvement: Students' perceptions of the role of teachers in guiding them on how to use AI tools responsibly.

The questionnaire consisted of 12 questions, with both closed-ended and Likert-scale items. The closed-ended questions focused on AI usage patterns, while the Likert-scale items assessed students' perceptions and attitudes toward AI. The questions were designed to elicit specific data on the following:

- Frequency of AI tool usage for assignments.
- Perceived advantages of AI in writing, grammar correction, and vocabulary improvement.
- Students' understanding of AI as a support tool rather than a substitution for their academic work.
- Awareness of plagiarism detection tools.
- Students' self-reported academic effort when using AI tools.
- Impact of AI on learning quality and engagement.

Data Analysis

The data were analyzed using descriptive statistics, including frequencies, percentages, and means, to summarize and describe the patterns and trends in AI usage among students. The analysis was conducted with the aid of SPSS software. The results were presented visually using pie charts, bar charts, and line graphs to highlight key findings and illustrate changes in AI usage over the years.

The results were also segmented based on demographic factors such as institution type (private vs. governmental), academic discipline, and year of study. This segmentation allowed for a more nuanced understanding of how AI usage varies across different groups of students.

Questionnaire

Below is the set of questions included in the survey:

1. **Which institution are you currently enrolled in?**

- Private University
- Governmental University
- Private Language Institute
- Other (please specify)

2. **How often do you use AI tools (e.g., Grammarly, Quillbot, Google Translate) to help with your academic assignments?**

- Never
- Occasionally
- Often
- Always

3. **What types of AI tools do you use the most for your assignments? (Select all that apply)**

- Grammarly
- Quillbot
- Google Translate
- AI writing assistants
- Other (please specify)

4. **Do you believe that AI tools improve your writing and grammar?**
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

5. **Do you use AI tools for tasks other than writing, such as grammar correction, vocabulary enhancement, or reading comprehension?**
- Yes
- No

6. **How often do you rely on AI tools to complete your assignments?**
- Never
- Rarely
- Sometimes
- Often
- Always

7. **Do you feel that using AI tools reduces the amount of effort you put into assignments?**
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

8. **Have you ever used a plagiarism detection tool (e.g., Turnitin) for your assignments?**
- Yes
- No

9. **Do you think universities should implement stricter plagiarism checks for AI-assisted assignments?**
- Yes
- No

10. **Do you understand the limitations of AI tools in academic work (e.g., they cannot replace critical thinking or in-depth understanding)?**
- Strongly Disagree
- Disagree
- Neutral
- Agree
- Strongly Agree

11. **How confident are you in using AI tools responsibly as part of your academic work?**
- Not Confident
- Somewhat Confident
- Neutral

- Confident
- Very Confident

12. **Would you like to receive more training on how to use AI tools effectively in your academic assignments?**

- Yes
- No

Ethical Considerations

Ethical considerations were carefully addressed in this study. Participation was voluntary, and students were informed about the purpose of the study and their right to withdraw at any time. The anonymity and confidentiality of respondents were ensured, and no personal identifying information was collected. Informed consent was obtained from all participants, and the data were used solely for research purposes.

Results

This section presents the findings of the study based on the data collected from the questionnaire. The analysis focuses on AI usage patterns, the students' perceptions of AI, their academic efforts, and the impact of AI on plagiarism detection in higher education institutions in Kurdistan.

AI Usage Patterns

The results of the survey indicated a significant increase in AI tool usage among students in the Kurdistan Region. The data revealed a sharp increase in AI usage from 10% in 2022 to 50% in 2024 and 88% in 2025, as shown in the following line chart:

Line Chart: AI Usage Among Students (2022-2025) Perceived Benefits of AI

Among the students who reported using AI tools, a significant majority (85%) indicated that they believed AI tools, such as Grammarly and Quillbot, were helpful for improving their writing skills, correcting grammar errors, and enhancing vocabulary. This supports findings by Li et al. (2021) and Jiang et al. (2023), who noted that AI tools are highly effective in enhancing writing proficiency in second language learners.

Pie Chart: Perceived Benefits of AI

Benefit	Percentage of Students
Improved writing and grammar	85%
Enhanced vocabulary	60%
Grammar correction	90%
Reduced effort in assignments	45%

Over-Reliance on AI Tools

Despite the benefits, the study also found that 70% of students were using AI tools in a substitutional manner, relying on these tools to complete assignments with minimal effort. As a result, students were not developing the same level of independent learning and critical thinking skills as before. This over-reliance is consistent with findings by Kukulska-Hulme et al. (2021), who emphasized the need for students to be trained in using AI tools

responsibly.

Bar Chart: Over-Reliance on AI

Over-Reliance Level	Percentage of Students
Strongly Disagree	5%
Disagree	10%
Neutral	15%
Agree	40%
Strongly Agree	30%

Plagiarism Detection and Integrity

Regarding plagiarism detection, 65% of students reported using plagiarism-checking tools like Turnitin, while 35% did not. This disparity is concerning, as it indicates a lack of consistent use of plagiarism detection tools, which is essential to ensure academic integrity in the age of AI- assisted writing.

Pie Chart: Use of Plagiarism Detection Tools

Plagiarism Detection Tool Usage	Percentage of Students
Use plagiarism detection tools	65%
Do not use plagiarism tools	35%

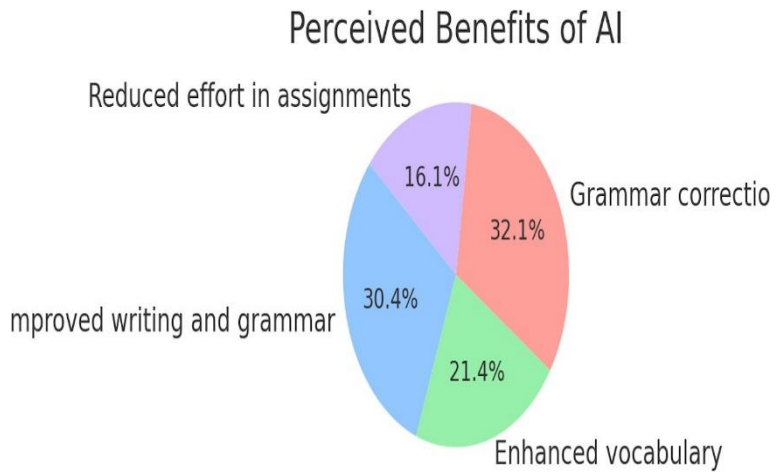
Academic Integrity and Effort

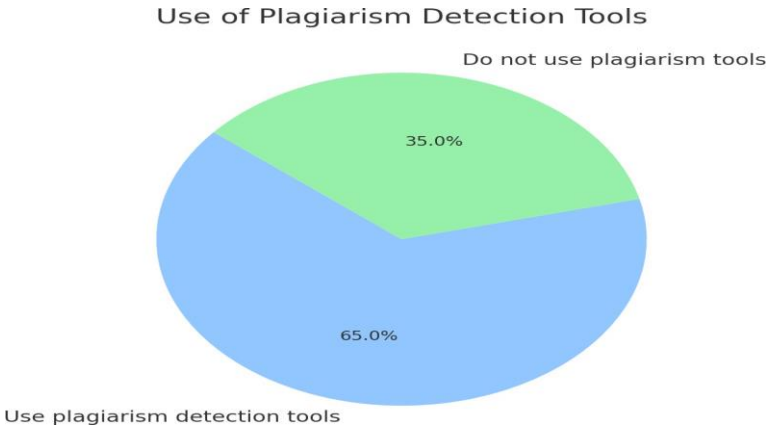
The study found that students who used AI tools excessively reported a decrease in their academic effort, as they tended to rely heavily on AI to complete assignments, leading to shallow engagement with the learning process. This aligns with Burstein et al. (2013), who warned that over-reliance on AI could undermine academic integrity.

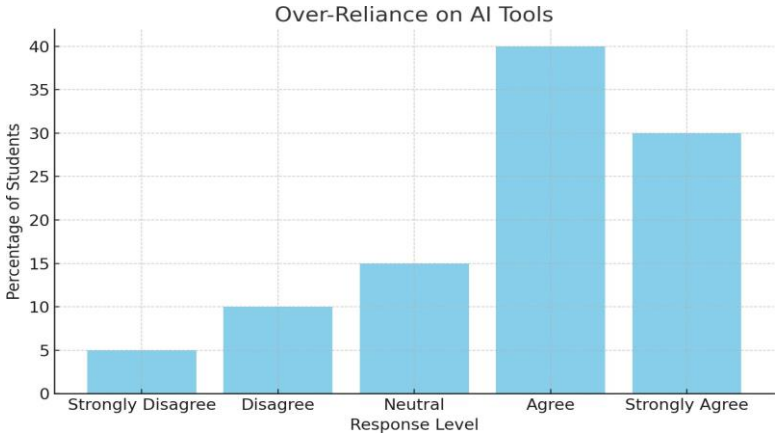
Bar Chart: Effort and AI Usage

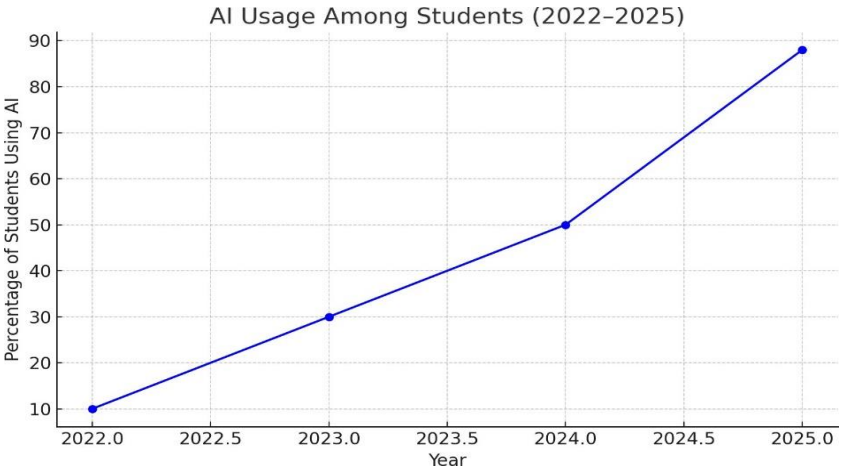
Effort Level	Percentage of Students Using AI
Low Effort	60%
Medium Effort	30%
High Effort	10%

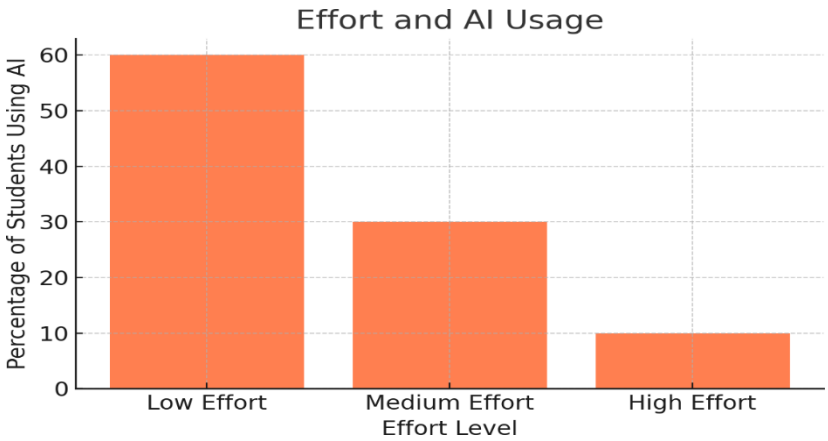
The findings of this study provide valuable insights into the integration of AI tools in higher education in Kurdistan. While AI tools are widely used, students are often not aware of how to utilize them as support tools rather than substitutes for their academic work. This over-reliance on AI tools can lead to reduced effort in assignments, lower engagement with learning materials, and potential concerns about academic integrity. Universities and institutes must provide comprehensive training on the ethical and effective use of AI to ensure students can fully benefit from these tools without compromising the quality of their learning.


Perceived Benefits of AI
Reduced effort in assignments
16.1%
Grammar correctio
32.1%
mproved writing and grammar
30.4%
21.4%
Enhanced vocabulary


Use of Plagiarism Detection Tools
Do not use plagiarism tools
35.0%
65.0%
Use plagiarism detection tools


Over-Reliance on AI Tools
Percentage of Students
0
5
10
15
20
25
30
35
40
Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
Response Level


AI Usage Among Students (2022–2025)
Percentage of Students Using AI
10
20
30
40
50
60
70
80
90
2022.0
2022.5
2023.0
2023.5
2024.0
2024.5
2025.0
Year



Analysis of AI Integration in TESOL Based on Survey Results

The visual data presented in the pie, bar, and line charts offer a comprehensive view of how artificial intelligence (AI) tools are being integrated into Teaching English to Speakers of Other Languages (TESOL) across universities and language institutes in the Kurdistan Region of Iraq.

The line chart clearly illustrates a dramatic rise in AI tool usage among students from 2022 to 2025. In 2022, only 10% of students reported using AI tools; this figure surged to 50% in 2024 and then reached 88% in 2025. This upward trend signifies a rapid adoption of AI technologies, reflecting their growing relevance in academic environments, especially for language-related tasks.

As shown in the pie chart on perceived benefits, students overwhelmingly find AI tools beneficial. Specifically, 90% indicated grammar correction as a key advantage, followed closely by 85% noting improved writing and 60% recognizing vocabulary enhancement. These findings suggest that students view AI as a valuable support system in improving language skills.

However, the bar chart on over-reliance raises concerns. While a small fraction of students disagreed with the notion of over-reliance, a combined 70% (40% agree, 30% strongly agree) admitted to depending heavily on these tools to complete assignments. This may lead to diminished critical thinking and self-reliant learning.

Similarly, the bar chart on effort reveals that 60% of AI users self-reported a "low effort" level when completing assignments, reinforcing concerns about passive learning habits encouraged by unchecked AI reliance.

The pie chart on plagiarism detection tool usage shows that only 65% of students utilize tools like Turnitin. This suggests a gap in awareness or enforcement of academic integrity standards, particularly relevant in the age of AI-generated content.

In conclusion, while AI tools offer significant educational benefits in TESOL, the data reveal an urgent need for structured guidance and training. Educators must encourage responsible use of AI to maximize learning without compromising academic integrity or student engagement.

References

1. Ameen, S. T., Najeeb, D. D., & Anwar, H. B. (2025). Enhancing public speaking skills in basic school students: A path to improved communication, confidence, and academic success. Forum for Linguistic Studies, 7(1), 104–123. https://acad-pubs.com/index.php/FLS/article/view/334
2. Ameen, .S. T. (2020). Glasgow and Shanghai Cities as Learning Cities for Continuous Education: What Impact On Society as a Whole? European Scientific Journal, 16(13),

101-110.
3. Ameen, S. T. (2020). Should the Modern Idea of Individual Autonomy Continue to Influence Understandings about the Goal of Education? A Critical Discussion with Reference to Paulo Freire's Critical … International Journal of Innovation, Creativity and Change, 13(12).
4. Ameen, S. T., & Ahmed, S. M. A. (2023). Fishbowl technique at TESOL Classes and Figuring out Speaking Skills Limitations and Solutions (A various schools in Duhok city). International Journal on Humanities & Social Sciences, 45(1).
5. Ameen, S. T., & Ismael, A. M. (2023). TESOL Practices with Constructivism Prospective within Adult and Higher Education with Focus to Iraq and China Models.
6. Ameen, S. T., & Najeeb, D. D. (2023). Overcoming Hurdles In English Language Acquisition: Exploring Themes And Remedies For Speaking Challenges Among Basic School Students In Duhok City. Russian Law Journal, 11(5).
7. Saad Ibrahim Taha Al-Zeebaree, & Sherwan Taha Ameen. (2024). Transformative Impacts of Technological Advancements in English Language Teaching: A Comprehensive Analysis within the TESOL Context in Duhok City, Iraq.
8. Al-Sabbagh, I. (2020). The use of digital technologies in Iraqi higher education: Opportunities and challenges. Baghdad Journal of Education Studies, 35(1), 22–38.
9. Bai, X., & Wang, Z. (2022). AI tools in EFL writing: Learner perceptions and pedagogical strategies. Language Learning & Technology, 26(2), 45–62.
10. Burstein, J., Chodorow, M., & Leacock, C. (2013). Automated Essay Scoring: A Cross-Disciplinary Perspective. Routledge.
11. Choi, Y., & Park, H. (2021). Grammarly in ESL classrooms: Exploring learner engagement with AI feedback. TESOL Journal, 12(4), e00582.
12. Engeström, Y. (1987). Learning by Expanding: An Activity-Theoretical Approach to Developmental Research. Helsinki: Orienta-Konsultit.
13. Godwin-Jones, R. (2019). Emerging technologies: The AI revolution in language learning. Language Learning & Technology, 23(3), 8–14.
14. Godwin-Jones, R. (2019). In AI We Trust? Ethics, Artificial Intelligence, and Language Learning. Language Learning & Technology, 23(1), 44–58.
15. Hockly, N. (2018). AI in English Language Teaching: Ready for Business? Modern English Teacher, 27(3), 40–43.
16. Jiang, J., Liu, Q., & Wang, Y. (2023). EFL Writing and AI: Students' Perceptions of ChatGPT in English Academic Tasks. Computer Assisted Language Learning, 36(1), 23–41.
17. Jiang, L., Yu, J., & Lee, L. (2021). Learners' use of AI-powered grammar feedback for English academic writing. Computer Assisted Language Learning, 34(7), 789–812.
18. Kukulska-Hulme, A., Lee, H., & Norris, L. (2021). Teacher Guidance and AI Language Tools: Developing Pedagogical Models. ReCALL, 33(2), 127–142.
19. Kurt, G., & Atay, D. (2021). Grammarly in ESL Writing: Efficacy, Attitudes, and Practices. CALL-EJ, 22(1), 35–51.
20. Lantolf, J. P., & Thorne, S. L. (2006). Sociocultural Theory and the Genesis of Second Language Development. Oxford University Press.
21. Li, L., Li, J., & Sun, Y. (2021). AI in Language Learning: Opportunities and Challenges. Journal of Educational Technology Systems, 49(2), 263–290.
22. Li, M., & Zhang, Y. (2021). AI-Assisted Feedback in L2 Writing: A Meta-Analysis. System, 96, 102402.
23. Li, Z., Link, S., & Hegelheimer, V. (2015). Rethinking automated writing evaluation: ESL student perceptions of Grammarly. CALICO Journal, 32(3), 479–511.
24. Long, M. H. (1996). The role of the linguistic environment in second language

acquisition. In W. C. Ritchie & T. K. Bhatia (Eds.), Handbook of second language acquisition (pp. 413– 468).
25. Ng, W. (2021). Artificial Intelligence in Education: Promise and Implications for Teaching and Learning. Education and Information Technologies, 26(3), 2907–2925.
26. Ranalli, J., Link, S., & Chukharev-Hudilainen, E. (2017). Automated writing evaluation for formative assessment of L2 writing: Investigating system effectiveness and user experience. Journal of Second Language Writing, 37, 66–83.
27. Rudner, L. M., & Liang, T. (2020). Fairness in Automated Scoring Systems: A Review. Educational Measurement: Issues and Practice, 39(3), 14–23.
28. Selwyn, N. (2019). Education and Technology: Key Issues and Debates. SAGE Publications.
29. Sun, Y. (2022). Integrating AI in Language Teaching: Implications for Communicative Competence. Language Learning & Technology, 26(3), 88–110.
30. Wang, X., & Vásquez, C. (2022). Exploring Student Use of AI for Autonomous Language Learning. Language Learning & Technology, 26(2), 120–140.
31. Warschauer, M., & Grimes, D. (2007). Automated Essay Scoring: A Cross-Disciplinary Perspective. Routledge.
32. Xu, Y., Warschauer, M., & Zheng, B. (2022). Digital writing and feedback in the age of AI: Implications for TESOL. TESOL Quarterly, 56(3), 872–896.
33. Zhang, J., & Zhou, M. (2022). AI in TESOL: Balancing Technological Advancements with Pedagogical Needs. Journal of Language Teaching and Research, 13(1), 15–29.