

IKR Journal of Education and Literature (IKRJEL)

Journal homepage: https://ikrpublishers.com/ikrjel/

Volume-1, Issue-1 (July-August) 2025 ISSN: 3107-7684 (Online)

Reimagining Language Education: Human-AI Collaboration in Teaching Literature and Grammar

¹Dr Jibril Lawal* and ²Dr Suleiman Balarabe,

^{1,2}Federal University of Education, Zaria

*Corresponding author: Dr Jibril Lawal

ABSTRACT

This paper explores the potential benefits of integrating human teaching with AI support in language education, focusing on literature and grammar instructions. We review existing and available literature on the strengths and limitations of both human teachers and AI-powered tools, highlighting the potential for a blended approach to enhance student learning process and outcome. By leveraging AI's capabilities in text analysis, grammar correction, and personalized feedback, teachers can focus on high-touch tasks like facilitating critical thinking and discussions, guiding creative writing and fostering emotional connections with literary texts. This collaboration can create a more comprehensive and effective learning experience.

Keywords: Reimagining, Language Education, Human-AI, Collaboration, Teaching Literature, Grammar.

Introduction

The integration of technology in language education has transformed the way we teach and learn languages. AI powered tools, in particular, have shown promise in enhancing language learning outcomes. However, the role of human teachers remains crucial in providing nuanced guidance, critical thinking and emotional support. This paper argues that a blended approach combining human teaching intelligence with AI support, can optimize language education and by extension literary appreciation/study.

It is important we differentiate between AI (Artificial Intelligence) and HI (Human Intelligence). Artificial intelligence, which refers to the development of computer systems that can perform tasks that typically require human intelligence, such as learning, problem solving, and decision-making. HI on the other hand could stand for Human Intelligence and obviously human intelligence is dynamic and inexhaustible as human behaviors are unique and could be unpredictable. Critical thinking, discussions and emotional intelligence are significant aspect of Human Intelligence. It is HI that produces AI. However, in terms of capabilities, human Intelligence (HI) currently possesses qualities

like creativity, empathy and complex decision-making that are hard to replicate with AI. AI on the other hand is highly excellent in areas like data processing, speed and scalability and can perform wonderful tasks within a shortage time possible. It is not important to understand which is higher but rather how they can complement each other. AI can augment human capabilities, freeing us to focus on higher-level thinking and creativity, instead of troubling search for information, analyzing it or performing time-consuming tasks that could be handled by various AI tools.

Literature Review:

Research has shown that human teachers excel in providing contextualized explanations, encouraging critical thinking and fostering emotional connections with students (Kern, 2006 and Lawal&Abubakar 2025). AI-powered tools, on the other hand, offer consistency, scalability and data-driven insights (Warschauer, 2002). Studies have demonstrated the effectiveness of AI in language learning, including grammar correction (Lee, 2019), reading comprehension assessment (Liu, 2020) and personalized feedback (Wang, 2018). Though

teachers from Sweden have expressed concern over the use of Android technology in the process of learning (YouTube....), it is important to note that the entire teaching and learning processes should not be left to AI, and most often we shall encourage the use of physical book for which pupils or students must learn to read otherwise reading texts is also left for the machine to do, while we listen.

According to Lawal and Abubakar (2024) Artificial Intelligence (AI) is rapidly transforming the educational landscape, augmenting the role of teachers and enhancing student learning experiences. By automating routine tasks, providing personalized learning support, and offering valuable insights, AI is poised to revolutionize the teaching and learning process (Chen et al 2020) AI as a teacher's assistant, AI is significantly enhancing teacher efficiency by automating timeconsuming tasks such as grading, administrative work, and lesson planning. This frees educators to focus on more strategic and creative aspects of their role, such as individualized student support and curriculum development Zawacki-Richter et al(2019). Additionally, AI-powered tools can provide teachers with real-time feedback on student performance, enabling them to identify areas where students may need additional support. (Cuban 2001)

However, Russell and Norving (2016) believe that AI personalized learning. One of the most promising applications of AI in education is personalized learning. By analyzing student data, AI can identify individual learning styles, strengths, and weaknesses(Gašević 2023). This information can be used to create tailored learning paths, ensuring that each student receives the appropriate level of challenge and support. AI-powered tutors can also provide personalized feedback and remediation, helping students to master difficult concepts.

Human – AI Collaboration:

By combining human teaching with AI support, educators can create a more comprehensive learning experience. AI can handle routine tasks like grammar correction, freeing teachers to focus on high-touch tasks like the following:

1. **Discussion facilitation:** human teachers can lead discussions on literary texts, encouraging critical thinking and nuanced analysis. A teacher can pose a question on literary text studied by students that would generate critical discussion or thinking: for

example, "proverbs are palm oil with which words are eaten", is this quotation from Chinua Achebe's texts English? Why is it English, if you choose to say it is English and Why is it not English if you choose to say that. The critical discussion and thinking here is between what is grammatically correct and what is culturally acceptable.

- 2. Creative writing guidance: teachers can provide personalized feedback on creative writing, guiding students in developing their writing styles. For example, a teacher may decide to task students in writing a short drama or poem about the effect of European culture on African Culture in terms of food and feeding, considering the effect of colonization as presented in Things Fall Apart by Chinua Achebe. Students could be guided by other Poems as may be presented by the teacher.
- Emotional Connection: Human teachers can foster emotional connections with their students. creating a supportive learning environment. When a teacher relates the story in Things Fall Apart to students' lives and explore themes like cultural identity, family and community ties, students could be asked to compare such relationships and experiences in their various traditions and how such relationships are revered or otherwise. Empathy-building can help connect with students' emotional intelligence. For example, Okonkwo's struggle to live a better life than his father, Unoka and his effort to ensure Nwoye also follows his footsteps brings about conflict between father and son and grandfather. Students could be encouraged to imagine they find themselves in similar situation. Other ways of developing empathy and understanding among the students' is through character analysis, where the characters' emotion, motivation and relationships are analyzed. Other may include creative projects like role playing, acting or writing from Nwoye's or Unoka's perspective, etc.

By using these routine classroom activities, where students feel safe, comfortable, free and respectful, they can cheerfully share their thoughts and feelings about the novel. These approaches can help students develop a deeper emotional connection with the novel, its characters and plots or any other literary text they study, while also fostering a sense of community and understanding in the classroom.

Meanwhile, AI can support language learning through the following means if appropriate commands or queries are directed to it:

- 1. **Text Analysis:** AI-powered tools can analyze literary texts found in its data links and other online sources, providing insights into themes, character and character analysis, literary devices or literary style of the author. Using the AI tools textual analysis becomes faster and insights become vivid and hastened. Students would have more time to study additional books at higher levels.
- 2. Grammar Correction: ΑI can correct grammatical errors, providing instant suggestions, feedback and guidance. If you use Microsoft Word on your computer to write essays by yourself, you will be familiar with spelling and grammar checker and other tools. AI performs greater task in grammar, style, and purposeful use of language to yield meaning and reinforce communication. Apart from grammar checking and corrections AI tools can provide for language practice through AIdriven platforms like Smart Chat AI, Chatbot – AI Smart Assistant, etc. these can generate interactive exercises, guizzes, games, etc. to help the students practice grammar, building and improving vocabulary and pronunciation, etc. However, the teacher must not relax in giving guidance and monitoring the progress of students, even though AI can track students' progress, identifying areas where improvement and providing insights for teachers. These are supplementary to the traditional teaching methods never meant to replace the guidance and efforts of the teacher, especially where the teacher employs the support of the AI tools with wisdom.

Other grammar exercise could be introduced with exercise in generating different levels of sentence structure from simple to complex, including multiple phrasal structure, etc. AI speech coaching tool could assist students to improve their vocabulary and engage students in practical exercises, while the AI tool assists students in correcting wrong structures and contextual mistakes in expression.

3. **Personalized Feedback:** AI-driven systems can offer tailored feedback on student writing, identifying, areas for improvement, such grammar, wrong expression, use of appropriate words, phrases or clauses. It can also help students in generating summary and analysis of complex sentences for deeper understanding of scientific or technical processes.

According to Lawal and Abubakar (2025), there are various AI tools and their various functions and capabilities. There are the robots AI, which perform human tasks like cooking, driving, hunting, and all the domestic tasks. Other similar robots perform human tasks in the airport, hotels and restaurants. The following is a table of various AI tools and the type of task they can carry out. They can be promising in developing critical thinking in students, especially is students are familiar with their functions and utilisation to get the required feedback from the tools.

It should be noted that AI tools do not act like human being. They do not read your mind or emotion. The tools rely heavily on how you use language to write queries for their response. Their response is solely based on the available data to it as at the time you punch in your queries. Sometimes we may even get wrong responses from the tools or a clear confession from the tool.

s/no.	AI Tool	Functionality	Use Case in Critical Thinking	Accessibility/Notes
1.	ChatGPT (OpenAI)	Conversational AI for writing, problem-solving, and reasoning	Encourages deep thinking and reflective inquiry	Web & mobile; free with limits
2.	Grammarly	Writing assistant with clarity and tone feedback	Supports reflective writing and logical structuring	Works offline with browser plugins
3.	Quillionz	Generates critical questions from text	Promotes comprehension and higher-order thinking	Web-based; limited free version

4.	Socratic by	Homework help via visual	Facilitates inquiry-	Mobile app; good for
	Google	explanations and concept mapping	based learning	low-resource contexts
5.	Khanmigo (Khan Academy)	AI tutor that explains reasoning and concepts	Encourages self- paced analytical learning	Requires stable internet; free for now
6.	Elicit	AI research assistant for asking and answering research questions	Fosters evidence- based reasoning and analysis	Great for students with research assignments
7.	Turnitin Revision Assistant	Feedback on essay quality, structure, and argument strength	Promotes critical self-assessment in writing	An institutional subscription often required
8.	Canva Magic Write	AI writing assistant in Canva	Helps students brainstorm and present ideas logically	Accessible on mobile and desktop
9.	WolframAlpha / MathGPT	AI for solving and explaining math and logic problems	Supports logical and mathematical reasoning	Available online with step-by-step output
10.	Curipod	AI for generating interactive lessons and discussions	Encourages dialogue and critical engagement	Teacher/student- friendly; free version available
11.	Gemini AI (Google)	Multimodal AI for reasoning, coding, and research tasks	Enhances inquiry- based learning and synthesis of information	Integrates with Google Workspace tools
12.	Grok 3 (xAI by Elon Musk)	Conversational AI with real-time X (Twitter) integration	Facilitates real-time discussion and critical engagement	Available in X Premium; English- focused

Conclusion:

The integration of human teaching with AI support tools offers a promising approach to language education. By leveraging the strength of both, educators can create a more comprehensive and effective learning experience. Further research is needed to explore the optimal balance between human teaching and AI support in language education.

Despite the promising support of AI in teaching learning, there is disquiet not only among teachers but

among other professionals. Many people worry about AI's potential to impact on jobs and human roles. While AI will not and cannot certainly automate some tasks, it

is also likely to create new opportunities and augment human capabilities.

Some experts believe AI will lead to a shift in human work, focusing more on creative problem-solving, empathy, and complex decision-making. Others see potential risk if AI development is not carefully checked and managed.

Recommendations

The following are some recommendation in the use of AI tools for teaching and research, while we await the codification of ethical values in the use of the tool by the appropriate authorities. When using AI tools as support for teaching, learning and research, teachers should consider the following:

- Verify AI-generated content or responses: ensure accuracy and reliability of information generated by AI tools as sometimes such information contains biases and inaccurate information or errors.
- 2. Understand the limitation of AI Tools: recognize AI's limitations, such as lack of human judgement, potential biases, and context-specific understanding. This is to say that AI responses are based on how it is programmed and based on the available data it can process.
- Critical Evaluation: ensure that each time you critically evaluate AI-generated information/content, developing your analytical and critical thinking skills. Encourage students to do the same with every AI-generated information or content.
- 4. Data Privacy and Security: ensure AI tools comply with data protection regulations, safeguarding student and institutional data. Each AI tools is equipped with such data protection and privacy regulations, especially if the source of such AI tools is corporate and licensed.
- 5. Transparency and Accountability: clearly communicate AI usage to students, ensuring transparency and accountability in AI-driven teaching and research practices. In this case, institutions and government would have to provide ethical practices for the use of AI tools in academic circles and for research purposes, drawing limitations of the use of the tools, so that transparency and accountability could be ensured. One must know how to use AI tools to be able to draw authentic and acceptable information or contents.
- 6. Avoid Over-Reliance: balance AI use with human interaction, discussion and critical thinking to maintain a depth and nuance of learning. Make sure AI-generated content does not betray the reality of the meaning your trying to make with the content, thereby creating mistrust among your audience.
- 7. Stay Updated: staying updated and informed about AI development, best practices and potential risks to ensure effective and responsible AI interaction saves the teacher from embarrassment and misguiding the students.

8. *Ethical and Academic Guides:* Academic Institutions, National Communication Commission (NCC) and National Information Technology Development Agency (NITDA) should collaborate as a matter of urgency to provide ethical and academic standard for the use of AI in teaching, learning and research, which could be reviewed from time to time.

By being aware of these cautions, teachers can harness AI's potentials while maintaining academic integrity, promoting quality learning and enhanced academic result oriented research.

Please consider the poem below:

In Zaria's Hall of Learning High A Conference Blooms and Zooms Where minds collide in collision At School of Science, a gathering ground International voices, ideas expand.

Artificial Intelligence, a tool so fine Enhances Research a wondrous find Data analyzed, insights unfold Discoveries born, knowledge to hold.

Nigeria's Scholars, global peers unite Sharing wisdom, igniting the light Research Elevated, AI's gentle hand Innovation's Spark, across the land.

This poem is dedicated to this maiden international Conference on the use of AI in enhancing Academic Research, courtesy of Human Ingenuity and Artificial Intelligence.

References:

- 1. Chen, L., Chen, P., & Lin, Z. (2020). Artificial Intelligence in Education: A Review. *In Access*, 8,75264-75278.
- 2. Cuban, L. (1993). Computers meet classroom: Classroom wins. *Teachers College Record*, 95(2),185-210.
- 3. Gašević, D., Siemens, G., &Sadiq, S. (2023). Empowering learners for the age of artificialintelligence. *Computers* and Education: Artificial Intelligence, 4, 100130.
- Kern, R. (2006). Perspective on Technology in Learning and Teaching Languages. TESOLQuarterly,40(1), 183 – 210

- Krashen, S. D. (1987) Principles and Practice in Second Language Acquisition.
 OxfordUniversityPress. London.
- 6. Lawal, J. and Abubakar, H. (2024). A Paradigm Shift in Teaching: Technology and TeachingProcess, a Conference paper presented at 1st International Conference on Advancement in Research, Innovation, Scholarship and Enterprise with a theme "Artificial Intelligence, Science and the Economy: Interrogating the African Situation, organised by Topfaith University, MKPATAK dated 6th December 2024.
- 7. Lawal, J. and Abubakar, H. (2025). The Use of Artificial Intelligence in Developing CriticalThinkingAmong Nigerian Students Amidst Poor Provision of Reading and Research Materials. A Conference Paper presented at the 4th National Conference organised by the Institute of Education, Ahmadu Bello University, Zaria from 13th 17th May 2025.
- 8. Lee, J. (2019) Automated Grammar Correction for Language Learners: A Review. Computer

- Assisted Language Learning, 32(5-6), 641 662.
- Liu, X. (2020). Reading Comprehension Assessment Using Machine Learning. Journal ofeducationalComputing Research, 58 (4), 419 – 435.
- Russell, S., &Norvig, P. (2016). Artificial intelligence: A modern approach. Pearson Education
- Wang, Y. (2018) Personalized Feedback in Language Learning: A Systematic Review. Educational Technology and Society, 2191), 146 – 157.
- 12. Warschauer, M. (2002). A Developmental Perspective on Technology in Language Education. TESOLQuarterly, 36 (3), 453 475.
- 13. Zawacki-Richter, O., Marín, V. I., Bond, M., &Gouverneur, F. (2019). A systematic review of research on artificial intelligence applications in higher education—where are the Educators. *International Journal of Educational Technology in Higher Education*, 16(1), 1-27.