
ARTIFICIAL INTELLIGENCE, CREATIVITY AND CRITICAL THINKING IN ENGLISH LANGUAGE LEARNING: A STUDY AMONG B.A. (UNDERGRADUATE) STUDENTS

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ABSTRACT

The integration of Artificial Intelligence (AI), particularly generative tools such as ChatGPT, has significantly transformed English language learning in higher education. This study explores the impact of AI on creativity and critical thinking among Bachelor of Arts (B.A.) undergraduate students studying English. Using a mixed-methods approach, data were collected from 160 students through structured questionnaires and semi-structured interviews. The findings reveal that AI enhances language proficiency, idea generation, and learner autonomy, while also presenting challenges related to over-reliance and reduced independent thinking. Statistical analysis indicates a moderate positive relationship between AI-assisted learning and creativity ($r = 0.54$), and a complex relationship with critical thinking. The study highlights the need for balanced AI integration in pedagogy to promote higher-order thinking skills. The research contributes to emerging scholarship on AI-assisted language learning and provides practical implications for educators in developing contexts.

KEYWORDS: Artificial Intelligence, Creativity, Critical Thinking, English Language Learning, Undergraduate Students, Generative AI.

INTRODUCTION

The rapid advancement of Artificial Intelligence (AI) technologies has reshaped educational practices worldwide, particularly in English language teaching (ELT). AI-powered tools such as chat boots, automated writing assistants, and language learning platforms have introduced

new opportunities for enhancing learning experiences. Creativity and critical thinking are considered essential 21st-century skills, especially in language education. Creativity involves generating original ideas and expressions, while critical thinking entails analysing, evaluating, and synthesizing information. In AI-assisted learning environments, these skills are both supported and challenged.

Recent research suggests that AI can facilitate idea generation and academic exploration, thereby supporting creative learning processes. However, concerns have also been raised about students' over-reliance on AI, which may reduce independent thinking and analytical engagement.

This study aims to examine how AI influences creativity and critical thinking in English language learning among B.A. undergraduate students.

- **Theoretical Framework**

This study is grounded in two major theoretical perspectives:

(1) Cognitive Flexibility Theory

Cognitive Flexibility Theory explains how learners adapt their thinking across different contexts. Research indicates that critical thinking plays a mediating role between motivation and creativity in AI-assisted learning environments.

(2) Constructivist Learning Theory

Constructivism emphasizes active knowledge construction. AI tools act as cognitive partners, enabling learners to explore ideas, revise content, and engage in reflective learning.

Review of Literature

Recent studies have explored the role of AI in fostering creativity and critical thinking in language learning. A study in *Cogent Education* found that students perceive AI as beneficial for enhancing critical thinking through research and evaluation tasks, though limitations exist in contextual understanding. Similarly, research on AI-integrated English classes reported significant improvement in critical thinking, while gains in creativity were moderate. Studies on generative AI in writing classrooms highlight that AI promotes learner autonomy and idea generation but may reduce deep analytical engagement if used excessively. Furthermore, recent research indicates that AI-assisted tasks improve engagement and reflection when combined with structured instructional strategies. These findings suggest a dual role of AI: as a facilitator of creativity and as a potential risk to critical thinking if not used responsibly.

Research Objectives-

1. To examine the impact of AI on creativity in English language learning.
2. To analyse the influence of AI on students' critical thinking skills.
3. To explore students' perceptions of AI-assisted learning.
4. To identify challenges and opportunities in integrating AI into English education.

Research Methodology

Research Design- A mixed-methods design combining quantitative and qualitative approaches.

Participants-

- Sample Size: 160 B.A. students
- Location: Arts colleges in Maharashtra
- Sampling: Random sampling

Instruments-

- Creativity Scale (idea generation, originality)
- Critical Thinking Scale (analysis, evaluation, reasoning)
- AI Usage Survey
- Interview schedule

Data Analysis-

- Descriptive statistics
- Pearson correlation
- Thematic analysis

Results- Impact of AI on Creativity-

The findings indicate that Artificial Intelligence (AI) tools play a significant role in enhancing students' creative abilities in English language learning. A majority of respondents reported that AI-assisted platforms—such as text generators, grammar checkers, and conversational tools—support the creative process in multiple ways.

Firstly, students highlighted that AI tools facilitate rapid idea generation, especially during writing tasks such as essays, stories, and assignments. Many participants noted that AI provides prompts, outlines, and examples that help overcome writer's block and stimulate creative thinking. This aligns with the concept of AI as a “cognitive scaffold,” enabling learners to extend their imaginative capacity.

Secondly, AI was found to improve vocabulary and linguistic expression. Students reported that AI-generated suggestions exposed them to new words, idiomatic expressions, and varied sentence structures, thereby enriching their language use. This enhancement in linguistic repertoire contributed to more creative and expressive writing.

Thirdly, AI tools were observed to support creative writing tasks, including storytelling, poetry, and descriptive writing. Students frequently used AI to refine drafts, experiment with styles, and explore alternative expressions. As a result, learners demonstrated increased confidence in producing original content.

From a statistical perspective, correlation analysis revealed a moderate positive relationship between AI usage and creativity ($r = 0.54$). This suggests that while AI significantly contributes to creativity, it does not entirely replace the learner's own creative input. Instead, creativity emerges through the interaction between human cognition and AI assistance.

However, qualitative responses also indicated that excessive reliance on AI may lead to surface-level creativity, where students depend on AI-generated ideas rather than developing their own original perspectives.

Impact of AI on Critical Thinking-

The impact of AI on critical thinking skills presents a more complex and nuanced picture. The findings reveal both positive and negative dimensions. On the positive side, AI tools were found to enhance research and analytical skills. Students reported that AI assists in:

- Accessing information quickly
- Summarizing complex texts
- Comparing different viewpoints

These features enable learners to engage in higher-order thinking processes such as analysis and evaluation. Many students indicated that AI helps them understand difficult concepts and construct arguments more effectively. However, the study also identified significant concerns regarding over-dependence on AI. A considerable number of participants admitted that they often accept AI-generated responses without critical evaluation. This tendency reduces independent reasoning and limits deep cognitive engagement. Furthermore, some students reported that AI usage leads to cognitive offloading, where mental effort is transferred to the machine. As a result, learners may become passive recipients of information rather than active thinkers.

Thus, while AI has the potential to support critical thinking, its effectiveness largely depends on how it is used. Guided and reflective use promotes critical engagement, whereas uncritical reliance diminishes it.

Student Perceptions of AI in English Learning-

Students' perceptions of AI were generally positive but accompanied by cautious awareness of its limitations.

- 72% of students reported that AI is helpful in learning English, particularly for improving writing skills, grammar, and comprehension.
- 64% expressed concern about reduced originality, indicating that AI may negatively affect independent thinking and authentic expression.

Qualitative feedback revealed that students perceive AI as:

- A supportive learning tool rather than a replacement for teachers
- A time-saving resource for assignments and research
- A confidence booster in language use

At the same time, students emphasized the importance of maintaining academic integrity and originality. Many participants suggested that AI should be used as a guide, not as a substitute for personal effort.

DISCUSSION

The findings of this study confirm that AI has a transformative yet dual impact on English language learning among undergraduate students. On one hand, AI significantly enhances creativity by providing immediate feedback, idea prompts, and linguistic support. On the other hand, its influence on critical thinking is complex and context-dependent. The positive relationship between AI usage and creativity supports existing research that views AI as a collaborative partner in the creative process. By offering suggestions and alternatives, AI encourages students to explore new ideas and expand their expressive capabilities. This aligns with constructivist learning theory, where learners actively construct knowledge through interaction. However, the findings also highlight the risk of superficial creativity, where students rely heavily on AI-generated content. This raises concerns about originality and intellectual independence.

Regarding critical thinking, the study demonstrates that AI can both enhance and hinder cognitive development. When used critically, AI supports analysis, evaluation, and problem-solving. However, when used passively, it reduces independent thinking and promotes

cognitive dependency. These results are consistent with recent studies indicating that AI facilitates critical thinking only when learners actively engage with its outputs rather than accepting them uncritically. Furthermore, the findings support the argument that critical thinking acts as a bridge between motivation and creativity, reinforcing the need for balanced AI integration.

The study underscores the importance of guided AI usage, where educators play a crucial role in teaching students how to critically evaluate AI-generated content. Instructional strategies such as reflective tasks, peer discussions, and problem-based learning can help students develop higher-order thinking skills.

CONCLUSION

This study concludes that Artificial Intelligence has a significant and transformative impact on English language learning among B.A. undergraduate students. AI enhances creativity by facilitating idea generation, improving linguistic expression, and supporting creative writing tasks. At the same time, its impact on critical thinking is complex, offering both opportunities and challenges. While AI can support analytical thinking and research skills, excessive reliance on AI tools may reduce independent reasoning and originality. Therefore, the effectiveness of AI in education depends largely on how it is integrated into the learning process.

The study emphasizes the need for a balanced and guided approach to AI usage. Educators must design pedagogical strategies that encourage students to use AI as a supportive tool while maintaining critical engagement and intellectual independence.

In conclusion, AI should be viewed not as a replacement for human cognition but as a complementary tool that enhances learning when used responsibly. Developing AI literacy and critical awareness among students is essential for maximizing its benefits and minimizing its risks. The integration of AI into English education presents a dynamic interplay of opportunities and challenges. While AI enhances personalization, creativity, and efficiency, it also raises concerns regarding critical thinking, academic integrity, and equity. Ultimately, the success of AI in English education depends on responsible implementation, informed pedagogy, and continuous evaluation. By adopting a balanced approach, educators can harness the transformative potential of AI while preserving the core values of language learning.

REFERENCES

1. Darwin, et al. (2023). Critical thinking in the AI era. *Cogent Education*.
2. Kim, N. & Kim, H. (2025). AI-based English classes and thinking skills.
3. Arif, H. & Naeem, J. (2024). Generative AI in EFL classrooms.
4. Wen, et al. (2025). AI interaction and critical thinking.
5. Zhang, M. et al. (2025). AI and creative thinking processes.