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## **THE IMPACT OF GENERATIVE AI ON CREATIVE AND STRUCTURAL ACADEMIC WRITING: ENHANCING ORIGINALITY, COMPLIANCE, AND AUTONOMY IN ENGLISH LANGUAGE LEARNING**

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**Abstract:** The integration of Generative Artificial Intelligence (GenAI) in English as a Foreign Language (EFL) writing instruction has transformed how students develop both creative and academic writing skills. However, its widespread use raises concerns about overreliance, which may affect students' autonomy and critical thinking. This study investigates: (1) the impact of GenAI on creative writing quality, particularly

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originality, cognitive flexibility, and expressive innovation; (2) its role in enhancing structural academic writing, including coherence, organization, and grammatical accuracy; and (3) students' perceptions of autonomy and dependence in AI-assisted writing. Using a mixed-methods sequential explanatory design, the study involved 80 undergraduate students divided into experimental and control groups. Quantitative data were analyzed using independent-samples t-tests and MANOVA, while qualitative data were examined through thematic analysis. The findings indicate that GenAI significantly improves both creative and structural writing performance while fostering learner autonomy, although risks of emerging dependency remain. Overall, this study highlights the importance of a balanced and pedagogically guided integration of GenAI to enhance writing quality while sustaining students' creativity, autonomy, and critical thinking.

**Keywords:** *GenAI; mixed methods; English language learning; creative writing; academic structural writing*

## INTRODUCTION

The emergence of Generative AI (GenAI) in higher education has significantly transformed the way writing instruction and learning are conducted, particularly in the English as a Foreign Language (EFL) context. Through tools such as ChatGPT, students are now able to obtain immediate feedback, personalized guidance, and assistance in developing syntax, vocabulary, and textual coherence. Previous studies indicate that GenAI can support students' creative writing by enhancing idea generation, vocabulary development, and engagement, although excessive reliance on AI may reduce originality, authentic self-expression, and critical thinking in the writing process (Alkaissi & McFarlane, 2023; Cardon et al., 2023; Song & Song, 2023).

Recent studies have demonstrated the increasing contribution of GenAI to language learning and writing instruction. Existing literature has explored the role of AI in assessment practices (Marzuki et al., 2023; Smolansky et al., 2023), feedback provision (Brainnita Oktarina et al., 2024), and the development of English language skills, including grammar, vocabulary, and fluency (El Shazly, 2021; Hsiao & Chang, 2024; Hu et al., 2023; Wulyani et al., 2024). In academic writing contexts, GenAI has been reported to support students in organizing paragraphs, maintaining coherence, improving syntactic accuracy, and enhancing revision efficiency (Wang, 2025; Waziana et al., 2024). Previous studies further indicate that AI-assisted writing tools can help students expand vocabulary choices, structure ideas more systematically, and improve confidence in essay writing tasks (Marzuki et al., 2023; Waziana et al., 2024). These findings suggest that GenAI contributes positively to the technical and organizational dimensions of academic writing.

Studies on creative writing suggest that GenAI can support idea generation, vocabulary development, and student engagement by helping learners produce prompts, narratives, and stylistic alternatives more efficiently (Alkaissi & McFarlane, 2023; Cardon et al., 2023). In EFL contexts, AI-assisted writing has also been associated with reduced anxiety and improved drafting processes for less proficient writers. However, concerns remain regarding the overuse of AI-generated suggestions, which may encourage standardized language patterns and limit authentic self-expression, originality, and independent thinking in students' creative work (Alkaissi & McFarlane, 2023; Song & Song, 2023).

Moreover, recent studies indicate that the effectiveness of GenAI largely depends on the quality of collaboration between humans and technology in managing linguistic complexity and academic context (Hastomo et al., 2024; Huang & Tan, 2023). One of the major challenges lies in designing a pedagogical framework that maximizes the benefits of technology without compromising academic integrity and students'

independent thinking. Several studies reveal that students tend to accept AI-generated suggestions passively without critically evaluating the appropriateness or accuracy of the output, which may weaken divergent thinking and analytical reasoning skills (Song & Song, 2023; Wei, 2023). This issue is closely related to the psychological and affective dimensions of AI use in writing, particularly students' perceptions of autonomy and dependence, which remain insufficiently explored in current research (Song & Song, 2023; Wei, 2023). Therefore, scholars emphasize the importance of pedagogical interventions that strengthen digital literacy, ethical awareness, and critical engagement with AI tools to ensure that GenAI functions as a supportive learning aid rather than a substitute for students' independent thinking.

Despite these developments, several important gaps remain in the existing literature. First, previous studies tend to emphasize surface-level improvements such as grammar accuracy, fluency, and writing efficiency, while limited attention has been given to deeper dimensions of writing, including originality, cognitive flexibility, expressive innovation, and analytical rigor. Second, studies examining creative writing and structured academic writing simultaneously remain scarce, even though these two domains involve different cognitive and rhetorical demands (Alkaissi & McFarlane, 2023; Nurchurifiani, 2025). Third, students' perceptions regarding autonomy, dependence, and the preservation of authorial voice in AI-assisted writing contexts are still underexplored, particularly in EFL higher education settings.

Addressing these gaps, the present study investigates the impact of GenAI on two major domains of writing, namely creative writing and structured academic writing. The study also integrates students' perceptions in order to provide a more comprehensive understanding of how GenAI influences originality, independent thinking, academic precision, and writing autonomy. Accordingly, this study addresses the following research questions:

1. How does the use of GenAI influence the quality of domain-specific creative writing in English instruction, especially in terms of originality, cognitive flexibility, and expressive innovation?
2. To what extent can GenAI support students' adherence to formal conventions and logical organization in structured academic writing?
3. How can a balance be achieved between GenAI assistance and the preservation of students' autonomy and analytical rigor in academic writing tasks?

## **METHOD**

This section outlines the methodological framework employed in this study, including the research design, participants, instruments, data collection procedures, and data analysis techniques. The methodological approach was carefully selected to address the research objectives and to provide both quantitative evidence and qualitative insights into the impact of Generative Artificial Intelligence (GenAI) on students' writing development.

### **Research Design**

This study employed a mixed-methods sequential explanatory design consisting of two main phases: a quantitative experiment followed by a qualitative case study. The quantitative phase aimed to investigate the impact of Generative Artificial Intelligence (GenAI) on students' creative and structural writing quality, while the qualitative phase explored students' perceptions of autonomy, dependence, and reflective engagement in AI-assisted writing. This design was considered appropriate as it enabled the researchers to first capture measurable changes in writing performance and subsequently enrich these findings with in-depth insights into students' experiences, consistent with contemporary mixed-methods approaches in EFL research.

## Participants

The participants of this study were 80 fifth-semester undergraduate students enrolled in the English Education program at a university in Lampung. The participants were selected through purposive sampling based on several criteria, namely: (1) active enrollment in the Academic Writing course during the research period, (2) achievement of a minimum writing score of 75, categorized as above the class average, and (3) limited prior experience in using Generative Artificial Intelligence (GenAI) tools for academic writing purposes. The participants consisted of 22 male and 58 female students aged between 19 and 22 years.

Following the selection process, the participants were randomly assigned into two groups consisting of 40 students each. The experimental group received GenAI-assisted writing instruction, while the control group received conventional writing instruction without GenAI integration. In addition, semi-structured interviews were conducted with 12 participants from both groups to explore their perceptions and experiences regarding the use of GenAI in creative and academic writing activities.

## Research Instruments

Quantitative data were collected using three instruments: an adapted version of Kaufman's (2012) creativity rubric to assess originality, cognitive flexibility, and expressive innovation in creative writing; an IELTS-based writing rubric to evaluate coherence, cohesion, lexical resource, and grammatical accuracy in academic writing; and a 1-5 Likert-scale questionnaire adapted from Ng et al. (2024) to examine students' perceptions toward GenAI-assisted writing. Meanwhile, qualitative data were obtained through semi-structured interviews and weekly reflective journals. The interviews explored students' experiences related to learning autonomy and reliance on GenAI, while the reflective journals captured students' ongoing engagement with GenAI throughout the writing process. Together, these instruments provided a comprehensive understanding

of students' writing performance and perceptions regarding the integration of GenAI in writing instruction.

### **Data Collection Procedures**

The study was conducted over eight weeks. At the beginning of the study, both groups completed a pretest assessing creative and academic writing skills. During the intervention, the experimental group received GenAI-assisted writing instruction using ChatGPT for brainstorming, outlining, drafting, and revising activities, while the control group received conventional lecturer-guided writing instruction without GenAI assistance. Reflective journals were collected weekly from the experimental group to document students' learning experiences with GenAI. At the end of the intervention, a 1-5 Likert-scale questionnaire was administered to examine students' perceptions toward GenAI-assisted writing, followed by a posttest for both groups. In addition, semi-structured interviews with 15 selected participants were conducted to explore students' perceptions and experiences regarding the use of GenAI in writing activities.

### **Data Analysis**

Quantitative data were analyzed using a paired-sample t-test to examine students' improvement in creative writing performance and MANOVA to identify differences in structured academic writing performance between the experimental and control groups. In addition, descriptive statistical analysis was employed to analyze questionnaire data regarding students' perceptions toward GenAI-assisted writing. Prior to the analysis, tests of normality and homogeneity were conducted to ensure the validity of the statistical procedures. Meanwhile, qualitative data obtained from interviews and reflective journals were analyzed using thematic analysis. To ensure the trustworthiness of the findings, several validation strategies were employed, including data triangulation, member checking, and inter-rater reliability to maintain consistency in coding and theme development.

FINDINGS

This section presents the findings of the study based on the research objectives. The results include the impact of GenAI on students’ writing performance and their perceptions of autonomy and dependence.

Impact of GenAI Use on Students’ Creative Writing Quality

The analysis of the creative writing test scores revealed a significant difference between students who received GenAI assistance and those who did not.

Table 1.  
*Creative Writing Test Results (N = 80)*

| Group              | N  | Mean  | Std. Deviation | Std. Error Mean |
|--------------------|----|-------|----------------|-----------------|
| Experimental Group | 40 | 80.12 | 5.89           | 0.93            |
| Control Group      | 40 | 70.22 | 6.14           | 0.97            |

Table 1 shows a comparison of creative writing test outcomes between the experimental and control groups. The experimental group (with GenAI intervention) achieved a mean of 80.12 (SD = 5.89), while the control group averaged 70.22 (SD = 6.14). This suggests a clear advantage for the GenAI-assisted group in producing more original and expressive writing.

To assess whether the observed difference was statistically significant, an independent samples t-test was conducted.

Table 2.  
*Independent Samples t-Test Results*

| Variable Compared        | t    | df | Sig. (2-tailed) | Mean Difference |
|--------------------------|------|----|-----------------|-----------------|
| Creative Writing Outcome | 6.23 | 78 | 0.000           | 9.90            |

Prior to the t-test, assumptions of normality and homogeneity were satisfied. As shown in Table 2, the two-tailed significance is 0.000, well below the 0.05 threshold, indicating a statistically significant

difference. With  $t(78) = 6.23$  and  $p < 0.001$ , and a mean difference of 9.90, we conclude that GenAI use significantly boosts students' creative writing performance relative to conventional methods. Thus, it can be concluded that GenAI positively improved students' creative writing, particularly originality, cognitive flexibility, and expressive innovation, supporting the effectiveness of AI integration in enhancing writing quality significantly overall.

### Impact of GenAI Use on Academic Structural Writing

To assess the impact of GenAI on students' academic writing performance, both groups completed an argumentative writing task evaluated using the IELTS Writing Band Descriptors. These descriptors assess four key components: task achievement, coherence and cohesion, lexical resource, and grammatical range and accuracy. Table 3 summarizes the overall scores achieved by the experimental and control groups, providing a quantitative comparison of their structural writing outcomes.

**Table 3.**  
*Academic Structural Writing Results (N = 80)*

| Group              | N  | Mean | Std. Deviation | Std. Error Mean |
|--------------------|----|------|----------------|-----------------|
| Experimental Group | 40 | 7.13 | 0.42           | 0.07            |
| Control Group      | 40 | 6.38 | 0.57           | 0.09            |

Table 3 compares academic writing performance between groups. The experimental group scored an average of 7.13 (scale 9), whereas the control group averaged 6.38. The improvements are especially evident in coherence and cohesion and grammatical range & accuracy, indicating that GenAI (e.g. ChatGPT) can reinforce structural conformity and improve logical flow and text cohesion.

To further examine the extent of GenAI's influence on academic writing performance across multiple dimensions, a Multivariate Analysis of Variance (MANOVA) was conducted. This statistical test allowed for simultaneous comparison of the four core IELTS based

writing components, task achievement, coherence and cohesion, lexical resource, and grammatical range and accuracy between the experimental and control groups. The results are summarized in table 4 below.

**Table 4.**  
*MANOVA Multivariate Test for Academic Writing*

| Multivariate Test | Value | F    | df    | Sig.  | Partial Eta Squared |
|-------------------|-------|------|-------|-------|---------------------|
| Wilks' Lambda     | 0.671 | 9.18 | 4, 75 | 0.000 | 0.33                |

This table indicates a significant multivariate difference between the experimental and control groups across the four IELTS-based writing aspects. With  $p < 0.001$  and partial eta squared = 0.33, the effect size is substantial. These results reinforce the finding that GenAI functions effectively as a writing aid, improving structural accuracy, argument logic, and idea completeness.

**Students' Perceptions of Autonomy and Dependence on GenAI**

In addition to measuring writing performance, this study also explored students' perceptions regarding their autonomy and dependence when using Generative AI in academic writing. A Likert-scale questionnaire (1 = strongly disagree to 5 = strongly agree) was administered to both the experimental and control groups to quantify their sense of agency and reliance on GenAI. The descriptive statistics of their responses are presented in table 5.

**Table 5.**  
*Perceptions of Autonomy vs. Dependence (Likert Scale)*

| Group              | N  | Mean | Std. Deviation | Std. Error Mean |
|--------------------|----|------|----------------|-----------------|
| Experimental Group | 40 | 4.21 | 0.56           | 0.09            |
| Control Group      | 40 | 3.48 | 0.63           | 0.10            |

Table 5 presents students' perceptions (1-5 scale) on using GenAI in academic writing, focusing on autonomy versus dependence. The experimental group's average of 4.21 suggests a positive

perception of increased autonomy and confidence, while the control group's 3.48 is relatively lower. This data indicates that students who used GenAI experienced a sense of enhanced independence in writing.

**Table 6.**  
*Frequency of Themes from Interviews and Reflective Journals*

| Theme                | Code         | Frequency | Participants<br>(N = 15) |
|----------------------|--------------|-----------|--------------------------|
| Facilitated Autonomy | "Autonomy"   | 21        | 14                       |
| Emerging Dependence  | "Dependence" | 8         | 5                        |
| Dynamic Balance      | "Balance"    | 12        | 10                       |

Analysis of students' interviews and weekly journals showed three main themes about using GenAI in academic writing. One of the main benefits students mentioned was that GenAI helped them write more independently. This condition picturing a theme that is called facilitated autonomy. Most students in the experimental group said that GenAI helped them come up with ideas on their own, especially when they were stuck or unsure how to organize their writing. They saw GenAI as a tool that gave a starting framework. Many students said it was especially useful when they experienced writer's block or didn't know how to start a writing task. For example, student W2 said:

*"The first time I used GenAI to write an essay, it felt like I had a writing buddy who didn't judge me. It gave me the confidence to start writing without overthinking."*

According to W2, GenAI gives them the courage to begin writing without worrying too much.

Other students highlighted that GenAI helped them organize their ideas. Student W7 explained:

*"Even if I don't use the exact suggestions, just seeing the structure helps me frame my own arguments. It pushes me to think differently."*

W7 noted that even if they didn't follow GenAI's suggestions exactly, seeing the structure helped them plan their arguments and encouraged creative thinking. GenAI helped students generate ideas, organize writing, and build confidence while maintaining their personal voice. However, overreliance on AI may weaken critical thinking, independent reflection, and authentic academic expression.

The second emerging theme is developing dependency. Although most respondents found GenAI to be helpful, there were indications that some students began to rely on AI-generated suggestions without engaging in critical evaluation. This dependency was particularly noticeable during the final revision stages or when students were uncertain about word choices and sentence structures. Although not yet widespread, this phenomenon signals the need for pedagogical intervention to prevent AI use from undermining students' independent thinking.

Even though most students had good opinions on GenAI, a crucial subset of their answers raised new worries about being overly reliant on the technology. These students thought about the subtle ways using on AI-generated content could undermine their autonomous thinking and creation, rather than dismissing the value of GenAI in general. For example, student W11 stated plainly:

*"Sometimes I rely too much on AI suggestions, so I'm afraid I might lose my own writing style."*

This statement shows that the student is becoming more aware that using GenAI too much might weaken their personal writing style. They are not just worried about their writing sounding the same as everyone else's, but also about losing their own ideas and control over what they write. Similarly, student W14 shared:

*"When I was tired, I just let GenAI rephrase everything. It's helpful, but I worry that I'm not learning enough."*

The findings show that GenAI supports students' academic writing by improving idea generation, organization, confidence, and autonomy while helping them maintain their personal voice. However, excessive reliance on AI may reduce critical engagement and authentic expression, highlighting the importance of balancing technological assistance with independent thinking and learner agency.

The third identified theme is dynamic balance between technological assistance and personal control. Some students demonstrated the ability to use GenAI as an initial brainstorming tool while continuing to revise and personalize their writing to align with their individual style and academic expectations. This reflects an emerging metacognitive awareness, where students do not simply accept all AI suggestions but instead treat GenAI as a flexible thinking partner. This approach is considered an ideal model for AI usage in higher education contexts.

Students' reflections on their interaction with GenAI reveal an evolving awareness of its pedagogical potential, not merely as a shortcut to complete assignments, but as a generative tool for enhancing cognitive engagement. For instance, student W5 articulated:

*"I feel like GenAI gives me a starting structure, but then I can adjust it to make it more personal."*

This response underscores the role of GenAI that provides initial structural guidance while still allowing room for personalization and deeper authorial engagement. The student's emphasis on *adjustment* and *personal touch* reflects an active stance in the writing process, suggesting that the learner does not passively receive AI-generated input but transforms it to fit their individual style and communicative intent.

Similarly, student W9 emphasized:

*"I'm beginning to realize that AI is not a tool for copying, but a way to start thinking."*

This insight shows a shift from superficial use to reflective engagement, in which GenAI is viewed not just as a convenience but as a thinking partner. The phrase “*a way to start thinking*” suggests that GenAI helps stimulate ideas, support divergent thinking, and assist in the drafting process.

Overall, these reflections show a positive learning outcome. The analysis of students’ experiences with GenAI in academic writing reveals three key themes: facilitated autonomy, developing dependency, and a dynamic balance between technological assistance and personal control. Encouragingly, several students demonstrated metacognitive awareness by using GenAI as a starting point while actively revising and personalizing their work, showing reflective and creative engagement. These findings suggest that GenAI can enhance academic writing when used intentionally, providing scaffolding without replacing the learner’s agency.

## DISCUSSION

The findings of this study demonstrate that the integration of Generative Artificial Intelligence (GenAI) in writing instruction has a positive impact on both creative and academic writing quality among EFL students. Students who received GenAI-based intervention, particularly through ChatGPT, showed significant improvement in idea originality, cognitive flexibility, and expressive innovation. This aligns with Kaufman’s (2012) assertion that creativity in writing is not solely determined by innate ability but is also shaped by environmental support and tools that stimulate divergent thinking (Slamet, 2024).

Students generally viewed GenAI as a helpful tool that supported idea generation, organization, and language development while still allowing them to maintain their personal creativity and writing style. Nevertheless, the findings also indicated a growing reliance on AI-generated suggestions, emphasizing the importance of guiding students to use GenAI critically and responsibly in the writing process. It supports the findings of Mahande et al. (2025) and Song and Song (2023), who argue that AI tools can function as intelligent writing

assistants that guide learners in producing well-structured and academically appropriate texts.

GenAI provided significant support in helping students organize ideas, improve sentence structure, and enhance lexical choice, which reduced cognitive load and increased their confidence in writing. However, excessive dependence on AI-generated suggestions may weaken students' critical reflection, self-monitoring, and development of an authentic authorial voice. Such reliance may also expose students to risks such as AI "hallucinations" and diminished authorial control, where learners may incorporate inaccurate or uncritically accepted content into their writing (Alkaissi and McFarlane, 2023). From an affective and reflective standpoint, the findings indicate that GenAI enhanced students' confidence, autonomy, and writing development, while also creating a tendency toward dependency when overused as the primary validation source. This result reinforces the importance of self-regulated learning principles, in which learners are expected to plan, monitor, and evaluate their learning processes independently (Chang et al., 2023; Istiara & Hastomo, 2023; Napida et al., 2024).

Overall, GenAI improved students' confidence and autonomy in the writing process. However, excessive reliance on AI may reduce students' independent reflection and evaluation skills. These findings support the principles of self-regulated learning, which emphasize learners' ability to monitor and evaluate their own learning processes independently (Chang et al., 2023; Istiara & Hastomo, 2023; Napida et al., 2024).

## CONCLUSION

The findings indicate that GenAI positively influenced students' domain-specific creative writing by enhancing originality, cognitive flexibility, and expressive innovation through idea generation and language support. In structured academic writing, GenAI also assisted students in maintaining formal conventions, improving logical organization, and refining sentence structure, which contributed to

clearer and more coherent writing. However, the study revealed that excessive dependence on AI-generated suggestions may weaken students' autonomy, analytical rigor, and authentic authorial voice. Therefore, achieving a balance between technological assistance and independent thinking is essential. GenAI should function as a scaffolding tool that supports students' creativity and academic performance while still encouraging critical reflection, self-regulation, and active engagement in the writing process to preserve learner agency and intellectual ownership.

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## DECLARATION OF AI AND AI-ASSISTED TECHNOLOGIES

In accordance with the journal guidelines, this manuscript includes a dedicated AI declaration. The authors acknowledge the use of Generative Artificial Intelligence (GenAI), specifically Grammarly, to support language refinement and editing during the manuscript preparation. All intellectual content remains the original work of the authors. All AI-assisted outputs have been carefully reviewed and validated to ensure accuracy and academic integrity.

## REFERENCES

- Ahmed, A. A. A., Widodo, M., Komariah, A., Hassan, I., Sukmana, N., Ali, M. H., Abbas, A. K., & Rohi, A. (2022). Assessing the effects of gamification on developing EFL learners' idiomatic knowledge: Do attitudinal factors contribute to the learning of the idioms with the game? *Education Research International*, 2482570, 10 pages. <https://doi.org/10.1155/2022/2482570>

Istiara, F., Ajeng, G. D., Maximilian, A., Hastomo, T., & Wicaksono, A. (2026). The impact of Generative AI on creative and structural academic writing: Enhancing originality, compliance, and autonomy in English language learning. *JEELS (Journal of English Education and Linguistics Studies)*, 13(2), 661-681.

- Alkaissi, H., & McFarlane, S. I. (2023). Artificial hallucinations in ChatGPT: implications in scientific writing. *Cureus*, 15(2), e35179.. <https://doi.org/10.7759/cureus.35179>
- Cardon, P., Fleischmann, C., Aritz, J., Logemann, M., & Heidewald, J. (2023). The challenges and opportunities of AI-assisted writing: developing ai literacy for the AI age. *Business and Professional Communication Quarterly*, 86(3), 257-295. <https://doi.org/10.1177/23294906231176517>
- Chang, D. H., Lin, M. P.-C., Hajian, S., & Wang, Q. Q. (2023). Educational design principles of using ai chatbot that supports self-regulated learning in education: Goal setting, feedback, and personalization. *Sustainability*, 15(17), 12921. <https://doi.org/10.3390/su151712921>
- Creswell, J. W., & Creswell, J. D. (2018). Qualitative, quantitative, and mixed methods approaches (5<sup>th</sup> ed). SAGE Publications.
- El Shazly, R. (2021). Effects of artificial intelligence on English speaking anxiety and speaking performance: A case study. *Expert Systems*, 38(3). <https://doi.org/10.1111/exsy.1266>
- Hastomo, T., Mandasari, B., & Widiati, U. (2024). Scrutinizing Indonesian pre-service teachers' technological knowledge in utilizing AI-powered tools. *Journal of Education and Learning (EduLearn)*, 18(4), 1572-1581. <https://doi.org/10.11591/edulearn.v18i4.21644>
- Hsiao, J.-C., & Chang, J. S. (2024). Enhancing EFL reading and writing through AI-powered tools: design, implementation, and evaluation of an online course. *Interactive Learning Environments*, 32(9), 4934-4949. <https://doi.org/10.1080/10494820.2023.2207187>
- Hu, P., Gong, Y., Lu, Y., & Ding, A. W. (2023). Speaking vs. listening? Balance conversation attributes of voice assistants for better voice marketing. *International Journal of Research in Marketing*, 40(1), 109-127. <https://doi.org/10.1016/j.ijresmar.2022.04.006>

- Istiara, F., Ajeng, G. D., Maximilian, A., Hastomo, T., & Wicaksono, A. (2026). The impact of Generative AI on creative and structural academic writing: Enhancing originality, compliance, and autonomy in English language learning. *JEELS (Journal of English Education and Linguistics Studies)*, 13(2), 661-681.
- Huang, J., & Tan, M. (2023). The role of ChatGPT in scientific communication: Writing better scientific review articles. *American Journal of Cancer Research*, 13(4), 1148-1154. <https://pmc.ncbi.nlm.nih.gov/articles/PMC10164801/>
- Istiara, F., Ajeng, G. D., Maximilian, A., Wicaksono, A., & Singh, R. P. (2025). The impact of AI-based gamification on student engagement in English writing course. *Journal of Educational Management and Instruction (JEMIN)*, 5(2), 451-463. <https://doi.org/10.22515/jemin.v5i2.10653>
- Istiara, F., & Hastomo, T. (2023). Exploring lecturers and administrative staffs' strategies to hone EFL students' digital literacy. *JOALL (Journal of Applied Linguistics and Literature)*, 8(1), 151-172. <https://doi.org/10.33369/joall.v8i1.25568>
- Istiara, F., Hastomo, T., & Indriyanta, W. A. (2023). A study of students' engagement and students' speaking skill: A correlational research. *TEKNOSASTIK*, 21(1), 1-7. <https://doi.org/10.33365/ts.v21i1.2198>
- Kaban, A. L. (2021). Gamified E-Reading experiences and their impact on reading comprehension and attitude in EFL classes. *International Journal of Mobile and Blended Learning*, 13(3), 71-90. <https://doi.org/10.4018/IJMBL.2021070105>
- Kessels, U., & Van Houtte, M. (2022). Side effects of academic engagement? How boys' and girls' well-being is related to their engagement and motivational regulation. *Gender and Education*, 34(6), 627-642. <https://doi.org/10.1080/09540253.2021.2011840>
- Kim, N. J., & Kim, M. K. (2022). Teacher's perceptions of using an artificial intelligence-based educational tool for scientific writing. *Frontiers in Education*, 7:755914. <https://doi.org/10.3389/feduc.2022.755914>
- Kothari, C., & Garg, G. (2021). *Research methodology: methods and techniques*. New Age Techno Press.
- Kaufman, J. C. (2012). Counting the muses: Development of the Kaufman Domains of Creativity Scale (K-DOCS). *Psychology of*

Istiara, F., Ajeng, G. D., Maximilian, A., Hastomo, T., & Wicaksono, A. (2026). The impact of Generative AI on creative and structural academic writing: Enhancing originality, compliance, and autonomy in English language learning. *JEELS (Journal of English Education and Linguistics Studies)*, 13(2), 661-681.

*Aesthetics, Creativity, and the Arts*, 6(4), 298–308.  
<https://doi.org/10.1037/a0029751>

Mahande, R. D., Fakhri, M. M., Suwahyu, I., & Sulaiman, D. R. A. (2025). Unveiling the impact of ChatGPT: Investigating self-efficacy, anxiety and motivation on student performance in blended learning environments. *Journal of Applied Research in Higher Education*, 18(1), 282–297.  
<https://doi.org/10.1108/JARHE-07-2024-0372>

Marzuki, Widiati, U., Rusdin, D., Darwin, & Indrawati, I. (2023). The impact of AI writing tools on the content and organization of students' writing: EFL teachers' perspective. *Cogent Education*, 10(2). <https://doi.org/10.1080/2331186X.2023.2236469>

Napida, M., Farhan, M., Istiara, F., & Hastomo, T. (2024). Innovative approaches: Integrating technology into English language teaching and curriculum design. *Lexeme: Journal of Linguistics and Applied Linguistics*, 6(2), 79–86.  
<https://doi.org/10.32493/ljlal.v6i1.41542>

Ng, D. T. K., Wu, W., Leung, J. K. L., Chiu, T. K. F., & Chu, S. K. W. (2024). Design and validation of the literacy questionnaire: The affective, behavioural, cognitive and ethical approach. *British Journal of Educational Technology*, 55(3), 1082–1104.  
<https://doi.org/10.1111/bjet.13411>

Nurchurifiani, E. (2025). Leveraging AI-powered tools in academic writing and research: Insights from English faculty members in Indonesia. *International Journal of Information and Education Technology*, 15(2), 312–322.  
<https://doi.org/10.18178/ijiet.2025.15.2.2244>

Oktarin, I. B., Saputri, M. E. E., Magdalena, B., Hastomo, T., & Maximilian, A. (2024). Leveraging ChatGPT to enhance students' writing skills, engagement, and feedback literacy. *Edelweiss Applied Science and Technology*, 8(4), 2306–2319.  
<https://doi.org/10.55214/25768484.v8i4.1600>

Istiara, F., Ajeng, G. D., Maximilian, A., Hastomo, T., & Wicaksono, A. (2026). The impact of Generative AI on creative and structural academic writing: Enhancing originality, compliance, and autonomy in English language learning. *JEELS (Journal of English Education and Linguistics Studies)*, 13(2), 661-681.

Philippakos, Z. A., Macarthur, C. A., Coker, D. L., Swanson, H. L., Harris, K. R., Graham, S., & Fitzgerald, J. (2019). *Best practice in writing instruction* (3rd ed.). Epub Edition.

Pingmuang, P., & Koraneekij, P. (2022). Mobile-assisted language learning using task-based approach and gamification for enhancing writing skills in EFL students. *The electronic journal of e-learning*, 20(5), 623–638. [www.ejel.org](http://www.ejel.org)

Qiao, S., Chu, S. K. W., & Yeung, S. S. sze. (2023). Understanding how gamification of English morphological analysis in a blended learning environment influences students' engagement and reading comprehension. *Computer Assisted Language Learning*, 38(4), 831–864. <https://doi.org/10.1080/09588221.2023.2230273>

Saville-Troike, & Muriel. (2012). *Introducing second language acquisition*. Cambridge University Press.

Sercanoğlu Öden, M., Bolat, Y. İ., & Goksu, İ. (2021). Kahoot! as a gamification tool in vocational education: more positive attitude, motivation and less anxiety in EFL. *Journal of Computer and Education Research*, 9(18), 682–701. <https://doi.org/10.18009/jcer.924882>

Slamet, J. (2024). Potential of ChatGPT as a digital language learning assistant: EFL teachers' and students' perceptions. *Discover Artificial Intelligence*, 4(1), 46. <https://doi.org/10.1007/s44163-024-00143-2>

Smolansky, A., Cram, A., Radulescu, C., Zeivots, S., Huber, E., & Kizilcec, R. F. (2023). Educator and student perspectives on the impact of generative ai on assessments in higher education. *Proceedings of the Tenth ACM Conference on Learning at Scale*, 378–382. <https://doi.org/10.1145/3573051.3596191>

Song, C., & Song, Y. (2023). Enhancing academic writing skills and motivation: assessing the efficacy of ChatGPT in AI-assisted language learning for EFL students. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1260843>

Istiara, F., Ajeng, G. D., Maximilian, A., Hastomo, T., & Wicaksono, A. (2026). The impact of Generative AI on creative and structural academic writing: Enhancing originality, compliance, and autonomy in English language learning. *JEELS (Journal of English Education and Linguistics Studies)*, 13(2), 661-681.

Wang, C. (2025). Exploring students' generative ai-assisted writing processes: perceptions and experiences from native and nonnative English speakers. *Technology, Knowledge and Learning*, 30(3), 1825-1846. <https://doi.org/10.1007/s10758-024-09744-3>

Waziana, W., Andewi, W., Hastomo, T., & Hasbi, M. (2024). Students' perceptions about the impact of ai chatbots on their vocabulary and grammar in EFL writing. *Register Journal*, 17(2), 352-382. <https://doi.org/10.18326/register.v17i2.352-382>

Wei, L. (2023). Artificial intelligence in language instruction: impact on English learning achievement, L2 motivation, and self-regulated learning. *Frontiers in Psychology*, 14. <https://doi.org/10.3389/fpsyg.2023.1261955>

Wulyani, A. N., Widiati, U., Muniroh, S., Rachmadhany, C. D., Nurlaila, N., Hanifiyah, L., & Sharif, T. I. S. T. (2024). Patterns of utilizing ai-assisted tools among EFL students: need surveys for assessment model development. *LLT Journal: A Journal on Language and Language Teaching*, 27(1), 157-173. <https://doi.org/10.24071/llt.v27i1.7966>