

## TRANSFORMING NARRATIVES: ENHANCING EFL LEARNERS' WRITING WITH AI FEEDBACK

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**Abstrak:** Penelitian ini menyelidiki dampak umpan balik formatif yang disediakan ChatGPT terhadap keterampilan menulis esai naratif pelajar Bahasa Inggris sebagai Bahasa Asing (EFL). Enam belas mahasiswa sarjana ditugaskan untuk menulis esai naratif, yang dievaluasi sebelum dan sesudah umpan balik menggunakan rubrik standar. Esai dinilai oleh dua penilai manusia, dan keandalan antar penilai dikonfirmasi ( $\alpha$  Cronbach = 0,912). Hasilnya menunjukkan peningkatan yang signifikan dalam kriteria penulisan utama, khususnya dalam gaya, suara, dan koherensi keseluruhan, sebagaimana dibuktikan oleh uji-t sampel berpasangan. Para pelajar juga sebagian besar menyatakan persepsi positif terhadap masukan ChatGPT, menyoroti kejelasan dan kegunaannya dalam menyempurnakan tulisan mereka. Temuan ini menunjukkan potensi umpan balik berbasis AI untuk mendukung pembelajaran bahasa dan mengatasi keterbatasan sumber daya di ruang kelas EFL.

**Kata Kunci:** ChatGPT, umpan balik formatif, penulisan narasi, pembelajar EFL, pembelajaran dengan bantuan AI

**Abstract:** This study investigates the impact of ChatGPT-provided formative feedback on the narrative essay writing skills of English as a Foreign Language (EFL) learners. Sixteen undergraduate students were tasked with writing narrative essays, which were evaluated pre- and post-feedback using a standardized rubric. The essays were rated by two human raters, and inter-rater reliability was confirmed (Cronbach's alpha = .912). The results indicated significant improvements in key writing criteria, particularly in style, voice, and overall coherence, as evidenced by the paired sample t-tests. The learners also predominantly expressed positive perceptions of ChatGPT's feedback, highlighting its clarity and usefulness in enhancing their writing. These findings demonstrate the potential of AI-driven feedback to support language learning and address resource limitations in EFL classrooms.

**Keywords:** ChatGPT, formative feedback, narrative writing, EFL learners, AI-assisted learning

### INTRODUCTION

The rapid use of technology has changed the face of education by providing new tools which alter the conventional methods and tools of teaching and learning. Among the new tools, ChatGPT, an AI-based language model designed by OpenAI, has shown its almost limitless potential in language learning, particularly for its ability to give detailed feedback to English language learners.

AI-generated feedback appears as a useful and viable solution for providing personalized feedback to learners in a timely and efficient manner. The technology's capacity to digest and assess written text efficiently and to offer detailed recommendations solves most of the problems associated with conventional feedback approaches. Previous studies have also proven the benefits of using AI-powered writing assistance in different fields, for example, in academic writing or creative writing. These studies have shown that writing quality has been enhanced and that the participants' attitude toward AI-based feedback systems is rather positive. Nevertheless, there is still a major research question that remains unexplored, namely, how ChatGPT is affecting EFL learners' ability in writing narrative essays is still a major research question that remains unexplored.

This current study aims at filling this important research gap by assessing the efficacy of ChatGPT as a formative feedback tool for EFL learners in writing narrative essay. More specifically, the research seeks to achieve two objectives; the first one is to measure the effect of ChatGPT feedback on the quality of the learners' narrative essay writing and the second one is to explore the participants' perception and practices of this new feedback approach. Through focusing on university students in Indonesia, this research offers useful information about the effectiveness of the AI-based feedback systems in the educational context where individual writing help may be scarce. The results of this study can help explain how the current AI technologies can be utilized in language learning environments to improve writing education and students' growth.

## LITERATURE REVIEW

Feedback is a critical component of effective learning, particularly for language acquisition. According to Sadler (Sadler, 1989), formative feedback helps learners identify gaps in their understanding and guides them toward improvement. Nicol and Macfarlane-Dick further emphasized that effective feedback must be clear, specific, and actionable, fostering learner autonomy and self-regulation (Nicol & Macfarlane-Dick, 2006). In writing, feedback enhances linguistic accuracy, coherence, and organization (Hyland & Hyland, 2006). However, in EFL contexts, traditional feedback methods often face challenges, such as large class sizes and limited teacher resources, underscoring the need for scalable solutions (Banihashem et al., 2024).

Artificial intelligence (AI) tools such as ChatGPT are transforming education by offering personalized and scalable learning solutions. Studies by Banihashem et al. (Banihashem et al., 2024) and Mahapatra (Mahapatra, 2024) highlights AI's potential of AI in providing real-time, detailed feedback that supports students' learning processes. AI tools can bridge this gap in resource-constrained settings by offering timely feedback without overburdening teachers. In writing tasks, AI-generated feedback has been shown to improve grammatical accuracy, coherence, and stylistic quality.

ChatGPT, which was developed by OpenAI, is a tool designed to assist with various educational tasks. Its ability to generate human-like text and provide detailed feedback makes it a promising addition to language learning classrooms. According to OpenAI, ChatGPT's deep-learning architecture enables it to deliver feedback on grammar, style, and organization, making it particularly suited for writing tasks (OpenAI, 2022).

Theories of second language acquisition (SLA) provide a strong foundation for understanding the role of feedback in language learning. Krashen's Input Hypothesis (1982) posits that learners acquire language most effectively when exposed to comprehensible input that is slightly beyond their current level of proficiency (Krashen, 1982). Feedback acts as an additional input layer, helping learners refine their language use. Similarly, Long's Interaction Hypothesis (Gass & Madden, 1985) underscores the importance of interaction in facilitating language development. While AI tools such as ChatGPT do not replicate human interaction, they provide iterative feedback that mimics the corrective aspects of teacher-student interactions. Ellis argues that corrective feedback, particularly in writing, plays a crucial role in SLA by addressing linguistic errors and enhancing learners' awareness of their language use (Ellis, 1994). This aligns with findings from studies of AI-generated feedback, which demonstrate its effectiveness in improving writing accuracy and complexity (Yan, 2024).

Several recent studies have explored the application of the ChatGPT in educational settings. Mahapatra (Mahapatra, 2024) found that ChatGPT significantly improved ESL students' academic writing skills, particularly grammar and organization. The study also reported positive learner perceptions of the ChatGPT's user-friendly interface and actionable feedback. Similarly, Polakova and Ivenz (Polakova & Ivenz, 2024) observed improvements in EFL learners' essay writing skills after receiving ChatGPT-generated feedback with significant gains in overall coherence and structure. Furthermore, J. Zebua and Katemba (Zebua & Katemba, 2024) focused on students' perceptions of the ChatGPT as a writing tool. Their findings revealed that a majority of students found feedback helpful for improving grammar and vocabulary, although some expressed concerns about the lack of cultural and contextual awareness. These studies highlight the potential of ChatGPT as a valuable support tool for writing instruction, particularly in EFL contexts.

Despite its promise, the use of AI tools, such as ChatGPT, raises questions about their limitations, particularly in addressing the cultural and contextual nuances of writing (Mahapatra, 2024). Additionally, while existing studies have primarily focused on academic and expository writing, few have examined the impact of AI-generated feedback on narrative writing, which requires creativity and personal expression. This study aims to fill this gap by evaluating the effectiveness of ChatGPT in enhancing EFL learners' narrative essay writing skills, providing a more nuanced understanding of its role in fostering language proficiency.

## METHOD

This study involved 16 undergraduate English Literature students from Universitas 17 Agustus 1945 Surabaya. All participants completed foundational courses in paragraphs and essay writing. The group included 5 females and 11 males, with TOEFL prediction scores ranging from 400 to 500. Participants as learners were tasked with writing narrative essays on their childhood memory. These initial essays were submitted to the ChatGPT for formative feedback using a standardized prompt. The participants revised their essays based on the feedback received. Both pre- and post-feedback essays were rated by two human assessors and the ChatGPT.

A narrative essay rubric from the City University of New York was used to evaluate aspects such as ideas, style, plot, voice, creativity, transitions, and conventions. Microsoft Excel was employed for data organization, and SPSS was used for statistical analysis. Scores were analyzed using paired-sample t-tests to determine improvements in essay quality pre- and post-feedback.

## FINDINGS AND DISCUSSIONS

### FINDINGS

#### Quantitative Findings

Paired sample t-tests revealed significant improvements across all rubric criteria after ChatGPT feedback, with style and voice showing the greatest increases. The mean total score increased from 69.69 (pre-feedback) to 74.75 (post-feedback), indicating a significant positive impact ( $\text{Sig.} < .001$ ).

Table 1: Pre-Feedback and Post-Feedback Total Scores

Participant	Pretest	Post-test
1	51	53
2	64	72
3	67	74
4	87	89
5	68	74
6	76	80
7	74	82
8	71	75
9	85	87
10	67	74
11	58	68
12	77	81
13	77	79
14	73	76
15	66	71
16	54	61
	69,69	74,75

Table 2: Criteria, Mean, and Improvement

Criteria	Pre-Feedback Mean	Post-Feedback Mean	Improvement
Ideas	15.06	15.63	+0.57
Style	13.19	14.56	+1.37
Voice	14.56	16.00	+1.44
Creativity	6.19	6.63	+0.44
Transitions	3.25	3.63	+0.38
Conventions	3.00	3.44	+0.44

Table3: Paired Samples Test

		Paired Differences								
		Mean	Std. Deviation	Std. Error	95% Confidence		t	df	Sig. (2-tail ed)	
					n	Interval of the Difference				
						Lower				
Pair 1	Pretest - Posttest	-5.06	2.56	.64	6	-6.43	-3.69	-7.88	15	.000

Based on the results, it is shown that the pre-feedback mean score of 69.69 increased to a post-feedback mean score of 74.75, which means that the improvement is statistically significant and hence proves that ChatGPT's formative feedback has a positive impact on students' overall writing quality. This proves that ChatGPT could effectively address students' specific narrative writing needs, since there was a significant increase in the mean scores of students' aspects of narrative writing, such as in voice (+1.44) and style (+1.37). This also indicates that the formative feedback provided by ChatGPT could effectively guide students in revising their tone, language use, and personal expression. This interpretation is reinforced by the data of paired samples t-test. The mean difference of -5.06 between pretest and posttest scores, accompanied by a t-value of -7.88 (df = 15, p = .000), highlights the robustness of the observed improvements. The 95% confidence interval (-6.43 to -3.69) provides statistical confidence that can rule out the possibility that the positive changes in students' writing performance are likely being accidental.

### Qualitative Insights

Post-intervention interviews revealed the students' positive perceptions of the ChatGPT feedback. Students highlighted their clarity and actionable nature, with many noting their improved confidence in their writing skills. Challenges included an occasional lack of context-specific suggestions.

Responding to three questions: if the feedback from ChatGPT is easy to understand, in what ways ChatGPT helped the participant in writing essays, and how the overall experience was, students generally found the feedback from ChatGPT rather easy to understand, with one of the participants mentioning, "It was very easy to understand because ChatGPT gives complete information about what am I lacks at in my writing". The ease of use is also evident, as one student remarked, "It was easy to understand, because it provided clear and simple feedback."

Regarding the ways ChatGPT's formative feedback helped them, one student noted, "It helps me in a lot of ways, it helps me fix my grammar, and how to tell my story better." In addition, the feedback helped them organize the essay into coherent paragraphs and structures.

As another student mentioned, "It helped me fix the paragraph and structure of my essay." The overall experience was good, judging by the remark of one of the students, "It was good, overall easy to understand, and provided simple yet effective instructions." In general, all students appreciated ChatGPT's formative feedback, as it

provided simple yet effective instructions on how to improve their writing skills.

## DISCUSSION

The findings underscore the potential of ChatGPT as an effective formative feedback tool for EFL learners. The significant improvements in style and voice suggest that ChatGPT feedback helps students enhance their use of narrative techniques and personal expression, key elements of effective storytelling. The automated feedback tool addresses the time constraints often faced by educators, offering a scalable alternative for large classrooms. The quantitative findings indicate that ChatGPT feedback is transformative for the improvement of learners' narrative writing. It is important to point out that the great number of changes concerning voice and style demonstrates the potential of AI systems such as ChatGPT in assisting students in writing narrative essays. The qualitative insights show that the AI tool, more specifically ChatGPT, is powerful in assisting learners as it expressed complex personalized action feedback not only enhancing traditional methods of instructions but also filling up learners' deficiencies effectively. Furthermore, the continuous progress in writing competencies for every criterion of the rubric reinforces the position of AI feedback as a tool that can be used in different writing tasks.

However, this study also had limitations. While ChatGPT excelled in providing linguistic corrections and stylistic advice, it sometimes lacked a nuanced understanding of the cultural or contextual elements. This aligns with prior research that emphasizes the complementary role of AI in conjunction with human feedback. From a pedagogical perspective, integrating AI tools, such as ChatGPT, can support learner autonomy and foster writing proficiency, especially in resource-constrained EFL settings. Future research should explore its application across diverse writing genres and larger populations to validate and extend these findings.

The findings align with existing research on the use of AI-generated feedback in education, particularly in the context of EFL learners. The significant improvements in key writing criteria, such as style, voice, and overall coherence, highlight the potential of ChatGPT as a transformative tool for formative feedback. These results resonate with theories of second language acquisition (SLA) and feedback effectiveness while also reflecting the unique contributions of AI in modern pedagogy.

Mahapatra emphasized the positive impact of ChatGPT on ESL students' academic writing skills, particularly in providing tailored feedback on grammar, structure, and organization (Mahapatra, 2024). Similarly, in this study, ChatGPT feedback enabled learners to refine stylistic and narrative elements, evident in the significant gains in style (+1.37) and voice (+1.44) scores. Both studies underscore ChatGPT's ability to simulate teacher-like feedback, addressing a critical gap in traditional feedback methods where individualized attention is limited.

Hasman et al. (2023) also observed improvements in students' essay writing due to AI-generated feedback, reporting a significant increase in post-test scores. This aligns with the present study, in which paired t-tests demonstrated statistically significant improvements in writing quality across all the rubric criteria. However, Hasman et al. focused on broader essay-writing skills, while this research narrows its focus to narrative essays, providing deeper insights into how AI tools enhance creativity and voice in storytelling.

The study's findings can be anchored in SLA theories, which emphasize the importance of input, interaction, and feedback. According to Krashen's Input

Hypothesis (Krashen, 1982), comprehensible input is crucial for language acquisition. ChatGPT serves as an interactive feedback mechanism, delivering input slightly above learners' current proficiency level, thereby facilitating language development. Additionally, Long's Interaction Hypothesis (Gass & Madden, 1985) suggests that the interaction and negotiation of meaning enhance language learning. Although ChatGPT does not provide dynamic interaction akin to human conversation, its iterative feedback process enables learners to self-correct and refine their work.

The feedback provided by the ChatGPT also reflects the principles of effective formative feedback outlined by Sadler (1989), which includes clarity, specificity, and actionable guidance. The participants reported that ChatGPT's suggestions were clear and easy to implement, supporting their revisions and boosting their confidence. Moreover, Nicol and Macfarlane-Dick's model of formative assessment emphasizes the role of feedback in fostering self-regulation, a critical component of autonomous learning (Nicol & Macfarlane-Dick, 2006). By allowing learners to independently revise their essays based on AI-generated suggestions, the ChatGPT contributes to this self-regulatory process.

The integration of the ChatGPT as a formative feedback tool addresses two major challenges in EFL education: the time-intensive nature of individualized feedback and the scarcity of resources in large classrooms. The high inter-rater reliability (Cronbach's alpha = .912) between human raters and the ChatGPT indicates its potential to complement or even substitute traditional feedback in specific contexts. Furthermore, the modest improvements observed in creativity and transitions suggest that ChatGPT can stimulate learners' critical thinking and structural awareness. These findings are consistent with those of Banihashem et al. (Banihashem et al., 2024), who posited that AI tools facilitate personalized learning by offering timely, targeted feedback that enhances both linguistic accuracy and creative expression.

Despite its strengths, ChatGPT's feedback occasionally lacks cultural and contextual sensitivity, a limitation noted in studies such as Mahapatra's (Mahapatra, 2024). For example, while the tool excelled in identifying grammatical and stylistic issues, it sometimes failed to provide nuanced suggestions tailored to learners' cultural context. This highlights the need for hybrid approaches that combine AI-generated feedback with teacher inputs to address these gaps.

Moreover, while ChatGPT significantly improved learners' writing, the improvements in transitions (+0.38) and conventions (+0.44) were less pronounced than those in style and voice. This suggests that the effectiveness of ChatGPT varies depending on the complexity and scope of the feedback required. Future iterations of AI tools can incorporate more sophisticated algorithms to address these areas better.

These findings contribute to the growing body of research advocating for AI integration in education. By leveraging the ChatGPT, educators can reduce their workload while maintaining high-quality feedback, particularly in writing-intensive courses. The tool also empowers students to take ownership of their learning, fostering self-awareness and autonomy. Future research should explore ChatGPT applications across diverse writing genres and learner populations. Investigating its role in collaborative tasks and its effectiveness when combined with peer and teacher feedback could further enhance its pedagogical utility.

## CONCLUSION

This study demonstrates the effectiveness of the ChatGPT in improving EFL learners' narrative writing through formative feedback. Its potential as a scalable feedback tool could be instrumental in enhancing writing education, particularly in contexts with limited resources. Further research could focus on refining AI feedback to incorporate cultural and contextual nuances into a more holistic approach.

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