Teachers' and Students' Views on AI Writing Tools' Adverse Effects in EFL Writings

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Abstract

This study investigated the adverse effects of AI writing tools in English as a Foreign Language (EFL) contexts and explored strategies employed by teachers and students to address these challenges. The research utilized a qualitative case study approach, involving 10 EFL students and 2 teachers from a private senior high school in Medan, Indonesia. Data were collected through classroom observations, semi-structured interviews, and document analysis over one week. Data analysis employed Braun and Clarke's six-phase thematic analysis framework, which involved thorough reading of transcripts, initial coding of relevant statements, theme identification, review and refinement of themes, defining and labeling, and final report generation. The findings revealed three significant concerns: a decline in learning autonomy and critical thinking, deterioration of genuine writing progression, and challenges in evaluation and academic integrity. Students exhibited increased dependency on AI tools, leading to standardized writing styles and diminished ability to engage in independent problem-solving. To address these issues, three primary strategies emerged: developing explicit ethical guidelines for AI tool usage, implementing activities that promote creativity and innovative thinking, and repositioning AI as an educational tool rather than a substitute for human effort. The study demonstrates that while AI writing tools offer immediate assistance, they often create a counterproductive cycle of dependency that compromises essential language learning objectives. The findings underscore the importance of maintaining a balance between technological advancement and authentic language acquisition, suggesting that AI tools, while valuable educational resources, require careful regulation to preserve the fundamental human aspects of language learning and academic development. This research contributes to the existing literature by providing comprehensive insights into the challenges and adaptation strategies within EFL environments..

Keywords: *academic integrity, artificial intelligence, critical thinking, learning autonomy, pedagogical strategies*

Introduction

Artificial intelligence (AI) has shown significant growth in recent years (Zhang et al., 2022; Chen & Liu, 2023). The application of AI induces a substantial revolution across multiple domains, particularly in education (Jain & Sharma, 2024; Mohan & Gupta, 2023; Patel & Verma, 2024). The application of AI-driven writing tools in the acquisition of English as a foreign language (EFL) is a subject of interest (Li et al., 2023; Wang et al., 2023). These AI-driven technologies possess the capacity to transform the interaction between educators and learners inside the educational framework (Wayne et al., 2019; Rose et al., 2021). These encompass grammar checks, writing aids, and software capable of autonomously generating written compositions, such as essays, without human

intervention (Johnson et al., 2024; Zhang & Smith, 2023). These tools are effective and user-friendly, conserving time and effort for both students and educators (T. S. Chang et al., 2021; Gayed et al., 2022; Jeanjaroonsri, 2023; Zhao, 2022). Consequently, numerous EFL students with limited English competence utilize AI as a writing assistance tool (Kim & Lee, 2024; Wang et al., 2023). The advantage of utilizing AI as a writing tool is the provision of quick feedback and assistance, enabling the prompt completion of essays (Zhang et al., 2023; Rahman et al., 2023; Liu & Peterson, 2023; Chen & Williams, 2024). AI enhances the accessibility of quality education for all, promotes lifelong learning, and cultivates a more skilled and knowledgeable workforce (Thompson & Garcia, 2024; Amz, 2023; Wilson et al., 2023; Park & Ahmed, 2023).

The incorporation of AI in EFL writing classrooms offers numerous options (Kim & Martinez, 2023; Park & Ahmed, 2023; Zhang & Roberts, 2024). AI writing tools can furnish educators with significant insights into student compositions, pinpointing prevalent faults, recommending enhancements, and delivering tailored comments (David & Sarah, 2023; Thompson et al., 2022; Anderson & Wilson, 2023). The primary function of AI writing tools is to assess written texts and provide feedback on multiple facets of writing, including grammar, vocabulary, syntax, content, and organization (Hosseini et al., 2023; Strobl et al., 2019; Thorp, 2023). These technologies can automate labor-intensive duties such as grading and essay evaluation, allowing educators to concentrate on more significant and engaging instructional activities (Wang et al., 2020; Holstein et al., 2019; Luckin et al., 2022; Liu et al., 2021). AI writing tools can function as virtual writing instructors for students, offering immediate feedback, idea generation, and language assistance (Thompson & Garcia, 2023; David & Sarah, 2022). Students can gain from this immediate feedback by obtaining direction on enhancing their writing abilities and comprehending the fundamental principles of effective writing (Akgun & Greenhow, 2022; Nazari et al., 2021; Rudolph et al., 2023). The tools can promote autonomous learning and self-directed practice, enabling students to assume responsibility for their writing progress (Chen et al., 2022; David & Sarah, 2023).

Research indicates that artificial intelligence-driven writing tools can enhance learners' writing skills (e.g., Kurniati & Fithriani, 2022; Wang, 2022; Zhao, 2022). However, the integration of AI writing tools in EFL writing presents certain obstacles (Kim & Martines, 2023; Wang & Thompson, 2022; Ahmad & Johnson, 2023). A primary concern is the possibility that AI may hinder the cultivation of critical thinking and creativity in pupils (Anderson & Kumar, 2022; Williams et al., 2023). An excessive dependence on AI technologies may result in a deterioration of students' capacity to produce original concepts, evaluate information, and formulate logical arguments (Rebecca, 2022; Kim & Peterson, 2023; Anderson & Roberts, 2022). Moreover, the quality and efficacy of AI writing tools can differ markedly, prompting inquiries regarding their dependability and educational worth. Educators may encounter difficulties in incorporating AI tools into their current pedagogical methods, necessitating the acquisition of new skills and experience. Several researchers (e.g., Y. Liu et al., 2022; Lund & Wang, 2023; Qadir, 2022) expressed concerns on the adverse effects of these techniques.

The identical dilemma is pertinent in the Indonesian context, since research indicates that the utilization of AI writing in the Indonesian EFL setting produced both advantageous and disadvantageous results. Research in Indonesia has examined the viewpoints of users within the field of education, specifically teachers (Marzuki et al., 2023; Aleyza & Rahmah, 2024) and students (Wijaya & Sutanto, 2022; Pratiwi et al., 2023). The findings of the study conducted by Marzuki et al. (2023) suggest that

technology integration can enhance student learning outcomes; nevertheless, its application must be tailored to the comprehensive educational requirements. At the same time, the study conducted by Aleyza & Rahmah (2024) indicates that educators predominantly have a favorable perspective on the use of ChatGPT, which can assist students in refining their grammar, augmenting their vocabulary, and delivering immediate feedback. Conversely, the research conducted by Wijaya & Sutanto (2022) indicates that the utilization of AI writing tools enhances students' motivation and confidence in English writing. Pratiwi et al. (2023) discovered that utilizing ChatGPT as a writing aid enhances students' writing quality and grammatical comprehension. Previous research integrating the viewpoints of both students and teachers (Hartono & Putra, 2022; Suryanto & Widodo, 2023) shown that teachers endorse AI within defined parameters, while students perceive it as beneficial for enhancing their ideas, writing quality, and self-assurance.

Despite prior research offering great insights into the advantages of AI writing tools in the EFL context, a substantial gap remains in our comprehension of their adverse effects. Most study predominantly emphasizes the positive dimensions, whether from the viewpoint of students, educators, or both, although it has not thoroughly examined the problems and hazards that may emerge. Research integrating the viewpoints of educators and learners to comprehensively assess the adverse effects remains scarce. Nonetheless, comprehending both viewpoints is essential for formulating effective, ethical, and sustainable educational techniques. This research seeks to address the gap by examining the adverse effects of utilizing AI writing tools in the EFL context, incorporating the viewpoints of both educators and learners concurrently. This research will identify the negative repercussions of its implementation, investigate the underlying variables, and create suitable mitigation methods. This strategy aims to yield research findings that offer a more equitable comprehension of AI writing tools, so significantly enhancing the development of effective, ethical, and needs-oriented English language education in Indonesia. This study seeks to fill the previously identified research gap by answering the following research questions:

1. What are the adverse effects of employing AI writing tools in the EFL environment from the viewpoints of teachers and students?

2. In what ways do students and teachers navigate the obstacles and issues posed by AI writing tools in the context of EFL?

Method

This research employed a qualitative case study technique to gain an in-depth understanding of the viewpoints of teachers and students using AI writing tools in English as a Foreign Language (EFL) writing. The research was conducted at a private senior high school in Medan, Indonesia, focusing on the utilization of AI technologies such as Grammarly, Quillbot, and ChatGPT in academic writing contexts. The qualitative method was chosen to explore the complex nature of participants' experiences and perspectives in their natural setting.

The study comprised 10 EFL students (6 females and 4 males) and 2 female EFL teachers selected by purposive sampling. The student participants were chosen from the eleventh grade due to their active use of AI writing tools and varying degrees of English proficiency, from intermediate to advanced. The two female educators involved had more than three years of experience in teaching EFL writing and had included AI tools into their teaching methods. The sample size adheres to qualitative research norms,

enabling thorough data collection and assuring feasible analysis, as noted by Creswell (2013).

The student participants demonstrated varying levels of AI tool usage in their academic work. All 10 students reported regular use of AI writing tools, with ChatGPT being the most frequently utilized (by 8 students), followed by Grammarly (7 students) and Quillbot (5 students). The duration of their experience with these tools ranged from 6 to 18 months, with an average usage period of approximately 10 months. Students reported using these AI tools for an average of 3-4 hours per week for academic writing purposes.

Regarding English proficiency levels, 6 of the 10 student participants were classified as intermediate English language learners based on their academic records and teacher assessments, while 3 were considered advanced and 1 at the upper-intermediate level. The intermediate-level students generally demonstrated higher frequency and dependency on AI tools compared to their more advanced peers, using AI assistance for approximately 70% of their writing assignments.

Data collection transpired throughout one week employing three primary methods: classroom observations, semi-structured interviews, and document analysis. Classroom observations occurred during EFL writing sessions that employed AI tools. Each class was monitored for 90 minutes, concentrating on teacher-student interactions, student engagement with AI tools, and the dynamics of teaching and learning. Comprehensive field notes were documented to capture observed behaviors, instructional tactics, and student reactions to AI-assisted writing tasks.

Semi-structured interviews were conducted individually with each participant, with each session lasting 30 to 45 minutes. The interviews were audio-recorded with the participants' consent and transcribed verbatim. The interview discussions centered on participants' experiences with AI writing tools, their perceived benefits and challenges, the impact on teaching and learning processes, and strategies for managing the utilization of AI tools. The examination of documents augmented the observational and interview data by analyzing students' writing samples (both AI-assisted and non-AI-assisted), teachers' lesson plans, feedback on AI-integrated assignments, and screenshots of participant interactions with AI tools.

The study employed thematic analysis using Braun and Clarke's (2006) six-phase framework. The methodology began with a comprehensive analysis of the data through many readings of transcripts and field notes, followed by the initial categorization of relevant remarks. The researchers subsequently identified subjects, examined and modified them, defined and labeled the themes, and ultimately produced the final study. This systematic approach ensured a comprehensive analysis of the qualitative data.

Numerous methods were implemented to ensure the credibility of the research outcomes. Member verification was conducted by permitting participants to review their interview transcripts and first interpretations. Regular peer debriefing sessions were held with colleagues skilled in qualitative research to discuss new findings and interpretations. A detailed audit trail was maintained by careful documentation of all research decisions and procedures. Furthermore, triangulation was conducted by cross-referencing observational data, interview data, and document analysis, so enhancing the credibility of the findings.

The study adhered to stringent ethical standards throughout its implementation. Informed consent was obtained from all participants, along with additional parental consent for student participants. Confidentiality was maintained through the use of pseudonyms, and all data were securely stored on password-protected devices.

Participants were informed of their right to withdraw from the study at any time, and approval was obtained from the school administration before commencing the research.

The one-week data collection was systematically organized, beginning with classroom observations on the first two days, proceeding to teacher interviews on the third day, student interviews on the fourth and fifth days, and concluding with document collection and preliminary analysis during the final two days. This streamlined schedule enabled thorough data collection while maintaining research motivation.

The study acknowledges some limitations inherent to its design. The one-week timeframe for data collection constrained the depth of the investigation. The focus on a single educational setting and the limited participant group may affect the generalizability of the findings to other contexts. Furthermore, there was a potential for participant bias in the self-reporting of their experiences and perceptions. These limits were alleviated using various strategies, including extensive data collection within the specified timeframe, detailed contextual descriptions, rigorous analysis of the limited sample, and triangulation of many data sources.

Results

This section presents the research findings intended to demonstrate the influence of AI-based writing tools on English as a Foreign Language (EFL) learning. The study process was undertaken thoroughly to uncover difficulties that arose in the field, encompassing both obstacles and implemented solutions. The thematic analysis of semi-structured interviews and gathered documents revealed many principal themes that illustrate the detrimental effects of AI writing tools in the EFL context, alongside the techniques employed by educators and learners to address these issues. The findings are structured according to two primary study topics. The responses from the participants below have been translated from Indonesian to English.

Adverse Effects of Utilizing AI Writing Tools in English as a Foreign Language Contexts
Decline in Learning Autonomy and Critical Thinking

The biggest adverse impact revealed is the considerable decline in pupils' ability to engage in autonomous learning and their critical thinking skills. This topic involves numerous interconnected problems: the erosion of creative skills, rising reliance on AI tools, and a subsequent harmful cycle that fundamentally affects independent learning processes. The research findings reveal that this decline occurs across many stages of the learning process, from initial concept formation to the final execution of writing assignments. Students display a considerable loss in their potential for independent problem-solving and creative thinking, especially in writing assignments that involve original ideas and personal insight. This trend is particularly worrying in the EFL environment, where the cultivation of independent thinking skills is critical for language learning and success. The research suggests that the introduction of AI tools has drastically modified students' approaches to learning problems, frequently avoiding critical cognitive processes important for language development. This trend is visible in their approach to complex writing projects, as the rapid access to AI-generated solutions increasingly supplants the natural processes of language learning and cognitive growth. The teacher articulated the argument regarding this issue directly during an interview.

> " I have concerns about students' increasing reliance on AI to generate ideas and organize essays. I think this may hinder the development of students' independent and critical thinking skills." (Teacher 1)
> "From what I see, students struggle to formulate their own arguments and strengthen their reasoning without the help of AI. This certainly raises concerns regarding their capacity to develop important cognitive skills necessary for academic and professional success." (Teacher 2)

The use of AI technology in education has raised serious concerns regarding students' cognitive development, particularly in terms of critical thinking and independent writing skills. As Teacher 1 expressed in their interview, students are showing an increasing dependence on AI to generate ideas and compose their essays, potentially undermining their ability to develop crucial independent thinking skills.

The impact of dependence on AI is becoming increasingly evident in students' ability to construct arguments. Teacher 2 expresed during the interview that students struggle to develop their own thinking without the help of AI, which potentially hinders the development of important cognitive skills necessary for their future academic and professional success.

This phenomenon indicates a worrying trend in the world of education, where the ease offered by AI technology can actually erode basic skills that should develop naturally through the process of learning and experience. Both teachers in the interview emphasized the importance of maintaining a balance between the use of technology and the development of independent thinking skills in students. The students similiarly expressed this during interviews:

> "I usually use recommendations from AI without really checking or rethinking. As a result, I feel that my creativity in writing has decreased." (Student 3)
> "I realized that it's getting harder for me to think of ideas on my own. Every time I get a writing assignment, I automatically look for AI help instead of trying to think of my own ideas first." (Student 7)
> "I like to panic when I'm told to write by myself, I'm really afraid that my writing has a lot of mistakes." (Student 1)
> "Now I feel like I can't write by myself. It feels really hard to start without looking for help or recommendations from AI first." (Student 10)

Student 3 admitted during the interview session that the use of AI in writing education has created a concerning dependency pattern among students. They are increasingly losing confidence in their ability to write independently and experiencing a decline in creativity.

During the interview, Student 7 expressed that significant changes are evident in students' writing methodologies, where AI has evolved from merely an aid to a primary necessity in completing tasks. Students have developed the habit of immediately seeking AI assistance before attempting to think independently.

This dependency has created a detrimental cycle, where the more AI is used, the lower the students' confidence in their own abilities. Many students, as revealed in the interview with Student 1, experience anxiety when asked to write independently.

Student 10 acknowledged in their interview that the long-term impact of this phenomenon is very concerning, especially in terms of developing editing and self-revision skills that are crucial for language learning progress. Students show difficulty in starting the writing process without AI assistance. Although the writing produced with the help of AI shows better structure, it is severely lacking in originality and personal insight.

Based on the analysis of student writing assignment documents, there is a significant decline in the development of genuine writing skills. The analysis results show that students' writing using AI tends to have a uniform structure and lacks variation in personal writing style. This pattern is clearly visible when comparing writing assignments before and after the intensive use of AI, where students' creativity and uniqueness of expression have drastically decreased.

Furthermore, classroom observations revealed that students experienced difficulties in the revision process and independently developing ideas. When asked to revise their writing without the help of AI, many students showed confusion and an inability to identify areas that needed improvement. This indicates a deterioration in editing and self-correction skills, which are essential components in the development of authentic writing skills.

Deterioration of Genuine Writing Progression

The extensive use of AI tools has adversely affected students' ability to develop authentic writing skills and personal expression, leading to a concerning trend in EFL education. This issue mostly stems from the homogeneity of writing styles and a deficiency in understanding the fundamental writing process. The research reveals a systematic deterioration in personal writing styles and creative expression, particularly among students who primarily rely on AI technologies for their writing tasks. The consistency in writing styles indicates a significant departure from the traditional goals of language education, which emphasize the development of personal expression and unique forms of communication. The study has identified three key areas where the decline of authenticity is most apparent: the development of a personal writing style, the ability to express cultural and individual perspectives, and the understanding of the various aspects of language use. The study reveals that students are increasingly adopting a uniform, AI-driven writing style lacking the personal nuances and cultural intricacies essential for effective language acquisition and communication. This was communicated directly by the educators via interviews:

> "I have observed an increasingly prominent uniformity in students' writing styles. Their structure and word choice tend to be similar, which reduces the unique expression and individual characteristics in their writing." (Teacher 1)
> "Many students tend to ignore the essential stages of writing, such as brainstorming, outlining, and revision. Their reliance on AI to produce a supposedly 'perfect' draft in a short period of time reduces their engagement in the process of critical thinking and idea development." (Teacher 2)

Teacher 1 expressed concerns in their interview about how the use of AI in writing education has resulted in a striking uniformity in students' writing styles. Observations indicate a transition from diverse and unique writing styles to a more uniform and less individualized approach. The structure and word choice in students' writing tend to resemble each other, reducing the unique expression and individual characteristics in their writing.

During the interview, Teacher 2 mentioned a more concerning phenomenon: students are increasingly neglecting the important stages in the writing process. The tendency to rely on AI to produce drafts deemed 'perfect' in a short time has reduced their engagement in the process of critical thinking and idea development.

This uniformity is not only limited to the basic structure of writing but also affects the way students express their views in English. Both teachers in the interview observed that the instant gratification offered by AI technology encourages a superficial approach to writing, where students prioritize quick task completion over authentic learning. The long-term impact of this trend is feared to affect students' ability to develop a genuine

writing voice and understand the nuances of communication in English. This issue is further substantiated by the perspective of the students expressed during interview:

> "Sometimes I feel like my writing doesn't show my true self. All the words feel stiff and seem forced.   (Student   5)
> "I often get confused when asked to explain the reasoning behind my essay because most of the ideas come from AI suggestions." (Student 2)
> "When I try to write using my own thoughts, I often end up following the structure of AI." In the end, my writing became less original and felt unnatural. (Student 6)
>
> "I feel like my writing style is disappearing because AI keeps suggesting the same structure and words over and over." (Student 8)

The results of the interviews with the students show a deep awareness of the changes in their writing habits. Student 5 expressed that they feel a gap between the message they want to convey and the actual writing results, where their writing becomes unnatural and loses its personal touch.

Student 2 reinforced how dependence on AI tools has begun to change their writing approach, often diminishing their creativity and original expression, as they had difficulty explaining the reasons behind the essay they wrote.

Students also face challenges in maintaining ownership of their writing process. Student 6 conveyed that they experience internal conflicts when trying to balance their personal writing style with the standard methods suggested by AI.

Furthermore, Student 8 shared that the continuous use of AI has led to the loss of their personal writing characteristics due to being fixated on uniform structures and word choices.

Further analysis of student writing samples and classroom observations reveals that this decrease in authenticity extends beyond surface writing characteristics. The research indicates a substantial issue about students' increasing detachment from the fundamental processes of writing development. This division manifests in several ways: pupils demonstrate reduced involvement in brainstorming, limited understanding of rhetorical strategies, and a diminished ability to generate and articulate own thoughts. The standardization of writing produced by AI tools has led to students creating technically precise but creatively uninspired work.

The consequences of this standardization are especially evident in students' methodologies for creative writing tasks and personal narratives. The research reveals a notable decline in the diversity and inventiveness of student writing, with many works exhibiting similar patterns, linguistic choices, and structural approaches. This standardization presents considerable issues in the EFL context, as personal expression and cultural nuances are essential to language development. Evidence suggests that students are relinquishing their own writing voices and overlooking crucial growth stages of writing skills that emerge from independently engaging with and mastering language.

Challenges in Evaluation and Academic Integrity

The integration of AI techniques has presented significant hurdles to maintaining academic integrity and accurately assessing student competencies, resulting in a complex conundrum for educators and institutions. This intricate problem is worsened by unclear ethical parameters and the increasing difficulty of evaluating authentic student effort. The study indicates that traditional assessment methods and academic integrity policies are inadequate for addressing the intricate use of AI tools in scholarly writing.

The investigation reveals that the challenges beyond conventional concerns associated with plagiarism and academic misconduct. Educational institutions are facing critical questions surrounding the nature of authorship, originality, and fair assessment in an AI-augmented learning environment. The research suggests that traditional metrics for evaluating student growth and achievement may no longer accurately reflect authentic language acquisition and writing skills. This was explicitly communicated in the teacher statements during the interview.

> "The line between acceptable assistance and academic misconduct is becoming increasingly blurred. Determining ethical boundaries in the use of AI is not easy." (Teacher 2)
> "The number of plagiarism cases is increasing because students use AI-generated content without citing the sources as they should." (Teacher 1)

Teacher 2 clearly expressed that interviews with teachers revealed growing concerns about the increasingly blurred line between acceptable academic assistance and academic misconduct.

Educators face a significant challenge in establishing clear guidelines for permitted AI use while maintaining academic integrity and fairness in evaluation methods. Teacher 1 revealed that this situation has created ambiguity in assessing student performance and establishing appropriate criteria for the use of AI in educational tasks, further exacerbated by the increasing cases of plagiarism due to the use of AI-generated content without proper citation.

Analysis from educators' perspectives indicates an urgent need to revise the assessment framework that can accurately measure student learning in the context of AI usage. Educators emphasize the need to develop innovative techniques to maintain academic integrity while acknowledging the existence and increasing use of AI tools in education. The students similarly conveyed this trough interviews:

> "I'm still confused, does using ChatGPT to help organize that essay count as cheating or not?" (Student 4)
> "I'm not sure if the grade I got truly reflects my own abilities or if it's just because I can use AI well." (Student 8)
> "I feel a dilemma because some friends often use advanced AI, while others hardly ever do." It feels unfair if we are all judged the same way. (Student 7)
> Sometimes I feel guilty when the teacher praises my writing because I'm not sure if what they like is truly my own ability or because of AI assistance. This makes me think again, how much have I really progressed in English? (Student 9)

Interviews with students reveal widespread confusion regarding the ethical boundaries of using AI tools in academic activities. Student 4 expressed how many students struggle to distinguish between legitimate assistance and academic misconduct.

Students experience anxiety related to academic integrity and the authenticity of their work. Student 8 shared concerns about whether their achievements truly reflect their own abilities or are merely due to their proficiency in using AI tools.

According to Student 7, the issue of fairness in assessment is also a major concern, especially considering the differences in access and use of AI tools among students. This uncertainty about the validity of their achievements affects how students perceive their language learning progress.

 Student 9 mentioned experiencing internal conflict when receiving praise for their work, as they question whether the appreciation is for their original abilities or the result of AI assistance.

These findings reveal systemic issues in maintaining academic integrity amidst technological advancements in education. The existing evaluation framework may require significant modifications to effectively assess student performance in an AI-enhanced educational environment. This situation requires a thorough review of evaluation methods to ensure fair and meaningful assessments in the context of an increasingly technology-dependent education system.

Based on classroom observations, it appears that students show varying levels of dependence on AI in completing their tasks. Some students appear hesitant and often double-check their work with AI, while others seem more confident in their own abilities. These differences create a complex classroom dynamic and pose a challenge for teachers in sconducting fair assessments.

Analysis of student assignment documents reveals a consistent pattern in language use and writing structure that indicates AI influence. Some assignments show a level of linguistic sophistication that does not match the actual ability level of the students, while other assignments display inconsistencies in writing style that indicate a mix between the students' original writing and AI assistance. This situation further complicates the process of objective evaluation and assessment of each student's actual abilities.

Strategies for Addressing Challenges and Issues Associated with the Utilization of AI Writing Tools in the EFL Context

This sub-theme discusses the strategies used to deal with adverse effect of using AI in writing. The main data was obtained through interviews as the strategies applied are more subjective and dependent on individual experiences. Therefore, observation and document analysis are not the main focus in this sub-theme.

Development of Explicit Ethical Guidelines

The formulation of explicit ethical rules has become an essential technique for tackling the issues posed by AI writing tools in EFL situations. These principles fulfill several objectives: upholding academic integrity, guaranteeing equitable evaluation, and fostering proper technology utilization in language skill development. The effort embodies a methodical strategy for establishing a dependable foundation for ethical AI utilization in academic environments.

The development of these recommendations necessitates meticulous evaluation of various elements, including particular learning objectives, assignment categories, and intended learning outcomes. The process generally entails collaboration among educators, administrators, and students to ensure that all viewpoints are recognized and that the resultant framework is both feasible and efficient. This collaborative method establishes criteria that are both broad and adaptable to technology advancements, while upholding stringent academic standards. This was communicated by teachers during an interview:

> "I must set a definitive policy addressing the permissible circumstances and ways for applying AI tools in writing assignments. This requires discussions with pupils to guarantee mutual understanding." (Teacher 1)
> "As educators, we must establish norms that not only consider existing AI capabilities but also foresee future advancements. This entails consistent updates and dialogues with fellow faculty members to guarantee our policies stay pertinent and efficient." (Teacher 2)

In facing the development of AI technology, it is important for educational institutions to establish clear policies regarding the use of AI tools in academic tasks. Teacher 1 emphasized that these policies must be proactive and adaptive to technological advancements while maintaining the integrity of education. Educators need to ensure a

mutual understanding between teachers and students regarding the limitations and expectations in the use of AI.

In addition, Teacher 2 highlighted that the policies created must also consider the future development of AI, necessitating regular updates and discussions among teaching staff. This approach is important to ensure that policies remain relevant and effective in facing technological changes. Anticipating AI developments and maintaining open communication among educators are critical elements for successful policy implementation.

Through this comprehensive approach, educational institutions can create an ethical framework that not only regulates the current use of AI but is also flexible enough to accommodate future technological developments, while maintaining the quality and integrity of education. Students articulated the same sentiment during the interview:

> "If there are clear guidelines, I would be more confident in using AI correctly and not relying too much on it." (Student 8)
> "If there are clear rules regarding the use of AI, I feel more at ease because I know which parts of the writing process can be assisted by AI without making my learning pointless." (Student 9)
> "I am happy when the teacher clearly explains when AI can be used for learning and when it cannot." This helps me make better decisions when writing. (Student 6)
> "Having detailed rules helps me understand the boundary between permissible AI assistance and what constitutes academic dishonesty." (Student 7)

The students expressed that clear guidelines gave them confidence and peace of mind in utilizing AI technology. As stated by Student 8, the existence of clear guidelines makes him more confident in using AI appropriately without relying too much on it. This shows the students' realization that AI can be a tool, but should not replace their learning process entirely.

In addition, these students appreciate that there are clear boundaries regarding when and how AI can be used in the writing process. Student 9 stated that with clear rules, she felt more comfortable as she could identify the parts of the writing process that could be assisted by AI without compromising the essence of learning. This reflects the students' awareness that inappropriate use of AI can reduce the value of their learning.

Explanations from teachers regarding the limits of AI use were also highly appreciated, as expressed by Student 6. Clear directions help students make better decisions when writing. Similarly, Student 7 emphasized that detailed rules help understand the line between allowable AI assistance and what is considered academic dishonesty.

The findings suggest that the effective integration of AI tools in EFL contexts requires a clearly articulated ethical framework that adapts to technological advances while maintaining educational principles. The joint formulation of these rules, which integrates the viewpoints of educators and learners, seems to create a more efficient and sustainable method to regulate the use of AI tools in educational settings.

Activities that Promote Creativity and Innovative Thinking

The creation of assignments that specifically promote original thought and cannot be easily performed by AI alone has become an essential tactic for combating the deterioration of creativity and critical thinking. These exercises are meticulously crafted to maintain the human aspect in language acquisition while utilizing technological advancements, highlighting personal experiences, emotional responses, and intricate analytical reasoning that necessitates human sensitivity and comprehension.

These creative tasks frequently utilize project-based learning methodologies that necessitate students to amalgamate their personal experiences, cultural insights, and

linguistic skills in manners that AI cannot emulate. The emphasis has transitioned to activities requiring profound emotional involvement and introspection, such as personal narrative composition, cultural comparative investigations, and artistic endeavors. This method guarantees that pupils stay actively involved in their education while cultivating the intricate cognitive abilities required for proficient language application. This was explicitly articulated by teachers during interviews:

> "In the future, I plan to give assignments that require personal reflection or analysis based on students' own experiences. This kind of assignment is difficult for AI to do." (Teacher 2)
> "Designing projects that combine language skills with students' personal interests and cultural context will result in more authentic and meaningful work than typical writing assignments. AI cannot replicate the emotional engagement and personal experience that students bring to this creative process." (Teacher 1)

Analysis of teacher interviews indicates a planned transition towards task design that emphasizes personal connections and cultural significance. As Teacher 2 stated in his interview, educators showed recognition of the importance of designing projects that go beyond mere language output, emphasizing tasks that require deep personal engagement and cultural understanding that AI cannot achieve.

Teacher 1 expressed in her interview that meaningful language acquisition occurs when students connect their learning to their own lives and experiences. This perspective was reflected in teachers' responses that emphasized their dedication to encouraging authentic learning experiences, with a focus on integrating personal interests and cultural contexts into assignments.

Overall, the approach taken by these teachers shows a significant paradigm shift in language teaching methodology. By incorporating personal and cultural elements in task design, educators not only create a more meaningful learning environment but also build a natural defense against over-reliance on AI. This strategy ensures that language learning remains a deep and transformative process, which develops not only linguistic skills but also students' cultural understanding and personal expression. Additionally articulated by the students during interviews:

> "Teachers should give assignments that can't be done with AI or make rules that prohibit the use of AI." (Student 10)
> "Assignments become more fun and meaningful if we have to combine personal experience and language mastery, rather than just creating content with AI." (Student 7)
> "I feel that we benefit more when we are asked to create something original that reflects our own culture and perspective. AI can't replicate our unique point of view." (Student 1)
> "Assignments that ask us to write about our personal experiences help me improve my language skills, as well as allowing me to convey my true voice in writing." (Student 8)

Student 10 and Student 7 revealed in their interviews that students significantly appreciate tasks that require personal engagement and innovative thinking. Analysis of the student interviews revealed that they recognized the importance of tasks that connect cultural heritage and personal experiences to language learning, and realized that these tasks offer more substantial learning opportunities than AI-generated materials.

As Student 1 stated in his interview, the students' comments demonstrated their understanding of the importance of developing their own voice in language learning. Their inclination towards tasks that require personal narrative and cultural introspection indicates an understanding that authentic language education goes beyond mere grammatical accuracy.

Student 8 in his interview expressed an opinion in line with the analysis of the comprehensive findings showing that innovative tasks that engage individuals effectively offset the standardization often associated with AI tools. The implementation

of these activities maintains the human aspect of language learning while facilitating appropriate technical integration.

Overall, these findings indicate that effective language learning requires a balance between technical support and personal engagement. The focus on creativity and personal expression in tasks seems to improve not only students' language proficiency but also their capacity for critical and independent thinking in the target language. This approach creates a more meaningful and sustainable learning environment, where AI technology serves as a supportive tool without replacing the essential elements of an authentic language learning process.

Utilizing AI as an Educational Tool, Not a Replacement

Both teachers and students contend that their perspective and application of AI tools should be adjusted, employing them primarily as educational aids rather than substitutes for the writing process. This paradigm change is crucial for attaining a more equitable balance between technological utilization and the cultivation of autonomous skills.

This method involves reconceptualizing AI as a supportive tool that enhances the learning process rather than merely accelerating task completion. The focus is on utilizing AI to enhance understanding, generate ideas, and provide feedback, while ensuring the student's active engagement in the learning process. This is evident from the teachers' statements during the interview:

> "I would encourage students to use AI as a tool for clarification or examples, not as a whole content creator." (Teacher 1)
> "Students should be taught to see AI as a support tool in learning, not something they rely on completely. I have designed assignments that ask students to assess AI-generated writing and identify parts that need improvement, so that they can develop critical thinking and understand the limitations of AI." (Teacher 2)

As Teacher 1 pointed out in her interview, the interviews with the teachers indicated a planned methodology for AI integration, emphasizing its function as a supporting resource rather than as the main tool in content creation. The educators saw the importance of directing students to use AI as a learning tool while maintaining their independence in the writing process.

Teacher 2 emphasized in her interview the need to develop students' critical evaluation skills and maintain autonomy in the learning process. Teachers' comments show a clear understanding of the need to establish systematic methods that allow students to use AI effectively while reducing over-reliance.

Overall, the approach taken by these teachers reflects a balanced and forward-looking teaching strategy. By positioning AI as a supportive tool rather than a substitute for the learning process, the educators managed to create a learning environment that encourages responsible use of technology while maintaining students' academic integrity and critical skill development. The identical insight can also be discerned through the statements of the students:

> "We can use AI to understand difficult concepts or find ideas, but we still have to write the content ourselves." (Student 6)
> "AI helps me understand complicated grammar concepts as a learning tool. But I realize that I still need to practice writing by myself to improve my skills." (Student 1)
> "I use AI to increase my understanding, but I make sure that I still do the writing and thinking process myself." (Student 9)

As reflected in Student 6's statements in his interview, the analysis of student interviews showed an increased understanding of the appropriate function of AI in their educational experiences. The students demonstrated an understanding that AI should

serve as a supporting instrument and not a substitute for their cognitive and writing endeavors, reflecting a maturity in their approach to technology integration.

Student 1 expressed in his interview a view in line with the students' responses that reflected a nuanced view of the use of AI, valuing its role as a pedagogical tool while emphasizing the need to maintain autonomy in the writing process. These insights indicate a favorable shift in students' perceptions towards technology support in language learning.

The views shared by Student 9 in his interview reinforce the combined results of teachers and students that show a real transformation in the understanding and utilization of AI tools in EFL contexts. The recognition of AI as an educational support tool, not a substitute for human labor, signifies constructive progress in the integration of educational technology.

This change in viewpoint indicates a favorable direction for the future incorporation of AI in EFL environments, where technology reinforces rather than replaces human learning mechanisms. The alignment between teachers' and students' views on the appropriate use of AI suggests the possibility of creating more effective and equitable methods for technology-enhanced language learning.

Discussion

This study's findings elucidate the intricate consequences of AI writing tools in EFL contexts, underscoring substantial concerns regarding their effects on learner autonomy, genuine writing development, and academic integrity. The noted reduction in students' critical thinking and autonomous learning ability corresponds with earlier apprehensions expressed by Anderson & Kumar (2022) and Williams et al. (2023) about AI's capacity to impede creative and analytical thinking skills. The study's findings indicate that although AI technologies provide prompt support, they frequently create a detrimental loop of dependency that compromises the essential goals of language learning.

The difficulties in developing an authentic authorial voice mirror concerns expressed in prior studies (Kim & Martinez, 2023; Park & Ahmed, 2023; Zhang & Roberts, 2024) on the uniformity of writing styles resulting from AI integration. This study's findings on the uniformity of writing outputs corroborate prior cautions from researchers (Thompson & Garcia, 2024; Amz, 2023; Wilson et al., 2023) regarding the possible erosion of individual expression in AI-assisted writing. This standardization is especially troubling in the EFL environment, where the development of a personal voice is essential for genuine language acquisition.

The results concerning difficulties to academic integrity reflect apprehensions highlighted by other research (Wang & Thompson, 2022; Ahmad & Johnson, 2023) regarding the intricacies of upholding educational standards in an AI-integrated context. The indistinct borders between permissible support and academic dishonesty identified in this study correspond with the forecasts of Rebecca (2022) and Kim & Peterson (2023) concerning the ethical dilemmas of AI incorporation in educational contexts. These findings enhance the comprehension of how AI tools are transforming conventional concepts of authorship and evaluation in EFL situations.

The noted decline in authentic writing advancement corroborates previous studies (Kurniati & Fithriani, 2022; Wang, 2022; Zhao, 2022) regarding the possible detrimental impacts of AI writing instruments on linguistic growth. The research indicates that although AI tools can improve short-term writing productivity, they may

concurrently hinder the organic development of language acquisition abilities, corroborating the apprehensions expressed by Y. Liu et al. (2022) and Lund & Wang (2023) regarding the enduring effects of reliance on AI in language education.

The techniques formulated by educators and learners to tackle these problems align with methodologies proposed in prior research (Marzuki et al., 2023; Aleyza & Rahmah, 2024) regarding the necessity for balanced technology integration in EFL environments. The focus on establishing clear ethical guidelines and fostering creative thinking corresponds with prior research recommendations (Wijaya & Sutanto, 2022; Pratiwi et al., 2023) about the preservation of educational integrity while utilizing technology advantages. These findings enhance our comprehension of how educational stakeholders may adeptly manage the intricacies of AI integration in language learning contexts.

The study's findings highlight the significance of perceiving AI as an educational instrument instead than a substitute for human labor, along with other research (Hartono & Putra, 2022; Suryanto & Widodo, 2023) that underscores the necessity for balanced technological integration. This method corresponds with previous findings about AI's capacity to augment, rather than supplant, conventional educational techniques, while recognizing the dangers of excessive dependence on technological support.

The study indicates a notable conflict between the short-term advantages of AI tools and their possible long-term detrimental effects on language acquisition, corroborating apprehensions expressed in earlier research (Anderson & Kumar, 2022; Williams et al., 2023) regarding the influence of AI on critical thinking and creativity. This friction is especially pronounced in the Indonesian setting, where the results correspond with local studies (Hartono & Putra, 2022; Suryanto & Widodo, 2023) concerning the intricate dynamics of AI integration in EFL classrooms.

The results highlight the necessity for a holistic framework that reconciles technological advancement with educational integrity, corroborating prior studies (Thompson & Garcia, 2024; David & Sarah, 2023) regarding the significance of preserving educational quality throughout the incorporation of AI tools. The research enhances our comprehension of the impact of AI technologies on EFL instruction, emphasizing the benefits and challenges arising from this technological integration.

This research enhances the existing literature on AI in EFL instruction by offering comprehensive insights into the particular problems and adaption tactics utilized by teachers and students. These findings extend prior research and provide novel insights into the practical ramifications of AI integration in language learning contexts. The study underscores the vital necessity of designing balanced strategies that harness the advantages of AI while maintaining the fundamental human aspects of language acquisition and education.

Conclusion

This research has revealed significant insights concerning the adverse effects of AI writing tools in EFL contexts and the strategies employed to mitigate these challenges. The findings highlight three critical issues: a substantial decline in learning autonomy and critical thinking capabilities, a concerning regression in authentic writing development, and emerging challenges in maintaining academic integrity. The results directly address the study's research questions by demonstrating how AI technologies, while offering immediate assistance, often create a counterproductive cycle of

dependency that undermines essential language learning objectives. This dependency manifests in standardized writing styles, diminished creative expression, and reduced capacity for independent problem-solving. The study reveals that students' increasing reliance on AI tools has led to a notable decrease in their ability to engage in authentic language production and critical analysis, particularly in scenarios requiring original thought and personal insight. These findings are especially significant in the Indonesian EFL context, where the balance between technological integration and authentic language acquisition presents unique challenges.

The research findings have led to the identification and implementation of three primary strategies by teachers and students to address these challenges: the development of specific ethical guidelines for AI tool usage, the execution of creativity-oriented activities that promote original thinking, and the fundamental reorientation of AI as an educational tool rather than a substitute for human effort. These strategies represent a comprehensive approach to maintaining educational integrity while leveraging technological benefits. The study contributes significantly to existing research on AI integration in language instruction by providing detailed insights into the challenges and adaptation strategies within EFL environments. Future research should examine the long-term impacts of AI tool usage on language acquisition, develop effective assessment methods for AI-integrated settings, and establish pedagogical frameworks that harmonize technological support with genuine language learning. This research emphasizes the crucial need to balance technological advancement with authentic language acquisition, indicating that while AI tools can serve as valuable educational resources, their implementation must be carefully regulated to preserve the fundamental human aspects of language learning and academic development. The findings suggest that successful integration of AI in EFL contexts requires a nuanced approach that acknowledges both the potential benefits and inherent risks of these technologies, while maintaining focus on the core objectives of language education: fostering genuine communication skills, critical thinking abilities, and authentic language production.

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