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Comparative Analysis of Human-Written and AI-Assisted Essays by Second-Year Students: A Case Study on the Causes of Car Accidents in Khoms City

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Abstract

This case study is a comparative analysis of human-written and AI-Assisted essays. The target audience is second-year university students at faculty of education, Elmergib university, academic year is 2025. The participants of the study are asked to write essays (both human-written and AI-assisted) on the causes of car accidents in Khoms. This helps the researcher to capture their perceptions and evaluations of essay quality and usefulness. Thus, Likert scale (1–5) allows the researcher to quantify participants' opinions, then the researcher can compare trends statistically.

The results of this case study showed that AI-assisted writing is perceived as a powerful support tool rather than a replacement for human authorship. AI excels in improving organization, grammatical accuracy, clarity, and efficiency, whereas human-written essays remain superior in critical thinking, depth of analysis, authenticity, and creativity. These findings support a balanced approach to academic writing, where AI is used as a supplementary aid to enhance form and efficiency, while human writers retain responsibility for content development, critical reasoning, and personal voice.



Keywords: AI-Assisted essay, human written essay, academic writing, authenticity, creativity.

1. Introduction

The teachers of English language (EL) as well as students encounter certain difficulties in teaching and learning writing. Zheng (1999) states that acquiring the writing skill seems to be more laborious and demanding than acquiring the other three skills. Nunan (1999, p.271) considers writing an enormous challenge to produce a "coherent, fluent, extended piece of writing" in one's second language. Thus, teachers of writing started thinking of combining more than one approach in order to suit all writing tasks and prepare the students for the writing that they have to do after they graduate.

The collaboration of adopting more than one approach is one of the changes that happened in English language teaching (ELT). One of the greatest changes was the shift in English language teaching, from a teacher-centered, to a learner-centered approach.

Throughout a researcher's experience in teaching English as a foreign language, it has been observed that the second-year university students of English department at Elmergib University have encountered difficulties in writing effectively. Some of these difficulties are due to vocabulary use, grammatical use such as word order, subject verb agreement, fragments, repetition of the subject; mechanical considerations such as spelling, punctuation and capitalization, as well as in content and organization. Unity and coherence are mostly found lacking. Thus, using AI as a supplementary aid to enhance the student's efficiency is nowadays necessary.



2. Literature Review

The use of artificial intelligence is discussed and investigated by many scholars, for example, González (2023) pointed out that there are many challenges associated with using artificial intelligence to generate academic writing. Tools such as ChatGPT were able to produce text which was broadly relevant to assigned topics, but González's study showed that AI-generated content still requires substantial human oversight to ensure factual accuracy and to capture the nuanced qualities of human authorship. Compared with human-written texts, AI outputs tended to lack specificity, analytical depth, and accurate or precise source attribution. Although AI can function as a supportive aid in academic writing, the findings suggest that its current capabilities—particularly in producing fully developed scholarly prose—remain limited. Consequently, the author emphasizes the need for continued refinement of AI models to facilitate their more effective and responsible integration into academic writing practices.

From a theoretical perspective, writing has traditionally been considered as a deeply personal and cognitive activity. According to Elbow (1983), Barthes (1992), and Paul and Elder (2006) writing is considered as an act of individual expression that requires creativity, critical thinking, and accountability in communication. These perspectives highlight the intrinsic connection between authorship and human agency. Thus, Elbow (1983) denied traditional writing methods. He confirmed non-stop or free uncensored writing, without editorial checkpoints first, followed much later by the editorial process.

The relationship between technology and writing has also been widely discussed. Early scholarship documented how technological innovations reshaped writing



practices and literacy (Bolter, 2001; Ong, 2013). A great attention has been noticed the shift which is the influence of digital technologies on reading habits and literary production (Baron, 2015; Hayles, 2012). However, systematic inquiry into the role of artificial intelligence in academic writing has only emerged more recently (Riedl, 2016).

In the same vein Bašić et al. (2023) had made a comparative study on student essays written without assistance to those produced with the help of ChatGPT-3. Their study revealed significant improvements in quality, efficiency, or authenticity. In fact, independently written essays received slightly higher evaluations, which the authors attributed to students' overreliance on the tool or limited familiarity with its appropriate use. Similar issues were identified in earlier research on GPT-2, where students expressed doubts about the credibility and reliability of AI-generated references (Fyfe, 2023).

It is interesting to note that these findings corroborate with principles from corpus linguistics, which examines patterns of language use and emphasizes the role of authorial voice in shaping originality, creativity, and conformity to disciplinary conventions (Hyland, 2009; McEnery & Brezina, 2022). Advance technological tools such as the developments in computational linguistics, particularly in natural language processing, paved the way for the advanced large language models such as Chat GPT to appear on the surface (Jurafsky & Martin, 2023). While these models can be considered as great help to generate fluent and contextually appropriate text, their growing sophistication raises essential questions with respect to authorship and the distinctiveness of AI-generated voice (Brown et al., 2020). From a corpus linguistics perspective, analyzing such language patterns remains essential for



understanding how authorship is constructed and interpreted in AI-assisted writing (McEnery & Brezina, 2022).

3. Research Questions

- 1- How do AI-assisted essays compare with human-written essays in terms of writing quality and critical engagement?
- 2- How do students perceive the role of AI in their academic writing practice?

4. Research Objectives

- 1- To compare the writing quality and level of critical engagement in AI-assisted essays and human-written essays produced by students.
- 2- To explore students' perceptions of the role, benefits, and challenges of using AI tools in their academic writing practices.

5. Methodology

5.1 Research Design

The methodology adopted for this study is a Mixed-Methods a quasi – experimental design to examine the impact of AI-assisted writing on students' essay performance and perceptions. Students completed two writing tasks: an in-class essay without AI assistance and a take-home essay allowing AI use. The quality of the two assignments was compared using predefined assessment criteria. Additionally, a questionnaire based on an adapted Technology Acceptance Model (TAM) was administered to capture students' perceptions of AI-assisted writing. This design is effective because it allows the researcher to measure observable differences in essays while also understanding students' experiences and reader perceptions.



5.2 Participants and Setting

According to (Creswell & Creswell, 2017), nonrandom assignment suits the quasi-experimental design. Participants of this research are forty-six undergraduate students majoring English at faculty of Education, Elmergib University, Khoms. All of group B and C are enrolled in a core writing course offered by the department as an essential requirement. They were distributed equally (23 students for each group). The writing 2 course is mostly studied during about the second year 2025-2026. The participants of this case are asked to complete both the in-class essay (human-only) and the at-home essay (AI-assisted). After the participants complete both assignments, the instructor of the course will assess the essays based on quality, clarity, and credibility. A questionnaire based on an adapted Technology Acceptance Model (TAM) was also administered to capture students' perceptions of AI-assisted writing.

5.3 Data Collection

1. Essays

The data collection process began with an in-class discussion of the topic. Following this discussion, the researcher instructed the students to write a three-paragraph essay on the causes of car accidents in Khoms. This task was completed in class within a one-hour time limit and was designed to capture **human-written** compositions. At the end of the session, the researcher collected all in-class assignments.



Subsequently, the students were asked to write a **home essay**, for which they were permitted to use **AI-assisted writing tools**. The home assignments were submitted during the following lecture, at which time the researcher collected all completed work.

2.Tools

The target audience is second-year students who are writing essays (both human-written and AI-assisted) on the causes of car accidents in Khoms. This technique helps the researcher to capture their perceptions and evaluations of essay quality and usefulness. Thus, Likert scale (1–5) allows the researcher to quantify participants' opinions, then the researcher can compare trends statistically.

5.4 Data Analysis

In the data analysis, the researcher analyzed both the students' questionnaire as well as students' assignments. The following table illustrates essay quality and writing features.

Table (1) Essay Quality and Writing Features

| | | | | | | |
|--|--|-------------------|----------|---------|-------|----------------|
| | | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|--|--|-------------------|----------|---------|-------|----------------|



| | | | | | | |
|---|---|-----|-----|----|-----|-----|
| 1 | AI-assisted essays demonstrate clearer organization compared to human-written essays. | 8% | 12% | 0% | 20% | 60% |
| 2 | Human-written essays provide deeper insights into the causes of car accidents in Libya. | 10% | 25% | 0% | 10% | 65% |
| 3 | AI-assisted essays use more accurate grammar and vocabulary than human-written essays. | 0% | 0% | 0% | 20% | 80% |
| 4 | Human-written essays show stronger critical thinking than AI-assisted essays. | 30% | 15% | 5% | 10% | 40% |



| 5 | AI-assisted essays are more concise and focused than human-written essays | 5% | 5% | 0% | 20% | 70% |
|---|---|----|----|----|-----|-----|

The findings in the above table revealed that AI-assisted essays were generally perceived as stronger in surface-level writing features, particularly organization, grammatical accuracy, and conciseness. A substantial majority of participants (60%) strongly agreed and 20% agreed that AI-assisted essays demonstrated clearer organization than human-written essays, suggesting that AI tools may support structural coherence in academic writing. Similarly, perceptions of language accuracy were notably high, with 80% of respondents strongly agreeing that AI-assisted writing essays were more accurate in both grammar and vocabulary. This result highlights the effectiveness of AI in handling linguistic correctness and standardized academic language.

It is noticeable that conciseness and focus were also associated more strongly with AI-assisted writing. Thus, a combined 90% of participants agreed or strongly agreed that AI-assisted essays were more concise and focused. The results indicated that AI may help reduce redundancy and improve clarity. These findings suggest that AI tools are particularly effective in enhancing formal writing features that rely on consistency and linguistic precision.



In contrast, human-written essays were perceived as superior in terms of content depth and critical engagement. (65%) of respondents strongly agreed that human-written essays provided deeper insights into the causes of car accidents in Khoms, while only 10% agreed, revealing strong confidence in human authors' ability to analyze complex, context-specific issues. Additionally, perceptions of critical thinking favored human-written essays, with 40% strongly agreeing and 10% agreeing that human writing demonstrated stronger critical thinking, despite some disagreement (45%) and a small neutral response (5%). This mixed distribution suggests variability in students' evaluations but nonetheless points to a perceived advantage of human authorship in analytical depth and reasoning.

Overall, these results showed a clear division between form and substance: AI-assisted essays are viewed as more polished and efficient in terms of structure and language, whereas human-written essays are perceived as richer in insight and critical analysis.

Table (2) Student Perceptions

| | | Strongly Disagree | Disagree | Neutral | Agree | Strongly Agree |
|---|---|-------------------|----------|---------|-------|----------------|
| 1 | I find AI-assisted essays easier to understand than human-written essays. | 0% | 10% | 0% | 35% | 55% |



| | | | | | | |
|---|---|----|-----|-----|-----|-----|
| 2 | Human-written essays feel more authentic and relatable than AI-assisted essays. | 0% | 10% | 0% | 20% | 70% |
| 3 | AI-assisted essays save time and effort compared to writing essays manually. | 0% | 0% | 0% | 20% | 80% |
| 4 | Human-written essays better reflect students' personal perspectives and creativity. | 0% | 0% | 10% | 20% | 70% |
| 5 | Overall, I prefer AI-assisted essays over human-written essays when analyzing the | 0% | 15% | 5% | 20% | 60% |



| | | | | | | |
|--|--------------------------------------|--|--|--|--|--|
| | causes of car accidents in Khoms. | | | | | |
|--|--------------------------------------|--|--|--|--|--|

The previous table shows students' perceptions which further reinforce the complementary strengths of AI-assisted and human-written essays. It is noticeable that a strong majority of participants (90%) agreed or strongly agreed that AI-assisted essays were easier to understand. They also indicated that clarity and readability are key advantages of AI-generated or AI-supported texts. Besides, most respondents (80%) emphasized that AI-assisted writing saves both time and effort, emphasizing the practical benefits of AI tools in academic tasks.

However, authenticity and personal engagement were strongly associated with human-written essays. Most students (70%) strongly agreed and 20% agreed that human-written essays felt more authentic and relatable, while a similar proportion (70% strongly agreed; 20% agreed) believed that human-written essays better reflected personal perspectives and creativity. These findings suggest that, despite the efficiency of AI, students continue to value the human voice and individual experience in academic writing.

Interestingly, when asked about overall preference, a majority of participants (60%) strongly agreed and 20% agreed that they preferred AI-assisted essays for analyzing the topic. However, some participants show disagreement (15%) and neutrality (5%). This result suggests that while students recognize the limitations of AI in



expressing originality and critical depth, they still favor AI-assisted writing for its convenience, clarity, and efficiency.

5.4.1 Commentary on the Participants Questionnaire

This study explored second-year students' evaluations of AI-assisted and human-written essays. Two essential addressing two research questions were addressed. They are: **(1)** how do AI-assisted essays compare with human-written essays in terms of writing quality and critical engagement? and **(2)** how do students perceive the role of AI in their academic writing practices? The findings contribute to current debates in higher education regarding the pedagogical implications of generative AI for student learning and assessment.

In relation to **RQ1**, AI-assisted essays were perceived as stronger in organizational clarity, grammatical accuracy, and conciseness. These results are consistent with research suggesting that large language models effectively support surface-level writing features and conformity to academic conventions (Brown et al., 2020; Jurafsky & Martin, 2023). However, students rated human-written essays as providing deeper insights and demonstrating stronger critical thinking, particularly when engaging with a locally grounded topic as *in the causes of car accident in Khoms*. This result supports earlier claims that critical reasoning, contextual awareness, and analytical depth remain fundamentally human competencies (Paul & Elder, 2006; Hyland, 2009). From a pedagogical perspective, this distinction suggests that while AI may enhance formal writing quality, it does not substitute for disciplinary thinking or higher-order learning outcomes.



With respect to **RQ2**, students considered AI-assisted essays as easier to understand and more time-efficient, reflecting broader trends in digitally mediated learning environments (Bolter, 2001; Ong, 2013). Although human-written essays include grammatical and spelling mistakes, they were consistently perceived as more authentic, creative, and reflective of own participants' experience. These findings resonate with scholarship that conceptualizes writing as a process of identity formation and meaning-making in higher education (Elbow, 1983; Barthes, 1992). It is noted that recent classroom-based studies claimed that overreliance on AI tools may reduce students' engagement with critical thinking and authorship (Bašić et al., 2023; Fyfe, 2023).

5.4.2 Summary Interpretation of the Questionnaire

It can be concluded that AI-assisted writing is perceived as a powerful support tool rather than a replacement for human authorship. AI surpasses in improving organization, grammatical accuracy, clarity, and efficiency, whereas human-written essays remain superior in critical thinking, depth of analysis, authenticity, and creativity. These findings support a balanced approach to academic writing, where AI is used as a supplementary aid to enhance form and efficiency, while human writers retain responsibility for content development, critical reasoning, and personal voice.

Overall, the results support a **pedagogically balanced approach** to AI in higher education. Rather than viewing AI as a replacement for student writing, the findings align with arguments for positioning AI as a learning support tool that can scaffold language accuracy and organization while preserving student responsibility for analysis, interpretation, and ethical authorship (Riedl, 2016; González González,



2023). For teaching in higher education, this implies a need for assessment designs and instructional practices that integrate AI use transparently, emphasize critical engagement, and foreground students' intellectual ownership of their work.

5.4.3 Commentary on the Participants' Assignments

This study examined second-year students' perceptions of AI-assisted and human-written essays and analyzed their own written assignments to identify common linguistic and organizational challenges. The research addressed two questions: (1) how do AI-assisted essays compare with human-written essays in writing quality and critical engagement, and (2) how do students perceive the role of AI in their academic writing?

Analysis of student -class assignments revealed frequent errors in grammar as in " *there are many people die from car accident...* "; sentence structure as in "*people feel sad and comes to help and try to solution the problem*"; vocabulary as in " *center city* and mechanics. Thus, it is clear that common students' problems included subject–verb agreement mistakes, verb tense confusion, run-on sentences, article omissions, inappropriate word choice, preposition misuse, and inconsistent capitalization. Organizational weaknesses, such as unclear paragraphing and abrupt narrative shifts, further reduced clarity and academic credibility. These difficulties largely reflect mother-tongue interference, limited grammatical knowledge, overreliance on literal translation, and insufficient revision practices. Despite these challenges, students demonstrated engagement with the topic and an ability to identify key causes of car accidents in their local context.



Overall, the great differences between them are that the AI- assisted essay presents idea more clearly and logically while human written essay sometimes repeats ideas and is less organized. Thus, AI-assisted essays were rated higher in organization, grammatical accuracy, conciseness, and readability, highlighting the potential of AI to scaffold formal aspects of writing. Conversely, human-written essays excelled in critical thinking, contextual depth, authenticity, and personal voice, but were more prone to the errors observed in student assignments. This contrast underscores that AI is most effective as a supportive tool rather than a replacement for human authorship (González González, 2023; Paul & Elder, 2006).

It should be noted that both way of writing whether human written essay or AI-assisted essay share similarities in handling the same topic, mentioning the causes of the car accident and focusing on bad roads, bad weather, and using mobile phones while driving and focus on the effects of these accidents on people and society.

From the Pedagogical point of view, the results suggest a hybrid approach in higher education: instructors can utilize AI to enhance grammar, sentence construction, and clarity, while maintaining a focus on critical engagement, originality, and revision. Such integration aligns with prior scholarship emphasizing the complementary roles of technology and human cognition in writing development (Bolter, 2001; Hyland, 2009; Riedl, 2016). By combining AI-assisted scaffolding with guided instruction, educators can help students produce linguistically accurate, coherent essays without sacrificing depth or academic credibility.

6.Conclusion



It can be concluded that the participants show high awareness of the topic and attempt to put their hands on the main causes of car accidents in their city. There is an attempt to describe the problem, give causes and include a personal experience. However, it is noticed that frequent grammatical errors, unclear sentence structure, and weak organization affect the clarity and quality of the essay. Although the participants are exposed to samples of cause-and-effect essays, they still need more practice in sentence writing, paragraph organization, and use of examples is needed. The ideas are present, but language accuracy and structure are weak, which lowers the overall quality. Ideas are also partially understandable, but clarity is reduced due to grammar and sentence problems. The content is believable but weakly supported. Informal tone reduces academic credibility. It can be concluded that their mistakes are attributed to many causes which are: 1. mother-tongue interference (Arabic → English) 2. limited grammatical knowledge, 3. overuse of direct translation, 4. lack of practice in writing complete sentences as well as 5. insufficient exposure to correct English models.

7. Recommendations

From the previous results obtained from these case study, the researcher can recommend the following points:

- 1- The instructors of teaching writing for second year should focus on tenses, sentence boundaries, and articles and prepositions.
- 2- Basic paragraph writing is essential when teaching writing for first and second year at university level.
- 3- Instructors should also use model paragraphs before asking students to write.



- 4- They also should encourage peer correction and guided rewriting.
- 5- Teachers have to provide a model three-paragraph essay suitable for this class in order to expose students to different samples of cause and effect essays.

References

- Bašić, B., Varga, M., & Toth, Z. (2023). *Artificial intelligence in academic writing: Opportunities and challenges*. Journal of Educational Technology & Society, 26(2), 45–58.
- Baron, N. S. (2015). *Words onscreen: The fate of reading in a digital world*. Oxford University Press.
- Barthes, R. (1992). *The death of the author*. In D. Lodge (Ed.), *Modern criticism and theory* (pp. 167–172). Longman. (Original work published 1967)
- Bolter, J. D. (2001). *Writing space: Computers, hypertext, and the remediation of print* (2nd ed.). Lawrence Erlbaum Associates.
- Brown, T. B., Mann, B., Ryder, N., Subbiah, M., Kaplan, J., Dhariwal, P., ... Amodei, D. (2020). *Language models are few-shot learners*. Advances in Neural Information Processing Systems, 33, 1877–1901.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
- Elbow, P. (1983). *Writing without teachers* (2nd ed.). Oxford University Press.
- Fyfe, P. (2023). *AI and the limits of authorship*. Digital Humanities Quarterly, 17(2).



- González González, C. S. (2023). *Exploring the boundaries of authorship: A comparative analysis of AI-generated text and human academic writing in English literature* (Master's thesis). University of La Laguna, Spain.
- Hayles, N. K. (2012). *How we think: Digital media and contemporary technogenesis*. University of Chicago Press.
- Hyland, K. (2009). *Academic discourse: English in a global context*. Continuum.
- Jurafsky, D., & Martin, J. H. (2023). *Speech and language processing* (3rd ed.). Draft manuscript. Stanford University.
- McEnery, T., & Brezina, V. (2022). *Fundamental principles of corpus linguistics*. Cambridge University Press.
- Nunan, D. (1999). *Second language teaching and learning*. Boston: Heinle and Heinle Publisher.
- Ong, W. J. (2013). *Orality and literacy: The technologizing of the word* (30th anniversary ed.). Routledge.
- Paul, R., & Elder, L. (2006). *Critical thinking: Tools for taking charge of your learning and your life*. Pearson Prentice Hall.
- Riedl, M. O. (2016). *Computational narrative intelligence: A human-centered goal for artificial intelligence*. IEEE Computer, 49(12), 52–59.
- Zheng, Y. (1999). *Providing students with effective feedback in the writing process*. Teaching English in China, (36)41-45.