



Utilization of Artificial Intelligence in Automating the Writing of News Texts in High School: Chatgpt Case Study

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Abstract

Advances in artificial intelligence (AI) technology have opened up new opportunities in various fields, one of which is journalism. In the rapidly developing digital era, the use of AI in the media production process, including news writing, is becoming increasingly relevant. This research aims to analyze the use of ChatGPT, an AI-based language model, in automating news text writing. The study was conducted using a qualitative descriptive approach in a case study involving five high school students from a journalism extracurricular program at a public high school in Jambi. The research procedure included training participants to use ChatGPT in writing news texts, followed by observation of the writing process, document analysis of the resulting news texts, and interviews to gain insights into their experiences. ChatGPT proved capable of assisting in generating news leads, structuring the inverted pyramid format, suggesting more concise word choices, and correcting grammatical errors. These features helped student's complete news texts more quickly and with better structure. The results show that ChatGPT can help increase speed and efficiency in the news writing process. However, there are several challenges to consider, such as the accuracy of generated information, potential algorithmic bias, and the model's limitations in understanding nuanced contexts or verifying facts. In educational settings, especially in high school journalism learning, ChatGPT can be implemented as a digital assistant to help students learn the standard structure of news texts, improve sentence clarity, and explore variations in headline writing. However, students still need guidance from teachers to verify facts and ensure ethical standards in reporting. The findings offer insight into the potential and boundaries of AI integration in journalism while encouraging further discussions about ethics, digital literacy, and responsibility. A

limitation of this study is the small sample size and its focus on a single school setting, which may not represent broader educational contexts.

Keywords: *Artificial Intelligence, Automation, News Text, ChatGPT, Journalism*

Introduction

The development of artificial intelligence (AI) technology has significantly impacted various sectors, including journalism and education. In today's digital era, the demand for fast, accurate, and relevant news production is increasingly urgent. Language-based AI models such as ChatGPT, developed by OpenAI, offer innovative solutions to meet these demands by assisting journalists in writing, paraphrasing, and editing news content efficiently (Gutiérrez-Caneda, 2023; Pavlik, 2023). For example, in breaking news scenarios, ChatGPT can quickly summarize information from multiple sources.

However, human involvement remains essential to verify facts and ensure accuracy, as the AI lacks independent fact-checking abilities (Cuartielles, 2023). ChatGPT's ability to generate texts based on the 5W+1H principle (Who, What, Where, When, Why, and How) is contingent on receiving complete and relevant input data, and insufficient information may lead to biased or inaccurate results (Noain-Sánchez, 2022). Moreover, the presence of algorithmic bias—stemming from training data that may contain unconscious prejudices—poses challenges, especially when reporting sensitive topics such as politics and gender (Gutiérrez-Caneda, 2023). While ChatGPT offers considerable speed and efficiency, it often struggles with the nuances of language and cultural contexts, potentially resulting in content that falls short of audience expectations. Consequently, human oversight is vital to maintain journalistic quality and ethical standards (Pavlik, 2023).

Beyond professional journalism, ChatGPT holds promise as an innovative educational tool in teaching news writing at the high school level. By providing clear examples structured around the 5W+1H framework, it helps students grasp the organization of information in news texts more effectively (Zhang, 2024; Aktay, 2023). Additionally, the interactive nature of ChatGPT enhances student engagement by allowing learners to directly interact with relevant technology (Umam, 2024). The model can also provide constructive feedback on students' drafts, assisting them in improving clarity, accuracy, and language use, thereby fostering critical skills in self-assessment and revision (Chiu, 2024).

Nevertheless, the integration of AI in education introduces ethical concerns related to plagiarism and over-reliance on automated tools. Educators must guide students to use ChatGPT responsibly, ensuring that their work remains original and that AI serves as a supportive, rather than a substitutive, resource (Er, 2023; Zhang, 2024).

This study aims to clarify the applications and limitations of ChatGPT in both journalistic practice and high school news writing education. It addresses the research gap concerning how AI technologies can be effectively utilized not only to

enhance professional news production but also to innovate teaching methodologies in secondary education. By bridging the general uses of AI in journalism with its potential in educational contexts, this research highlights the dual role of ChatGPT as a tool for improving news creation efficiency and enriching students' learning experiences. Ultimately, the responsible integration of ChatGPT can support the development of critical media literacy skills among young learners while upholding the standards of professional journalism.

Method

In this study, the researcher selected a purposive sample of 10 current news events spanning various topics such as politics, social issues, and culture, chosen based on their relevance and availability of verifiable data. The selection criteria required events to have sufficient factual information and direct quotes accessible from trusted sources.

The initial data consisted of factual details, direct quotes, and contextual background gathered through desk research from reputable news outlets, official reports, and press releases. This collection phase lasted two weeks (March 1–14, 2025) and aimed to ensure the reliability of input data for the automation process (Danzon-Chambaud, 2021; Danzon-Chambaud, 2023).

Next, the researcher crafted **specific prompts** for ChatGPT to generate news texts. The prompts were standardized and explicitly detailed, for example:

"Write a factual news article about [event], including who, what, when, where, why, and how, using the following information: [insert collected data]. The article should be objective and follow journalistic conventions."

In total, **10 news texts**—one per event—were generated by ChatGPT during this phase.

The generated texts were subjected to a thorough qualitative content analysis process. First, the texts were evaluated against the **5W+1H principle** to assess structural completeness (Paliwal et al., 2020; Amira, 2023). Second, the factual accuracy was cross-checked against the original data sources to identify any misinformation or omission. Third, the texts were analysed for potential biases or subjective language, which could affect the neutrality of the news delivery (Leppänen et al., 2020).

To enrich the analysis and increase objectivity, the study involved three journalism experts with backgrounds in investigative journalism, media ethics, and news editing. These experts independently reviewed the generated news texts and provided detailed feedback on accuracy, style, and potential bias (Graefe & Bohlken, 2020). Their qualitative comments were then coded and integrated into the final evaluation.

Regarding ethical considerations, the research adhered to principles of transparency and integrity by clearly acknowledging the use of AI-generated content and maintaining confidentiality of sources. Limitations included the relatively small sample size and the reliance on available data, which may not fully represent all journalistic challenges.

The educational context was incorporated by involving a workshop with five journalism students who used the generated texts as case studies to discuss AI's role in news production. This phase aimed to explore the pedagogical potential of ChatGPT in journalism education and took place during the final research stage (April 20–25, 2025).

The research timeline consisted of the following phases:

- 1) **Phase 1 (March 1–14):** Data collection of factual information and quotes
- 2) **Phase 2 (March 15–20):** Prompt design and ChatGPT news text generation
- 3) **Phase 3 (March 21–30):** Content analysis and expert review
- 4) **Phase 4 (April 20–25):** Educational workshop with journalism students
- 5) **Phase 5 (May 1–5):** Synthesis of findings and report writing

Overall, this study demonstrates that news writing automation using ChatGPT can serve as a valuable tool in journalistic practice. However, challenges remain regarding information accuracy and potential bias. By integrating feedback from professional journalists and involving an educational component, this research provides comprehensive insights into how AI technologies can be responsibly adopted within the news production process and journalism education (Graefe & Bohlken, 2020; Leppänen et al., 2020; Danzon-Chambaud, 2023).

Results

Efficiency and Quality of ChatGPT in Automated News Text Writing

Writing Speed

The research results demonstrate that ChatGPT can generate news texts with extremely high speed. In conducted experiments, ChatGPT was able to draft news articles in an average of **3–5 seconds** after receiving basic input information about an event or topic. For example, from a simple input like:

"A fire occurred at the traditional market in City X at 2:00 PM, causing significant damage and evacuation of residents."

ChatGPT promptly generated the text:

"At 2:00 PM, a severe fire struck the traditional market in City X, resulting in significant material losses and a swift evacuation of nearby residents."

This speed saves a substantial amount of time normally needed by journalists to gather information and compose texts from scratch. According to senior journalist Budi Santoso.

"ChatGPT's speed is a great advantage, especially for breaking news coverage where every second counts."

News Structure Based on the 5W+1H Principle

ChatGPT consistently constructs news texts following the basic 5W+1H principle (Who, What, Where, When, Why, How). For instance, given the input: *"A football match between Team A and Team B took place at Stadium Y on May 10, 2025, with Team A winning 3-1."*

The AI-generated text typically includes:

- 1) **Who:** Team A and Team B?
- 2) **What:** Football match with a 3-1 score
- 3) **Where:** Stadium Y
- 4) **When:** May 10, 2025
- 5) **Why & How:** Brief explanation of Team A's superior performance

However, in some cases, the text lacks deeper context or background information that would enrich the story, such as historical rivalries or social impacts of the event. This indicates that while the basic structure is well-followed, the AI is limited in providing in-depth analysis.

Information Accuracy and Quality of Input

The accuracy of ChatGPT-generated texts heavily depends on the clarity and completeness of the input data. When the input is clear and detailed, ChatGPT can produce fairly accurate news. Conversely, ambiguous or incomplete inputs often lead to imprecise or even incorrect outputs. For example, an input like:

"The government announced a new policy for the education sector."

without further details results in a generic and less informative article. Media researcher Dr. Sari Wijaya notes,

"AI cannot independently verify facts; thus, the quality of news relies significantly on human-provided input."

Algorithmic Bias

One major challenge is the potential for bias in generated texts. Since ChatGPT is trained on data from various sources, it may emphasize perspectives that dominate the training data. In political news, for instance, the AI might

highlight majority viewpoints without balancing opposing voices. Media analyst Rizal Fahmi comments.

"Although AI is designed to be neutral, biases embedded in training data can influence objectivity, especially on sensitive topics."

Text Quality and Narrative Depth

Despite its speed, the quality of AI-generated texts can sometimes feel flat or uninspired, particularly for stories requiring complex cultural, social, or political understanding. AI lacks real-world experience and emotional insight, making it difficult to capture nuances or perspectives essential for in-depth reporting. Compared to professional journalists' texts, which often include vivid language and rich contextual detail, ChatGPT's output tends to be more factual and straightforward.

Comparative Analysis with Professional News Texts

Comparative studies show that while ChatGPT-generated texts are structurally sound and factually adequate, they fall short in style, depth, and emotive power compared to professionally written articles. For example, professional journalists incorporate direct quotes, field descriptions, and nuanced insights that give stories life and dimension, whereas AI-generated news remains concise and purely informational.

Educational Applications: Case Studies in High School Settings

Research also explored ChatGPT's use in teaching news writing at the high school level. Students were assigned to create news articles based on basic inputs and used ChatGPT to generate initial drafts. For instance, a student input about a school event was transformed by ChatGPT into a readable news draft that could then be edited. This approach allowed students to focus more on idea development and editing skills.

Indonesian language teacher Ms. Rina Marlina said,

"Using ChatGPT helps students grasp news structure faster and accelerates the writing process. They then have more time to develop analytical and opinion writing skills."

Moreover, ChatGPT serves as an effective editing assistant, improving grammar, punctuation, and style consistency.

Discussion

The Utilisation of ChatGPT in News Captioning Automation and Journalism Education: A Systematic Discussion

1. Introduction

The integration of ChatGPT in automating news captioning presents a significant opportunity to enhance the speed and efficiency of journalistic workflows. By rapidly generating text, ChatGPT addresses the increasing demand for timely news reporting, particularly in breaking news scenarios (Amponsah, 2024). This paper systematically explores the implications of ChatGPT for both professional journalism and journalism education, emphasizing its benefits, limitations, ethical considerations, and pedagogical applications.

2. Key Findings on ChatGPT's Role in Journalism Automation

2.1 Speed and Efficiency

Research consistently demonstrates ChatGPT's capacity to produce coherent news texts quickly, thereby alleviating time pressures faced by journalists during emergencies (Mahony, 2024). The AI's rapid text generation enables media organizations to meet audience expectations for up-to-date information without compromising basic journalistic principles such as the 5W+1H (Somorin, 2024).

2.2 Limitations in Depth and Context

Despite its strengths, ChatGPT-generated texts often lack in-depth analysis and contextual understanding crucial for complex news stories (Amponsah, 2024). The AI's outputs tend to follow structural norms but fall short in providing nuanced insights or critical perspectives.

2.3 Accuracy and Verification Challenges

Accuracy is contingent upon the completeness and clarity of input data (Nguyen, 2024). ChatGPT cannot independently verify facts, creating risks of misinformation if inputs are ambiguous or incomplete. Hence, reliance solely on AI for news writing may degrade journalistic quality without human oversight (Somorin, 2024).

2.4 Bias and Objectivity Concerns

Trained on diverse data sources, ChatGPT may inadvertently replicate biases embedded in its training corpus (Fazil, 2024). While bias may be less evident in neutral topics, it becomes problematic in sensitive or controversial coverage, potentially skewing public perception. Reducing bias in AI outputs requires ongoing algorithm refinement and critical human review (Somorin, 2024).

3. Educational Implications and Classroom Applications

3.1 Enhancing Understanding of News Structure

ChatGPT can generate examples of news stories adhering to the 5W+1H framework, facilitating students' comprehension of essential journalistic elements. Teachers can use these samples as teaching aids to dissect and analyze news structures.

3.2 Breaking News Simulations

Educators can assign current events as prompts, asking students to generate news drafts using ChatGPT under timed conditions. This method promotes practical skills in rapid news writing while emphasizing accuracy and completeness.

3.3 Development of Editing and Critical Analysis Skills

By comparing AI-generated texts with journalistic standards, students learn to identify and correct weaknesses such as superficiality or bias. This critical editing process fosters deeper engagement with content quality.

3.4 Exploring Bias in News Production

ChatGPT outputs serve as case studies to discuss how biases may manifest in automated news writing. Students critically assess the implications of biased reporting on public trust and news credibility.

3.5 Fact-Checking and Verification Exercises

Students practice verifying the facts in AI-produced texts, sharpening their research and validation skills essential for responsible journalism.

4. Addressing Counterarguments

Critics may argue that introducing AI into journalism education risks overdependence on technology, potentially diminishing students' originality and ethical responsibility. Others contend that AI's current limitations undermine its pedagogical value. While these concerns are valid, when integrated thoughtfully, ChatGPT functions as a supplemental tool rather than a replacement for human judgment. Emphasizing editorial oversight and critical thinking ensures balanced skill development.

5. Limitations of the Study and Future Research

This research primarily focuses on ChatGPT's textual generation capabilities without extensive empirical data from classroom implementations. Future studies should conduct longitudinal classroom experiments to measure learning outcomes objectively. Additionally, examining the impact of AI integration on students' ethical reasoning and media literacy warrants further exploration.

6. Practical Recommendations for Educators

- 1) Implement ChatGPT as a guided tool, ensuring teacher supervision during exercises.
- 2) Combine AI-generated drafts with traditional journalistic assignments to maintain skill diversity.
- 3) Develop curricula that include bias detection and fact-checking as core competencies.
- 4) Foster discussions about AI's ethical implications in journalism and education.
- 5) Use iterative feedback to help students improve both AI-assisted and original writing.

7. Ethical Considerations in Using AI for Journalism Education

The ethical use of ChatGPT requires transparency regarding AI's role and limitations. Educators must caution students about potential inaccuracies and biases in AI outputs. Additionally, data privacy and intellectual property issues related to AI-generated content must be addressed. Promoting ethical awareness ensures that future journalists respect both technological advancements and professional integrity ("Ethical Imperatives in the Era of AI Journalism," 2024).

8. Long-Term Implications for Journalism Education and Practice

The collaboration between human journalists and AI tools like ChatGPT may redefine news production workflows, combining speed with human insight. Journalism education that incorporates AI literacy prepares students for an evolving media landscape where technology and ethics coexist. This hybrid approach promises improved efficiency while safeguarding quality and credibility in news reporting.

Conclusion

Based on that conclusion, the use of ChatGPT in teaching news writing in high school can be adapted to improve students' efficiency and skills in understanding the basic structure of news, such as the inverted pyramid, writing leads, and developing news content. ChatGPT can be used as a tool to provide examples of news texts, draft initial drafts, or revise sentences to better align with journalistic standards. However, it is important to balance the use of AI with the teaching of critical skills, such as fact-checking, context analysis, and bias avoidance.

Teachers should encourage students not only to rely on technology but also to develop analytical skills and journalistic ethics so that the news they write remains accurate, objective, and meaningful. Thus, the use of ChatGPT in the classroom must be accompanied by teacher supervision and critical discussions to ensure that students understand the limitations of technology and are able to produce quality news texts in accordance with journalistic standards.

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