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CRITICAL THINKING AND AI: A BOOSTER OR A DESTRUCTIVE FORCE IN LITERATURE TEACHING

Chahra BELOUFA *

ABSTRACT

The introduction of AI tools like ChatGPT, have made it feasible to develop new teaching methods and curriculum, encouraging a profound shift in the education sector. Teachers may easily construct a variety of exercises, lectures, and resources with ChatGPT. The consequences of ChatGPT on students' capacity for critical thought when examining a piece of literature worry the researcher. The effects of modern technology on students' ability to do well on exams are examined in this chapter. The study will shed important light on how to incorporate ChatGPT into the instruction of literature and highlight the value of critical thinking in education.

Introduction

The rapid progress of artificial intelligence (AI) has had a profound effect on numerous facets of modern life. There are worries that its widespread use may have negative effects on classroom instruction. For instance, do artificial intelligence (AI) tools threaten the pillars of humanistic education because of their disruptive character, or are they used to enhance literary instruction?

It is impossible to overstate the importance of developing a critical mind when reading literature. Literature's ability to mirror the human experience entices readers to investigate competing worldviews, delve deeply into intricate narratives, and broaden their worldviews. Analyzing, interpreting, evaluating, and synthesizing are all critical thinking skills necessary for a complete understanding of literary works. Students can develop their critical thinking, empathy, and an in-depth understanding and enjoyment of narrative power via close reading and analysis of literary works.

Students can engage with the themes, characters, and ideas provided by using these abilities in a critical way, which promotes intellectual development, empathy, and a sense of responsibility in the process a profound understanding of the power of storytelling. However, there are several advantages that AI technologies could provide for teaching literature. Teachers can devote more time to discussions and delivering individualized instruction when automated grading systems respond quickly. AI-enabled virtual assistants can provide students with quick access to information, facilitating research and improving their comprehension of literary works. Machine learning algorithms can examine massive amounts of literary content and reveal connections and patterns

* Arab Open University, c.beloufa@arabou.edu.sa

that could otherwise go undetected, enhancing literary analysis and interpretation.

In 2019, the Committee of Ministers of the Council of Europe supported a report on digital citizenship education that placed a significant focus on the integration of AI into the classroom:

"AI, like any other tool, offers many opportunities but also carries with it many threats, which makes it necessary to take human rights principles into account in the early design of its application. Educators must be aware of the strengths and weaknesses of AI in learning, to be empowered – not overpowered – by technology in their digital citizenship education practices. AI, via machine learning and deep learning, can enrich education ... By the same token, developments in the AI field can deeply impact interactions between educators and learners and among citizens at large, which may undermine the very core of education, that is, the fostering of free will and independent and critical thinking via learning opportunities ... Although it seems premature to make wider use of AI in learning environments, professionals in education and school staff should be made aware of AI and the ethical challenges it poses in the context of schools." (Council of Europe 2019)¹

Primer Artificial Intelligence, Human Rights, Democracy, and the Rule of Law issued by the UK's Alan Turing Institute (Leslie et al. 2021) characterizes AI systems as follows; it is based on the Ad hoc Committee on Artificial Intelligence (CAHAI) Feasibility Study of the Council of Europe.

"AI systems are algorithmic models that carry out cognitive or perceptual functions in the world that were previously reserved for thinking, judging, and reasoning human beings." (Leslie et al. 2021: 8)²

The phrase "artificial intelligence" was coined at a Dartmouth College workshop in 1956. Since then, AI has experienced "AI winters," or periods of tremendous interest and lofty expectations during which high standards were not met and financing all but froze up. Since the beginning of AI research, two concurrent methodologies have attracted attention. First, there is the "symbolic" approach to artificial intelligence, which focuses on knowledge engineering (encoding expert information) and the fundamentals of human thought, and produced "expert systems."

In recent years, there has been a growing convergence between literary writing and artificial intelligence (AI). The analysis and processing of literary texts is one area where AI technology has been used in literary creation (Hou et al.,

¹ Recommendation CM/Rec (2019)10 of the Committee of Ministers to member States on developing and promoting digital citizenship education, https://search.coe.int/cm/Pages/result_details.aspx?ObjectID=090000168098de08

² <http://rm.coe.int/cahai-2020-23-final-eng-feasibility-study-/1680a0c6da>.

2022; Omar, 2021). Based on thematic grouping and feature selection techniques, computational models and data mining techniques have been employed to analyze and categorize literary works (Omar, 2021; Omar, 2020). These methods have successfully extracted distinguishing features and produced trustworthy clustering structures (Omar, 2020). Additionally, AI has been used to translate literary works, yet difficulties still exist because it is challenging to effectively translate metaphors and cultural specifics (Almahasees, 2017). New avenues for comprehending and interpreting literary narratives have also become available because of the incorporation of AI in literary studies. People replicate events and experiences in their minds as they read literary narratives, according to eye-tracking studies, which suggest that readers simulate the events and experiences in the text (Mak & Willems, 2018). Additionally, AI has been used to examine how emotions are expressed in contemporary literary works, revealing information about the emotional impact of literary texts (Jing-Xia, 2022). AI has been employed in the field of talent acquisition in IT/ITeS firms, where AI technology is used to speed and improve the recruiting process, in addition to its applications in literary analysis (Pillai & Sivathanu, 2020). The adoption of AI technology in various contexts is an important topic of study, as it has the potential to transform industries and improve efficiency (Pillai & Sivathanu, 2020). However, the use of AI in literary analysis and interpretation raises ethical and legal concerns. It is crucial to think about issues like copyright protection and data dependability when dealing with literary works authored by AI (Wei, 2022). Another important consideration in AI's widespread adoption is how reliable its models and forecasts are (Ribeiro et al., 2016).

1. The Concept of Artificial Intelligence

AI is characterized as “the study of the computations that make it possible to perceive, reason, and act” or “the automation of intelligent behavior” (AI is characterized as the use this instead -the analysis of the algorithms that enable perception, reasoning, and behavior, or the automated performance of intelligent conduct|)³. However, in most cases and with specificity, AI is typically characterized as a non-human intellect that can mimic human mental abilities like pattern recognition, reasoning about others, strategizing, comprehending natural language (NLP), and adaptable experience-based learning⁴.

³ George F. Luger and William A. Stubblefield, *Artificial Intelligence: Structures and Strategies for Complex Problem Solving*, 6th ed., 2008; cf. also A. Barr and Feigenbaum, eds., *The Handbook of Artificial Intelligence*, vol. 2 (Stanford, California & Los Altos, California: HeurisTech Press and William Kaufmann, 1982).

⁴ Cf. Russell, & Norvig, 2009, one of the standard textbooks in the field

	Human Benchmark (H)	Rationality benchmark (R)
Intelligence as Thought Processes (T)	(T-H) Systems that think like humans (e.g. cognitive science) "The exciting new effort to make computers think ... machines with minds, in the full and literal sense" Haugeland, 1985 "The automation of activities that we associate with human thinking, activities such as decision-making, problem solving, learning ..." Bellman, 1978	(T-R) Systems that think rationally (logic/laws of thought) "The study of mental faculties through the use of computational models" Charniak and McDermott, 1985 "The study of the computations that make it possible to perceive, reason, and act" Winston, 1992
Intelligence as goal-oriented behavior (B)	(B-H) Systems that act like humans (Cf. Turing test; Winograd Schema Challenge) "The art of creating machines that perform functions that require intelligence when performed by people" Kurzweil, 1990 "The study of how to make computers do things at which, at the moment, people are better" Rich and Knight, 1991	(B-R) Systems that act rationally (rational agents) "A field of study that seeks to explain and emulate intelligent behavior in terms of computational processes" Schalkoff, 1990 "The branch of computer science that is concerned with the automation of intelligent behavior" Luger & Stubblefield, 1993

Figure 3: classification of several ai definitions, the theoretical basis, and some examples⁵

The following are a few samples of recent news stories:

- 2016

Lee Sedol, the reigning Go champion, was defeated at the Go board game by the AlphaGo computer program developed by Google.

It was predicted that computerized technology might not reach the level of defeating a human for another century at the highly sophisticated Go game after Garry Kasparov, IBM’s Deep Blue defeated a chess champion.

Tay, a new AI bot from Microsoft, was capable of learning from social media user behavior. Tay quickly morphed into a malicious troll who tweets derogatory remarks about women and makes fascist comments.
- 2017

Growing concerns emerged alleging that Facebook's AI systems had created their language, incomprehensible to humans. The programs were immediately terminated since these narratives played directly into fears about unrestrained AI.

Hanson Robotics' Sophia, a robot, received citizenship after speaking at a conven-

⁵ Adapted from Russell and Norvig, Artificial Intelligence: A Modern Approach., p. 5. The sources mentioned are R.E. Bellman, An Introduction to Artificial Intelligence: Can Computers Think? (San Francisco: Boyd & Fraser Publishing Company, 1978).; E. Charniak and D. McDermott, Introduction to Artificial Intelligence (Massachusetts: Addison-Wesley Reading, 1985).; J. Haugeland, ed., Artificial Intelligence: The Very Idea (Cambridge, Mass: MIT Press, 1985).; R. Kurzweil, The Age of Intelligent Machines (Cambridge, Mass: MIT Press, 1990).; George F. Luger and William A. Stubblefield, Artificial Intelligence: Structures and Strategies for Complex Problem Solving, 2nd ed. (California: Benjamin/Cummings, 1993).; E. Rich and K. Knight, Artificial Intelligence, 2nd ed. (New York: McGraw-Hill, 1991).; R.I. Schalkoff, Artificial Intelligence: An Engineering Approach (New York: McGraw-Hill, 1990). and Winston, Artificial Intelligence.

tion in Saudi Arabia.

2018	<p>Sundar Pichai, CEO of Google presented Google Duplex, an AI assistant capable of executing activities like organizing dinner reservations and whose voice was purported to be indiscernible from a human's.</p> <p>President Barack Obama was featured in a convincingly false video reading a speech that was being delivered by Jordan Peele, a comedian.</p>
2019	<p>Harish Natarajan, one of the top debaters in the world, was challenged by IBM's Project Debater to a discussion about funding for preschools. The judges declared Natarajan the victor after a contentious contest between man and machine.</p>
2020	<p>In a piece posted by The Guardian, GPT-3, an OpenAI language generator, claimed that humans should not view AI as a threat.</p> <p>Boston Dynamics just published a video of robots dancing to "Do You Love Me" by The Contours.</p>

Table 1: The Advancement of Artificial Intelligence⁶

2. The Significance of Critical Thinking in Literature Teaching

In his essay "What to Believe or Do," Robert Ennis described critical thinking as a thought process that is rational and introspective and is centered on determining how to act or what to believe (Ennis 1985, 46). A different way to characterize critical thinking is using reasoned and reflective thought to make wise decisions about beliefs and actions. The ability to think critically includes many different skills, including drawing conclusions, comparing, figuring out causes and effects, recognizing the impact of context on judgment, assessing the validity of sources, identifying overgeneralizations, separating facts from views, and employing many more techniques.

Critical thinking, according to Facione (2015), calls for both dispositions and cognitive abilities. A skilled critical thinker will be capable of truth-seeking, methodically, and curiously evaluating, appraising, inferring, and self-regulating a situation or problem that is presented. As a result, critical thinking has emerged as one of the abilities that students must develop in the current era (Saleh, 2019).

Bruce (2014) describes critical thinking as any evaluation and judgment made concerning a certain characteristic, item, or conduct within a certain sphere of human activity (p. 85). Furthermore, such judgments according to Tai et al. (2018) involve the assessments of the caliber of either one's creations or those of others. According to these viewpoints, in academic work, which is usually supported by evidence, critical thinking involves evaluating the quality of the

⁶ H. Sheikh et al., *Mission AI*, Research for Policy, <https://doi.org/10.1007/978-3-031-21448-6>

information that has previously been presented in past studies. to put it another way, authors must synthesize, evaluate, and build their positions on the knowledge offered in earlier studies. According to Wingate (2012), critical thinking is a necessary component of academic writing, which consists of constructing arguments based on evidence, which is a necessary element in writing for higher education.

Ennis (1989) described critical thinking as logical and reflective thought processes aimed at choosing our beliefs or actions, building on the premise that reflection is a component of critical thinking. Later, Paul (1996) asserted that developing critical thinking skills enables one to begin controlling the ideas that govern their lives. It is to think purposefully, carefully, and knowingly in ways that change who you are. It is to operate one's inner workings for the first time and to comprehend the "system" one is running. The goal is to create a mind that can be compared to a physically fit person's body. It is comparable to a talented dancer who can do any dance.

3. AI and Benefits in Education

Roll and Wylie (2016) argue that numerous disciplines have benefited greatly from AI over the last 25 years, such as technical advancements (VanLehn, 2011) and education (Heffernan and Heffernan, 2014; Koedinger and Corbett, 2006). According to Luckin et al. (2016), there are two instances in which Artificial Intelligence in Education (AIED) is used in real-world settings - to encourage student collaboration and enable personalized learning at scale. The AIED community has dedicated the past 25 years to developing platforms for education based on interactions that are just as successful as having a personal tutor (VanLehn, 2011). The most intriguing question from an educational standpoint is not if AIED will take the instructor's place or not, but rather how this technology can enhance and complement the role of the instructor.

With the emergence of new technologies being viewed as a panacea for the various issues related to education, teaching, and learning in classrooms worldwide, Howard Gardner (2000) cautioned against such a notion. With the advancement of technology, Sokolov proposed that educators could streamline the delivery of education through the concept of mass-customized education (Sokolov, 2001). According to Siegle (2004), the emergence of technology is transforming literacy itself. Therefore, it is crucial to conduct further research and studies to understand how technology impacts teaching and learning in education.

Several scholars have chosen to focus their studies on the "revolution" of HOTS (Higher-Order Thinking Skills) as well as the application of knowledge (Duan, 2012; Pecka, 2014). The correlation between technology and the improvement of higher-order cognitive abilities has been assessed (Mojica, 2010; Zenisky, 2014). For 7 months, Mojica studied the impacts of technology edu-

cation modules on the Marble Maze Challenge, Windows Movie Maker for Digital Storytelling, and Lego Mindstorms NXT Robotics System on the ability to think critically and analytically in 105 students in middle school's eighth grade in a New York City suburb. to determine the effects, the study employed The X Grade Level on the Cornell Test of Critical Thinking.

After conducting her research, she concluded that students' higher-order critical thinking abilities were unaffected by technology, regardless of their gender, age, or academic aptitude. However, the correlation between technology use and the improvement of higher-order cognitive abilities has not been well studied. Therefore, further investigation is necessary in this area. Educational organizations worldwide are promoting teaching and learning methodologies that utilize Benjamin Bloom's (1956) taxonomy of learning. Our curriculum guides have included these degrees of comprehension. Teachers rely on them frequently to stimulate student thought in the classroom.

4. Potential Dangers of AI in Literature Teaching

The use of AI in teaching literature could have far-reaching consequences. Using AI technology, there are many ways to enhance and maximize the learning process. It should be highlighted, nonetheless, that analysis of literature and human talents cannot be replaced by artificial intelligence. The following are some key ways that AI affects the teaching of literature: This category can include libraries, digital archives, and online repositories. AI algorithms can help with the classification and categorization of these texts to make it easier to find works, authors, or subjects. Intelligent coaching and individualized instruction: Intelligent teaching systems make use of artificial intelligence to give pupils customized feedback and direction while they engage with literary resources. These tools can evaluate pupils' responses, identify where they need assistance, and provide personalized advice on what to read or investigate next. Structure, style, and language of a text are examined and interpreted using artificial intelligence algorithms: The structure, tone, and language of a work can be examined using artificial intelligence algorithms, which can help students comprehend the author's methods and goals on a deeper level. Natural language processing (NLP) approaches can help analyze sentence structure, spot textual patterns, and spot literary devices. Artificial intelligence (AI) can give comments on students' written assignments and automate some grading processes. While artificial intelligence (AI) cannot completely replace human grading and feedback, it can lessen the workload on teachers by carrying out repetitious activities like checking for grammar and spelling problems, assessing the coherence of sentences, and providing input on how to write better.

Collaborative learning environments and facilitated discussions: AI platforms can support collaborative learning settings where students can debate ideas,

exchange interpretations, and provide feedback to promote communication and collaboration. AI algorithms can facilitate debates by emphasizing different viewpoints, summarizing arguments, and highlighting crucial points.

Virtual reality and immersive experiences can be enhanced by fusing AI with VR technology. This can enable educators to create immersive opportunities for students to discover the places, characters, and historical contexts of literature. Using virtual reality simulations, students can engage in an immersive and interactive experience that explores a specific cultural period, location, or historical era in the context of literature. Even though renowned theoretical physicist Stephen Hawking cautioned that AI may wipe out humanity, he was communicating through a very basic form of AI technology (Cellan-Jones 2014).

Spector separated Strong AI and Weak AI et al. in 1993. Strong AI features a program that is intended to take the place of a human-competent task, and weak AI features a program that tries to enable a person with less expertise to achieve higher levels of performance. Some research (Siau and Yang 2017; Zhang and Xie 2018) suggests that three distinct levels of artificial intelligence exist: superintelligence, general intelligence, and specialized intelligence. A computer that focuses on a small field is referred to as narrow AI, sometimes known as weak AI.

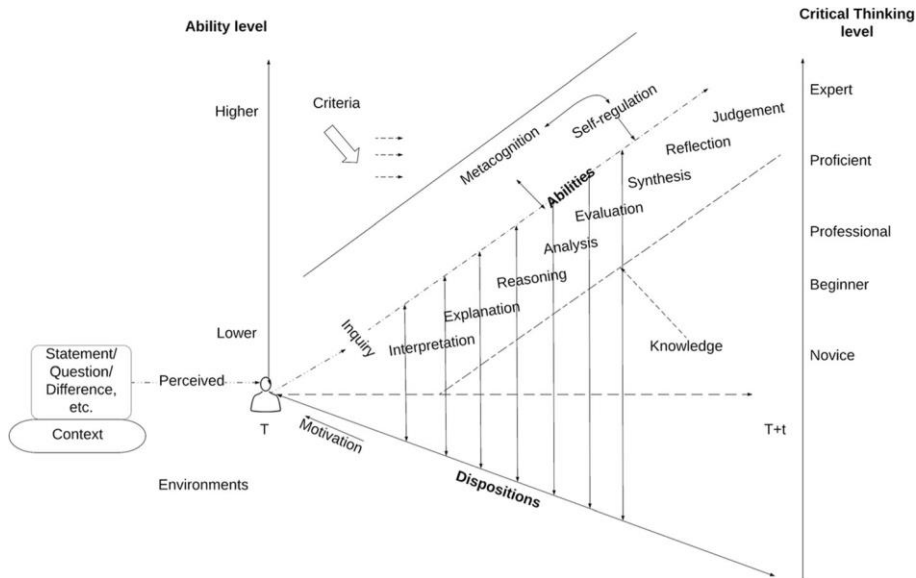


Figure 1: Critical Thinking Levels

It's crucial to take into account how AI might affect critical thinking and the growth of a critical mind. Although there are numerous benefits to using AI technology, there are also certain risks that might hinder critical thinking. Here are a few possible risks:

Algorithmic bias: AI systems are trained using data that has already been collected and may be biased. AI systems may reinforce and perpetuate existing biases if these biases are not addressed and reduced, limiting exposure to alternative viewpoints and complicating critical thinking. Making sure AI systems are impartial and inclusive during design and training is essential.

AI-powered algorithms frequently customize content and recommendations depending on users' tastes and behavior, creating echo chambers and filter bubbles. While this might enhance user experience, it can also cause echo users to be trapped in "chambers" and "filter bubbles," where they are only exposed to data and viewpoints that reflect their preconceived beliefs. Limiting exposure to competing opinions and viable arguments can limit exposure to other perspectives and impede critical thinking. Artificial intelligence algorithms may offer quick and automated answers to challenging issues. Oversimplification and superficial examination. They occasionally oversimplify problems and offer cursory analyses, though. Relying only on data and analysis produced by AI may deter people from conducting more in-depth studies and critical thought, which could result in only having a cursory understanding of difficult issues. **Loss of human judgment and intuition:** Artificial intelligence (AI) systems work by following preset algorithms and patterns. They lack the human capacity for contextual consideration, judgment, and intuition that humans frequently bring to critical thinking. An overreliance on information provided by AI without the use of human judgment can hinder the ability to think critically and independently, without relying on the opinions of others.

Reduced incentive for independent research: People may be less inclined to do independent research and investigations because of the ease with which information is made available by AI systems. There is a chance that people may become less willing to probe deeper, challenge presumptions, and perform extensive research if AI tools offer rapid answers and solutions, which could impede the growth of critical thinking abilities.

5. Chatgpt and Teaching Literature: Gaps in The Literature

There are several factors to consider when examining how ChatGPT and literary texts relate to one another. OpenAI's ChatGPT language model has drawn notice for its capacity to produce text that appears human-like in response to user inputs. The creation of literary writings is just one of the many applications that have resulted from this. The article, "Language Models are Unsupervised Multitask Learners" by Alec Radford et al. is one alternative source to understand ChatGPT's effects on literary pieces (2019). The GPT architecture is described in this study along with its performance on several linguistic tasks, such as text production and completion. It offers perceptions of the potential and constraints of language models like ChatGPT. The article "The Curious Case of Neural Text Degeneration" by Ari Holtzman et al. is another important

source (2019). This essay investigates the problem of generic and repetitive content produced by language models. The "neural text degradation" phenomena are discussed, and solutions to this issue are suggested. Understanding this issue is essential if you are thinking of using ChatGPT to generate literary writing because it can enhance the originality and quality of the output. Additionally, the use of variational autoencoders (VAEs) for producing coherent and varied phrases is explored in the study "Generating Sentences from a Continuous Space" by Samuel R. Bowman et al. (2016). In this research, a methodology for teaching VAEs to produce sentences is presented, and its potential applications in natural language creation are discussed. This work can offer insights into different strategies for producing literary texts considering the developments in language models like ChatGPT. It is beneficial to investigate literary works that have been produced by or affected by ChatGPT in addition to academic studies. One romantic novella that uses AI language models in its plot is "The AI Who Loved Me" by Alyssa Cole. This piece illustrates the use of ChatGPT in literary storytelling and poses concerns about the use of AI in the arts. Overall, one can obtain a thorough grasp of the relationship between ChatGPT and literary texts by looking at scholarly studies like those described above and investigating literary works that have been impacted by ChatGPT. This understanding can influence how people discuss how AI language models may transform literature and creativity.

A chatbot called ChatGPT that uses artificial intelligence has shown promise in a number of research areas. A study looked at ChatGPT as an example of how chatbots can be used in the classroom (Tlili et al., 2023). It has been used to help teach chemistry and with general chemistry exam questions (Clark, 2023) and in undergraduate chemistry labs (Humphry & Fuller, 2023). The field of medicine could be changed by ChatGPT by making nursing school focus more on intellectual and critical thinking challenges (Sun & Hoelscher, 2023). ChatGPT has been used in medical, dentistry, pharmacy, and public health education and has been considered for the future of medical education in the field of medicine (Feng & Shen, 2023; Sallam et al., 2023). However, there are also worries about the ethical standards and how using ChatGPT can compromise those standards in nursing practice, research, and teaching (Abdulai & Hung, 2023). The possible drawbacks of generative AI for education, including engineering education, must also be considered (Qadir, 2022). Overall, ChatGPT has the power to improve education by delivering individualized learning experiences, supporting lab work and exam questions, and altering the way some courses are taught. However, it is critical to address moral questions and be knowledgeable about the restrictions and dangers connected to its application in education.

ChatGPT functions as an AI language model within the larger field of machine learning (ML) and natural language processing (NLP). Its main purposes center on facilitating talks and providing information. However, ChatGPT has demonstrated its potential in several areas, including storytelling and creative writing. The ChatGPT's ability to work with human authors is one of its more exciting features. By offering suggestions or prompts, writers can interact with the AI model to discuss story elements, character development, and world-building. This collaborative partnership has the potential to yield original and innovative literary creations.

ChatGPT can be a valuable tool for aspiring authors to grapple with writer's block or challenging sections of their writing. It assists in generating stories automatically through a process known as automatic story generation. AI language models such as ChatGPT can be trained on extensive collections of literature to compose stories in specific genres or to mimic the writing styles of renowned authors. Although the quality of these artificially generated stories may not match that of literary classics, they still serve as engaging and enjoyable writing exercises.

However, the difficulties and ethical consequences of AI-driven writing must be considered.

Originality and Creativity: While ChatGPT aids in the creative process, concerns exist that excessive reliance on AI may stifle originality and creativity. It is possible that human imagination and thought may not be entirely original.

Plagiarism: Owing to the ease of generating text with AI, there is a risk of improper use, leading to plagiarism or the creation of derivative works without proper attribution.

False Information and Bias: ChatGPT may inadvertently generate prejudiced or erroneous information in its output if the training data used to construct it contains such bias.

Balancing human innovation and AI support is crucial in human-AI collaboration. AI should be considered as a tool to support and augment creative processes rather than as a replacement for human authors. While ChatGPT and AI language models have the potential to aid writers and increase literary creativity, their use must be approached with prudence, with an eye toward ethical considerations and the preservation of human creativity and originality. The literary world should welcome AI not to replace human creativity but to help it flourish via testing and refinement.

Artificial intelligence language models can also make books more accessible and make simultaneous translation easier. These services have the potential to increase the reach of works of literature and foster mutual understanding amongst people of different cultural backgrounds and linguistic backgrounds.

in addition, ChatGPT and other AI technologies can sift through libraries of existing works to unearth recurring themes, archetypes, and character traits that authors can use to hone their character creation processes.

Furthermore, the authors can leverage AI language models to receive immediate feedback on their writing, including suggestions for grammar improvements, tone adjustments, and enhancement of overall coherence. This streamlined editing process can produce high-quality products.

Wang, Li, Feng, Jiang, and Liu explored the use of AI-generated content to foster collaborative problem-solving and discovered that students' critical thinking and teamwork skills increased. One has engaged with ChatGPT in a different automated discussion about literary themes to check the quality of the response ChatGPT will provide and test its critical capacity. One has asked ChatGPT about pit strike sillitoe. ChatGPT did not recognize the author and the short story. He provided a limited answer that reflects bare knowledge. The answer is demonstrated as follows:

Prompt 1	ChatGPT response
pit strike Sillitoe	<p>It appears you have mentioned "pit strike" and "Sillitoe." You may be referring to a historical event or a specific individual.</p> <p>A "pit strike" could refer to a strike or labor dispute in a coal mine (pit), which has been a common occurrence in the history of mining industries. Workers often went on strike to protest working conditions, wages, or other labor-related issues.</p> <p>"Sillitoe" could potentially refer to a person's name or a specific context, however, without more information, it is challenging to provide a precise response. If you have a particular question or need more information about a particular topic related to "pit strikes" or "Sillitoe," please provide additional details, and I will do my best to assist you.</p>

Throughout the answer, we can remark that ChatGPT is generating guesses and that is one of its shortcomings that may occasionally produce misleading or incorrect information. ChatGPT answers that he does not have information on the topic.

Prompt 2	ChatGPT response
It is a short story	<p>Thank you for clarifying that you are referring to a short story. You may be talking about a short story titled "Pit Strike" written by a specific author named Sillitoe. However, I do not have information about every short story ever written, especially if it is relatively obscure or not widely recognized. If "Pit Strike" by Sillitoe is a specific short story you would like information about or have questions regarding its themes, characters, or context, please offer additional information, and I will do my best to assist you.</p>

To test further the responses of ChatGPT, the researcher prompted generative AI to provide information on another novel. These titles were inspired by the course syllabus at the Arab Open University, AA100B course which is a *Past and Present* course about different cultural topics, philosophies, and literary themes.

Prompt 3

ChatGPT response

In Cuba, I was a German Shepherd

"It Cuba I Was a German Shepherd" is a novel written by Ana Menéndez, a Cuban-American author. The book was published in 2001 and is a collection of interconnected short stories about Cuban immigrants in the United States, particularly in Miami. The stories give us a deep and often funny look at the problems and changes that happen when families and individuals leave their home country and settle down in a new one.

Prompt 4

ChatGPT response

What symbols stand for cultural displacement and identity in the novel?

Ana Menéndez's poem "In Cuba, I Was a German Shepherd" uses a lot of different images and patterns to talk about identity and moving from one culture to another. The following ideas are illustrated in the book using these images:

The Title: "In Cuba, I Was a German Shepherd" is a metaphor used in the novel to describe how Cuban immigrants' life alter after they arrive in the United States. For example, it asserts that becoming a new person (a German Shepherd) in a different society is like being a Cuban in one's own country (the United States). The mango tree in the family's Miami yard serves as a metaphor for much of the book. It is a link between the present and the past in Cuba. The fruit from the tree, which makes you think of Cuba, stands for sadness and a longing for your home country.

Cultural Antiques: A variety of cultural artifacts and items serve as markers of the protagonists' displacement from their own Cuba. These can be things like artwork, music, treasures from the past, and special dishes. These items act as concrete reminders of the cultural heritage of the characters and the sensation of loss they experience.

Language and Communication: Language serves as both a conduit to one's cultural history and a roadblock to assimilation in the book. The choice of language in a particular setting represents the identity of the characters and their attempt to communicate across cultural barriers. Characters frequently move between Spanish and English.

Names of Characters: Characters' names might represent their displacement and sense of identity. While some characters have Americanized names, others have traditional Cuban names, showing their attempts to blend into American culture.

The Ocean: The ocean serves as a metaphor for the protagonists' emotional and geographical separation from their native country, particularly the Florida Straits that divide Cuba from the United States. It stands for the risky migration process and being cut off from one's roots.

Cultural Traditions: The story depicts various cultural traditions as hallmarks of the protagonists' Cuban identity, including festivals, rituals, and customs. These customs frequently conflict with American culture, emphasizing the difficulties of cultural exile.

*Prompt: Make a lesson plan to teach *The Winter's Tale* by Shakespeare.*

ChatGPT's Response:

For both you and your students, developing a lesson plan to teach Shakespeare's "The Winter's Tale" can be rewarding. As "The Winter's Tale" is one of Shakespeare's later, more complicated plays, this lesson plan presumes that your pupils are at least somewhat familiar with Shakespearean language and concepts. An extensive lesson plan with several sessions is provided below:

Lesson Title: Exploring Shakespeare's "The Winter's Tale"

Grade Level: High School (10th-12th grade)

Duration: Five 60-minute sessions

Learning Objectives:

1. Analyze the plot, characters, and themes of "The Winter's Tale."
2. Understand the historical and cultural context of the play.
3. Develop an appreciation for Shakespearean language and its relevance today.
4. Perform selected scenes to enhance comprehension and engagement.

Materials:

- Text variations of "The Winter's Tale"
- Projector and screen
- Handouts with key passages and discussion questions
- Costumes and props (optional, for performance activities)

Session 1: Introduction to the Play (60 minutes)

Objective: to introduce the history and topics of the play to the class.

1. Start by having a quick conversation about William Shakespeare's importance in literature.
2. Give a summary of the play's plot and themes, which include time passing, forgiving others, and envy.
3. Discuss the cultural and historical contexts of the play's settings, Sicilia and Bohemia, using photos of the locations.
4. Assign reading homework for Act 1, Scene 1.

Session 2: Act 1 and the Theme of Jealousy (60 minutes)

Objective: Examine the jealousy theme in Act 1 in depth.

1. Recount Act 1, Scene 1 to get things started. Talk about the plot, the characters, and the function of jealousy.
2. Act 1, Scene 2's main portions should be read and examined. Discuss the effects of King Leontes' jealousy.
3. Assign reading homework for Act 2, Scene 1.

Session 3: Acts 2 and 3 - Perdita's Journey (60 minutes)

Objective: Explore Perdita's travels and the rural setting.

1. Review Act 2, Scene 1, pointing out the differences between Sicilia and Bohemia's pastoral environment.
2. Read Act 2, Scene 3, paying particular attention to Perdita's persona and her interactions with Polixenes and Florizel.
3. Discuss the themes of disguise and identity.
4. Assign Acts 3 and 4 as reading homework.

Session 4: Reconciliation and Forgiveness in Acts 4 and 5 (60 minutes)

Objective: Consider topics like forgiveness and reconciliation in the last acts

1. Recap Acts 3 and 4. Discuss the character growth and shifting dynamics.
2. Read and evaluate significant Act 5 passages with an emphasis on the "statue" scene and the idea of reconciliation.
3. Discuss the play's resolution and its implications.
4. Assign Act 5 as reading homework.

Session 5: Performance and Reflection (60 minutes)

Objective: Encourage your students to perform and reflect while reading the book.

1. Divide students into groups and assign each group a scene from the play.
2. Have groups prepare and perform their scenes in front of the class.
3. Encourage discussions about the themes, emotions, and character motives that were presented during each performance.
4. Finish by having the class discuss the play's timeless themes of redemption and forgiveness as well as its current relevance.

Assessment:

- Participation in class discussions and activities.
- Written reflections on the themes and character development in the play.
- Performance of assigned scenes (if desired).

With the help of discussion and performances, students will be able to interact with "The Winter's Tale" in this lesson plan's planned manner. It promotes a greater comprehension of Shakespeare's language and the eternal themes of the play.

Prompt: What rhyming scheme is used in Sonnet 18 of Shakespeare?

ChatGPT's response:

Shakespeare's Sonnet 18 uses the conventional English sonnet rhyme structure of three quatrains (four-line stanzas) and a final couplet (a two-line stanza). Sonnet 18's rhyme pattern is commonly written as ABAB CDCD EFEF GG. This indicates that the first and third lines of each quatrain rhyme with one another, as do the second and fourth lines. The last couplet rhymes with itself

and frequently offers a twist or resolve to the poem's central theme. The rhyming scheme for Sonnet 18 is as follows:

“Shall I compare thee to a summer's day? (A)
Thou art more lovely and more temperate:
(B) Rough winds do shake the darling buds of May, (A)
And summer's lease hath all too short a date: (B)
Sometimes too hot the eye of heaven shines, (C)
And often is his gold complexion dimm'd; (D)
And every fair from fair sometime declines, (C)
By chance or nature's changing course untrimm'd; (D)
But thy eternal summer shall not fade (E)
Nor lose possession of that fair thou owest; (F)
Nor shall Death brag thou wanderest in his shade, (E)
When in eternal lines to time thou growest: (F)
So long as men can breathe or eyes can see, (G)
So long lives this, and this gives life to thee.” (G)

The sonnet's structure, pace, and overall literary effect are all influenced by the rhyme scheme.

Prompt 1	ChatGPT response
Mona Ragab	I am sorry, but my training data do not have any precise information about a person called Mona Ragab. Please provide more context or facts if you have a query or require information regarding a specific Mona Ragab, and I will try to help you.
Prompt 2	ChatGPT response
I will try tomorrow a short story	Certainly! Anytime you want to talk about or continue working on your short tale, feel free to come back. I will be here to help if you need clarification, direction, or just someone to bounce ideas from. Good luck with your writing, and I look forward to assisting you with your short story whenever you are ready!

Prompt 3

ChatGPT response

I will try tomorrow is the title of the short story

Ah, I see! "I Will Try Tomorrow" sounds like an intriguing title for a short story. Titles play a crucial role in drawing readers in and setting the tone for the narrative. If you have any specific questions or need assistance with anything related to your short story, such as brainstorming ideas, developing characters, or crafting the plot, please feel free to share, and I'll be happy to help. Good luck with your writing, and I hope your story turns out great!

The limited answers provided by ChatGPT encourage one to think about further prompts. The limitations of ChatGPT can have the effect of engaging in a detailed conversation with it. This conversation awakens critical thoughts, where one would use a series of creative prompts and detailed questions to receive appropriate information. This is what I would call the counter-effect of ChatGPT. ChatGPT can be an effective tool for creating a literature course. One asked ChatGPT to Generate a lesson plan on Shakespeare's *The Winter's Tale*. ChatGPT's answer includes all elements of a lesson plan, which provides the lesson objectives, the level of students, the materials to be used, the duration of the course, and the topics to be covered in each lesson. Teachers can develop original literature discussion lessons using ChatGPT. It can also be used to design activities as highlighted below:

The Prompt: Design an activity for students on Jane Austen

Activity Title: "Jane Austen Character Collage"

Objective: The goal of this activity is to provide students with a deeper knowledge of the personalities, motives, and character development of the characters developed by Jane Austen in her novels. Critical thinking, creativity, and literary analysis are all encouraged by this practice.

Materials Needed:

1. Copies of the works of Jane Austen (e.g., "Pride and Prejudice," "Sense and Sensibility," "Emma," etc.)
2. Supplies for making art (colored pencils, markers, magazines, scissors, glue, poster boards, etc.)
3. Access to research resources at a library or on a computer

Instructions:

1. Introduction (15 minutes): Give students some background knowledge on Jane Austen, her life, and her contributions to English literature at the start of the activity. You might also briefly go over the themes and traits that recur in her books, like socioeconomic class, marriage, and women's roles.
2. Character Choice (15 minutes): Depending on class size, divide the students into small groups or let them work alone. Each group or student should select one character to analyze from a Jane Austen book. to ensure

that the class discussions are diverse, encourage them to choose characters with a range of characteristics and backgrounds.

3. **Character Assessment (30 minutes):** Give students the assignment of re-researching the character they have chosen. They should read the pertinent chapters, make notes on how the character behaves, develops, and changes throughout the narrative, and consider how the character interacts with other characters.
4. **Establish a Character Collage (45 minutes):** Give the students art supplies and a collage-making lesson to help them visualize the figure they have chosen. To illustrate the character's look, personality features, and crucial passages from the novel, students can utilize periodicals, sketches, or printed photos from the internet. Encourage artistic expression and inventiveness.
5. **Presentations (20 minutes):** Have each group or student present their character collage to the class. During the presentation, they should discuss:
 - The character's name, novel, and author.
 - A summary of the character's role in the story.
 - The character's personality traits, values, and flaws.
 - Any significant character development or changes throughout the novel.
 - How the character contributes to the overall themes of the novel.
6. **Group Discussion (15 minutes):** After each presentation, facilitate a class discussion by asking questions like:
 - How does the character's personality align with the social norms and values of the period?
 - What challenges or conflicts does the character face in the story?
 - How does the character's journey contribute to the novel's themes?
 - Are there any similarities or differences between characters from different novels by Jane Austen?
7. **Conclusion (10 minutes):** Wrap up the activity by summarizing key insights and takeaways from the character analyses. Encourage students to reflect on the universality of human traits and the enduring relevance of Jane Austen's characters in today's society.

The ChatGPT provides a rhyme scheme for poems. We asked ChatGPT to provide us with the rhyme scheme of Shakespeare's *Sonnet 18*. ChatGPT has generated a full sonnet with ending rhymes, further explaining the sonnet's typical form. ChatGPT for teachers of literature is a tool that fosters creativity, with a human prompt and original questions; it can generate creative activities on literary analysis, character analysis, studying rhyme, literary text style, or prosody, enriching critical perspectives of teachers. For students, ChatGPT can

diminish their creativity if they rely solely on its generated content. When we asked ChatGPT to provide the themes mentioned in the novel *Cuba I Was a German Shepherd*, ChatGPT highlighted key themes in the novel. Students can use these themes to develop a coherent piece of writing. Students should be directed by their teachers to the knowledge and use of ChatGPT. It shall not feed students' thinking; on the contrary, it must raise their capability to criticize the information generated by asking, comparing, and further researching the validity of the information. Rudolph, Tan, and Tan recommended using the flipped learning strategy, which requires students to prepare for courses by studying pre-class materials utilizing ChatGPT. This method allows for more practice and discussion in class.

Ethical Integration of AI in Literature Classroom

Through the ethical integration of AI, learning experiences in the literature classroom can be considerably improved, encouraging increased engagement with literary texts. However, it is important to approach this integration with a strong sense of wisdom and accountability. Here, we lay out a detailed strategy for incorporating ethical AI into literature classes.

The guiding principles of this integration are, first, openness and permission. It is crucial to give students clear explanations of how AI tools are used in the classroom, explaining the goals, potential, and constraints of the technology. Students should also be asked for their approval after being fully informed of the potential uses of their data and given assurances of strong privacy safeguards.

In the classroom, AI can be used as a potent tool for analysis and study. AI can dramatically improve processes like text analysis, summarization, and sentiment analysis. With the help of these resources, students can better understand and analyze complex literary texts, developing their critical thinking and understanding of literature.

AI can also be used to support individualized learning. Reading assignments or conversation topics can be customized to the unique interests and academic levels of each student using artificial intelligence (AI). As a result of this customization, which acknowledges and respects the different learning preferences and styles of its pupils, engagement with the subject matter is increased.

It is crucial to stress that AI should be used as a tool, not as a substitute for communication and guidance from humans. AI's role in education is to enhance and support learning, fostering a richer learning environment where technology enhances rather than replaces the crucial function of teachers.

Ethical considerations are paramount in the ethical integration of AI. to protect the privacy of students' data, strong data security measures must be adopted. Moreover, it is imperative to prohibit the disclosure of student data

or personal information to third parties without explicit permission, ensuring the utmost protection of students' sensitive information.

Bias mitigation is another critical aspect of this integration. Recognizing and acknowledging potential biases in AI algorithms, particularly those influenced by gender, ethnicity, or cultural preconceptions, is vital. Encouraging students to engage in discussions regarding how AI-generated content relates to the literature they are studying and to critically evaluate it for bias fosters a nuanced understanding of this aspect.

Furthermore, responsible AI development should be a subject of discussion in literature classes. Engaging students in conversations about the ethical considerations and responsibilities of AI developers and users provides them with a broader perspective on the societal implications of AI, not only within literature but also in wider contexts.

Teaching digital literacy is integral to this integration. Incorporating digital literacy skills into the curriculum ensures that students are well-informed about AI, its applications, and its ethical implications. Equipping students who can evaluate and question AI-generated content and interpretations empowers them to be critical thinkers in the age of AI.

Feedback mechanisms should also be established to allow students to offer input on the use of AI in the classroom, both positive and negative. This feedback serves as a valuable resource for refining and improving the integration of AI in future classes, making it an evolving and student-centric process.

Finally, continuous ethical reflection is encouraged. Ongoing conversations and reflection on the ethical implications of AI in literature education foster an ethically conscious culture. Staying updated on evolving ethical guidelines and best practices in AI education ensures that the integration remains aligned with ethical standards.

Conclusion

To promote critical thinking in classrooms, literature teachers can adhere to a comprehensive set of guidelines. First, they should acquire a thorough understanding of AI capabilities and limitations before integrating AI tools into their teaching methods. This understanding encompasses knowledge of various AI tools available for literature analysis, such as sentiment analysis, text summarization, as well as natural language processing. Next, educators should be discerning in their choice of AI tools, opting for those sourced from reputable providers with a record of accomplishment of accuracy and ethical standards, and ideally, tools tailored for literary analysis.

Moreover, teachers should emphasize to their students that AI serves as a supplementary aid rather than a replacement for human interpretation, encouraging students to regard AI-generated insights as one perspective among

many. Critical evaluation of AI-generated insights is paramount, and students should be trained to scrutinize the quality and relevance of AI-generated analyses or interpretations, engaging in discussions regarding potential biases and limitations inherent in AI algorithms. An interdisciplinary approach is encouraged, fostering discussions that integrate AI tools with other subjects like ethics, computer science, or data literacy to provide a holistic perspective on AI's impact on literature.

Additionally, it is essential to explicitly define learning objectives tied to critical thinking when employing AI tools, clarifying how AI contributes to achieving these objectives alongside traditional literary analysis methods. Classroom discussions should be fostered, where students are expected to communicate their viewpoints on AI-generated insights, promoting healthy debates and allowing students to challenge AI-generated interpretations. Furthermore, hands-on experiences should be offered to students, granting them the opportunity to use AI tools themselves, which can enhance their understanding of algorithms and limitations, leading to more informed discussions.

Ethical considerations should also be incorporated into the curriculum, encompassing debates on the ethical implications of AI usage in literature analysis, including privacy, bias, and the responsibilities of AI developers. Collaborative learning projects are advocated, where students collaborate in teams to analyze literature using AI, thus promoting diverse perspectives and critical thinking. Teachers should reflect on their pedagogical approaches, considering new methods or strategies that align with the incorporation of AI in the literature classroom and adapting their pedagogy as needed.

Furthermore, feedback mechanisms should be put in place to allow students to submit feedback on their experiences using AI tools in the literary classroom, allowing for the improvement of techniques in future courses. Continuous vigilance and staying updated on AI advancements in literature analysis are imperative, including attending conferences, reading relevant literature, and engaging with the AI research community.

Respect for student privacy is essential and should ensure that any data collected during AI-powered activities respects students' privacy. Clear communication should be maintained regarding how their data will be used, with their consent sought when necessary. Finally, teachers should encourage students to think about the ethical use of AI outside of the classroom, emphasizing responsible AI use and decision-making in real-world circumstances. By diligently following these guidelines, literature teachers can effectively harness AI tools to enhance critical thinking skills, all the while fostering ethical awareness and responsible AI use among their students

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