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Does ChatGPT foster academic misconduct in the future?

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Abstract

Purpose – This paper analyzes the ethics of integrating Artificial Intelligence (AI), particularly regarding AI-generated educational content in academia. It attempts to explore how AI customization mimics human interaction and behavior in education, investigate ethical concerns in educational AI adoption, and assess ChatGPT's ethical use for nurturing curiosity and maintaining academic integrity in education.

Design/methodology/approach – Fictional tales may help us think critically and creatively to uncover hidden truths. The narratives are analyzed to determine the affordances and drawbacks of Artificial Intelligence in Education (AIEd).

Findings – The study highlights the imperative for innovative, ethically grounded strategies in harnessing AI/GPT technology for education. AI can enhance learning, and human educators' irreplaceable role is even more prominent, emphasizing the need to harmonize technology with pedagogical principles. However, ensuring the ethical integration of AI/GPT technology demands a delicate balance where the potential benefits of technology should not eclipse the essential role of human educators in the learning process.

Originality/value – This paper presents futuristic academic scenarios to explore critical dimensions and their impact on 21st century learning. As AI assumes tasks once exclusive to human educators, it is essential to redefine the roles of both technology and human teachers, focusing on the future.

Keywords Artificial Intelligence in Education (AIEd), Academic innovation, Academic misconduct, Generative pre-trained transformer (GPT), Ethical practice

Paper type Research paper

Introduction

Machine mimicry

The field of Artificial Intelligence (AI) spans various academic disciplines with deep philosophical foundations (Cao, 2023). Evolving over time, the impact of AI on 21st-century human ecosystems is profound. The term "artificial intelligence" originated from the question of whether computers can engage in abstract thinking (Turing, 1950, pp. 436) and spontaneously generate new ideas. Asimov (1942) introduced the Three Laws of Robotics, addressing independent devices like robots. Turing's (1950) imitation game assesses a computer's capability for intelligent behavior, comparable to or distinct from humans.

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McLuhan (1962) argues that all technology adapts to human beings. Internet networks and AI can be viewed as extensions of human neurons and brains. The theoretical perspective of social constructivism, emphasizing cultural and social components in human perception and relationships, could be introduced after addressing McLuhan's (1964) belief. This approach aids in understanding the influence of AI on human habitats and the evolving connection between AI and humans.

However, the widespread use of AI technology raises concerns about the potential merger of human and artificial intelligence (Kaur and Kumar, 2022). The fields where AI increasingly replaces human labor include copywriting, the media, accountancy, and legal advice (Lane, 2023). Since the earliest digital AI, educators have worried about losing their employment (Selwyn *et al.*, 2021). These days, (Diebold, 2023, p.1, para. 2) "some instructors fear that producing papers or answering homework problems by AI may become undetected", letting students go on with their education and get diplomas based on content that is not technically accurate. AI-powered language models like ChatGPT are widely available, and some professors fear that students may use them to write essays, reports, or homework responses without acknowledgment. In higher education, students may engage in unethical actions due to academic pressure.

AI-driven cheating has become a concern in performance-driven education systems like that of India (Ananthakrishnan and Collins, 2019). Students may utilize AI language models to cheat on tests and assignments. In an effort to safeguard the learning process, instructors and educators in the field are actively working to identify and eliminate AI-generated material. European colleges and schools use AI-based plagiarism detection software to combat academic dishonesty (Lukac and Lazareva, 2023). Students may discover ways to submit AI-generated material unnoticed as AI language models improve. EU policymakers are considering measures to modernize academic integrity regulations and protect against AI-powered cheating (Renda, 2019; Holmes *et al.*, 2022). AI for academic dishonesty is a significant worry in South Africa because education helps solve social problems and boosts the economy. As AI language models become more accessible, students may be inclined to utilize AI-generated material for examinations, assignments, and other evaluations, drawing a parallel with the increasing reliance on digital tools and resources in academic settings. This might damage education's credibility and learning results. "Academy misconduct" sums it up perfectly. Should we exclude AI and other cutting-edge technologies from the classroom if they are expected to become more prominent in the workplace as part of the fourth industrial revolution?

Ethical dilemma

The emergence of ChatGPT and AI technology blurs the lines between real-time human thought processes and machine capabilities. Advanced AI language models can replicate human language and behavior convincingly, challenging our ability to distinguish between human and AI-generated content. Chatbots in customer service, some of which are highly advanced, can interact with clients without them realizing they are conversing with AI.

AI-based deep fake technology further complicates the issue by creating lifelike videos of people saying or doing things they never did, casting doubt on the authenticity of video evidence. AI systems are also capable of producing human-like creative works in writing, poetry, music, and visual art, leading to debates about authenticity and originality. In the medical field, AI-assisted diagnostics sometimes outperform human diagnoses, adding complexity to the ethical considerations surrounding AI applications.

To sum up, GPT is a model of artificial intelligence that uses guided and reinforced training to replicate the structure of natural and artificial languages (OpenAI, 2022). Although ChatGPT translates written language into spoken language, other AI models may

use visual, auditory, or aural data and written language (e.g., Midjourney, DALL-e, You, Whisper). Search engines for the internet (like Bing) and text editors (like ProWritingAid's Rephrase function) have included ChatGPT.

Even if it is becoming more frequent, using AI in classrooms is still controversial. As knowledge of and concern about these technologies enter the mainstream, the discussion has broadened to include more than only educational technologists. The public may download ChatGPT and a suite of related programs, all freely accessible and straightforward in various languages. With growing public and professional curiosity in AI, this research sought to investigate both optimistic and pessimistic imaginings of the future of education to improve teaching practices and prevent dishonesty and misconduct in the classroom.

This study delves into the ethical considerations surrounding the integration of artificial intelligence (AI) in education, with a specific focus on AI-generated educational materials and the maintenance of academic integrity. The exploration encompasses ethical concerns associated with tailoring AI to replicate human behavior and communication within educational settings. The study also scrutinizes ethical implications and scepticism surrounding the presence of AI in classrooms, with particular attention to major corporations. Additionally, it investigates the ethical utilization of AI technologies, such as ChatGPT, to foster intellectual curiosity and uphold academic integrity within educational institutions.

Literature review

Humanistic integration

The introduction of AI into the classroom is a result of various factors, including advancements in processing power, digital infrastructures, the widespread availability of vast datasets, and the evolution of practices, innovations, and algorithmic research within Artificial Intelligence in Education (AIEd). While AI technologies have a historical presence, a notable surge in research occurred in the 2000s (Tang *et al.*, 2021). Over the past three decades, AIEd studies have proliferated, exploring analytical and forecasting tools (Dogan *et al.*, 2023; Crompton *et al.*, 2022), analytics for learning (Pelletier *et al.*, 2021), and digital transformation plans (Brown *et al.*, 2020a, b; Bhalerao *et al.*, 2022). Research indicates that AIEd has the potential to enhance student actions, engagement, and motivation (Ventura, 2018).

Technology dependency

Systematic research reveals that AI technologies are predominantly employed in classrooms for predicting learner outcomes and behaviors, personalizing the learning experience, creating adaptive learning environments, improving academic performance, and supporting better health facilities (Ouyang *et al.*, 2022; Kumar *et al.*, 2021). Higher education literature on AIEd emphasizes intelligent teaching structures, adaptive systems, summarization and forecasting, evaluation, and assessment as the most practical areas of study. Similar affordances were found in a recent K-12 literature examination conducted by Crompton *et al.* (2022). Various applications illustrate the creative use of AIEd in classrooms, such as employing AI to enhance modeling methodologies, visualization, and collaborative learning. In an innovative approach, students take on the role of teachers, instructing a tool that simulates a beginner learner. The theoretical basis of ethical implications of AI after outlining worries about unforeseen bad results, uncertainty about AI, and the necessity to deal with data privacy and moral concerns. It is important to stress the importance that ethical concerns play in safeguarding academic integrity, maintaining

the trustworthiness of educational institutions, and promoting the responsible deployment of artificial intelligence.

Technology adoption

In the realm of educational technology, the adoption of new technologies, such as Artificial Intelligence (AI), is intricately influenced by institutional, cultural, and societal factors. A holistic understanding of these technologies within the context of our social, cultural, educational, and organizational settings is imperative to mitigate unintended and potentially detrimental outcomes. The acceptance of certain adverse consequences in the pursuit of technological advancement has been acknowledged in the literature (Farrow, 2023). Numerous challenges may arise from the adoption of AI in schools, emanating from factors such as scepticism surrounding artificial intelligence, a scarcity of technologically proficient educators, ethical considerations, and difficulties in the practical implementation of technological solutions (Crompton *et al.*, 2022). Prior to the full-scale integration of AI technology, scholars have advocated for addressing concerns related to data privacy, ownership, and ethical considerations (Humble and Mozelius, 2022). Another area of worry is the growing influence the educational institutions the giant companies such as ed-tech have over, and by extension, their students and the employees they serve. It is particularly true when companies utilize data collected from their employees and students to improve and expand their usage of artificial intelligence (for instance, in Higher Education, the use of identifying plagiarism) (Crompton *et al.*, 2022). Descriptive studies abound, and interesting AIEd research is essential.

ChatGPT perception

Tlili *et al.* (2023) conducted a comprehensive examination of ChatGPT from a pedagogical perspective. Their three-stage case study revealed that, despite some dissenting voices and advocates urging caution, the general public discourse on the utilization of ChatGPT tends to be predominantly positive. Tlili *et al.* (2023) posit that the effective utilization of AI-enabled tools necessitates a novel educational approach. They advocate for the inclusion of AI literacy as an essential 21st-century technical skill, emphasizing the development of ethical and personable chatbots alongside the enhancement of digital literacy skills (Ng *et al.*, 2022). In response to concerns surrounding issues such as cheating and inappropriate use, Cotton *et al.* (2023) underscore the paramount importance of academic integrity and honesty. They advocate for the establishment of new regulations and procedures to ensure the ethical and responsible deployment of AI technologies in educational settings. Echoing these sentiments, Tate *et al.* (2023) issue a cautionary note about the potential upheavals associated with the integration of AI in education. They call upon researchers, educators, and legislators to proactively implement measures that mitigate unintended consequences and safeguard the integrity of the academic community. Zhai (2023) contributes to the discussion by emphasizing the necessity for innovative evaluation methodologies that prioritize creativity and critical thinking. This emphasis is particularly relevant in domains where artificial intelligence may not serve as a comprehensive substitute. Zhai contends that pre-trained AI systems inherently reflect the biases, attitudes, preconceptions, or ideologies of their creators and input suppliers. Consequently, he cautions against the assumption that such systems universally function effectively, asserting that no pre-trained AI system can cater to the needs of all users (Gault, 2023). Thus, authoritarian governments must ban this technology for conformity training and teaching unintended notions to pupils.

AI imaginations

In response to the heightened interest, concerns, and inherent ambiguity surrounding ChatGPT, the objective of this investigation is to engage in speculative discourse, utilizing fictional scenarios to contemplate potential outcomes. The aim is to stimulate contemplation on AI in a broader context, with a specific focus on generative AI, by envisioning the AI continuum at both extremes. This approach allows for exploration of the nuanced areas and diverse tones within the AI landscape. Beyond the presentation of empirical facts, the intention of this work is to provoke intellectual and critical responses, contributing to an enhanced understanding and inquiry into the implications of generative AI.

Academic integrity

ChatGPT has undergone a transformative impact on higher education, significantly influencing academic integrity. While it has the potential to enhance educators' self-esteem and academic self-efficacy, concerns about academic integrity have concurrently emerged. The dual role of ChatGPT as both an educational empowerment tool and a potential facilitator of academic misconduct underscores the intricate relationship between technology and academic integrity. The side effects of AI-driven technologies, exemplified by ChatGPT, may give rise to issues such as plagiarism and dishonesty, thereby undermining academic integrity, equity, and confidence. Consequently, an in-depth examination of ChatGPT's impact on academic misconduct in higher education becomes imperative. Cope *et al.* (2021) have acknowledged the influence of ChatGPT on academic dishonesty in higher education. The literature emphasizes the need to investigate ChatGPT's dual role in academia, acknowledging its capacity to alleviate teaching and learning burdens while simultaneously raising concerns about plagiarism and academic impropriety (Cotton *et al.*, 2023). Recognizing the moderating effect of academic integrity on ChatGPT use is crucial (Holden *et al.*, 2021), as previous research establishes the profound influence of academic integrity on academic conduct (Cerda-Navarro *et al.*, 2022). Consequently, further research is warranted to comprehend how ChatGPT specifically impacts academic misconduct in higher education.

The existing discourse surrounding AI's integration into human life, particularly within the educational domain, has been well-explored. However, the issues and ramifications specifically associated with ChatGPT have not received commensurate attention. Notably, the discussion briefly touches upon AI-driven cheating and ethical considerations without engaging in an in-depth analysis. Additionally, the current discourse fails to assess the present state, limitations, and educational applications of AI in education. This research gap is indicative of a need for a dedicated study that comprehensively addresses the specific challenges and implications posed by ChatGPT. Such a study would be instrumental in filling existing knowledge gaps and providing a more nuanced understanding of AI's influence on education.

Methodology

The methodology adopted in this study has been thoughtfully selected to serve a specific research objective within the domain of AI in education. The narrative approach was chosen to conduct an in-depth examination of potential future scenarios related to the integration of AI in educational environments, encompassing both positive and negative outcomes. Employing this narrative methodology allows for a comprehensive exploration of innovative and imaginative cognitive processes, enabling the consideration of unconventional concepts and scenarios that may pose challenges to conventional methodologies. Furthermore, it engages the reader by establishing a deeper connection, enhancing their comprehension of

and connection to complex ethical dilemmas. The utilization of a narrative storytelling format in this context brings to light latent desires and concerns, facilitating a thorough exploration of the ethical, philosophical, and moral implications associated with the integration of AI in education. In summary, this approach promotes inventive cognition, encourages hypothetical inquiries, and facilitates interdisciplinary dialogues, thereby augmenting the depth and breadth of the investigation into the ethical dilemmas posed by AI technology in educational settings.

Imaginative narratives

Exploring potential future situations and orientations is a strong use of speculative approaches. Stories help us make sense of the future even as they keep us firmly planted in the here and now. The ability to think critically and beyond the box is one of the benefits of using our imaginations. Because of fictional tales' inherent originality and adaptability, a theoretical approach allows us to think creatively and, in many circumstances, observe phenomena outside of an echo chamber. Fictional stories also help illuminate hidden desires and apprehensions.

Creative forecasting

Using fiction as a prediction tool is a speculative technique that promotes out-of-the-box thinking (Houlden and Veletsianos, 2022). Marenko (2018) characterized it as a methodological process encompassing forensic, diagnostic, and divinatory dimensions. This process explores alternative discourses, acknowledging their comparable influence in shaping reality, constructing futures, and exerting tangible impact. Particularly useful for envisioning, crafting speculative futures, and prompting innovative perspectives, the speculative methodology is instrumental in visualizing and critically examining the potential nature and consequences of various complexities and boundaries within the context of fictional storytelling (Ross, 2017). Further creative and original applications of this technique may be found in several sources (e.g., Suoranta *et al.*, 2022; Kupferman, 2022; Hrastinski and Petar, 2023).

Diverse perspectives

In order to integrate diverse thoughts and strands of thinking into a unified framework, a collaborative writing technique was employed in the composition of this work (Jandrić *et al.*, 2023, p. 2), several additional excellent instances of collaborative writing exist. Studies that used a group to write one or more publications include those on the COVID-19 pandemic, education networks, and online learning and teaching (MacKenzie *et al.*, 2022). We tried to recruit a diverse set of writers from various cultural and economic backgrounds for this research. The goal was not to get writers to write about their own experiences but to represent various perspectives within a particular environment.

Language dynamics

ChatGPT and similar AI agents exhibit a notable capability in emulating human behavior, treating language as a soft technology integral to humanity's myriad accomplishments. It is noteworthy, as emphasized by Sharples and Pérez (2022), that language, one of the most dynamic and flexible soft technologies, predates narrative development. This observation serves as a foundation for a more nuanced understanding of the potentials and limitations inherent in conversational AI bots and the uncertain trajectories that may unfold. Viewing conversational AI bots as characters in our self-narrated tales facilitates a more comprehensive exploration of the "what if?" scenarios and the nuanced grey areas

between optimistic and pessimistic visions of potential futures. To delve into this exploration, each author intentionally contributed two works of fiction—one optimistic and one pessimistic—fostering an examination of divergent possibilities. This approach, designed to stimulate originality and mitigate peer influence, ensured that authors had no prior exposure to their colleagues' works in progress. In addition to the contributions from human authors, a narrative generated by ChatGPT is included. However, it is imperative to recognize ChatGPT as an AI-powered tool, acknowledging the contentious nature of considering AI technology as co-authors, as discussed by (Lin, 2023). This underscores the challenge of assigning due credit to AI-powered technology in the collaborative creation of narratives. Importantly, the objective of this endeavor is not to seek unanimity but to foster a thought experiment that encourages cross-disciplinary discussions and serves as a catalyst for critical inspiration among academics. The emphasis is on stimulating diverse perspectives and enriching interdisciplinary dialogue.

Intellectual exploration

Both benefits and drawbacks are acknowledged in the article. The study's most significant strength is its ability to examine the topic critically. Using theoretical methods is a novel strategy that goes beyond the constraints of traditional academic works and improves our understanding of the whole range of AI and the subtleties between its extremes. This study may need to generalize or give a complete picture. Instead, thinking about the pros and cons of AI technology is an excellent mental workout. Proper care is taken for the correctness of the idea; readers should be aware that the author's opinions may impact the ideas expressed here and may include prejudices.

Results and discussions

This article employs a consortium of global experts to present two prospective scenarios, delineating both positive and negative consequences of generative AI tools, exemplified by ChatGPT and similar conversational AI models. The prevailing consensus among these expert accounts suggests that such tools may transcend their role as passive instructional aids, extending their utility to encompass various purposes. These include facilitating knowledge access and growth, eliminating language barriers, promoting language skills, fostering lifelong learning, and influencing educational decision-making and creative inspiration. (McLuhan, 1962), which are occurring across the board in the educational sector and, indeed, across society. Nonetheless, the researcher's knowledge means that the stories substantially affect classroom practice.

Despite these optimistic projections, the researcher's insights indicate a substantial impact of these narratives on classroom practices. A common theme permeates the positive speculative future stories—the imminent and ongoing transition. The educational institution that is well-established and existing might confine the positive part of artificial intelligence in instruction, so there needs to be (1) a significant transition in education; (2) a redefinition of AI and human positions and corresponding possession in education; and (3) responsible utilization AI to ensure a maximum academic achievement.

Concerns about the future's potential and our natural aversion to the unknown give rise to several dystopian scenarios in negative speculative future tales. AI technology is changing information and communication, and global education requires new literacies. There are also worries about data ownership, privacy, and ethics. Consistent with these concerns, subsequent tales typically referred to the need for academic honesty and integrity. The future may rely on training data sets; however, some speculative storylines brought up the possibility of coded bias, indicating concerns about the information's validity. Questions such

as "Who trains AI models?", "Who determines right and wrong?" and "Who dictates what is good and evil?" arise from this perspective. Such a robust tool might manipulate the educational environment and even world civilization. These worries stem from the possibility that living under constant surveillance may become the norm in our culture. Several hypothetical future scenarios elaborate on the problem of shallow and inauthentic learning caused by a scarcity of diverse information sources. Primary concern includes a decline in inventive writing and a need for more variety and creativity. After any probable future, it seems reasonable to wonder: How much are the combined results of humans and AI worth?

Furthermore, we must consider potential educational responsibilities associated with learner agency and teaching authority. Teachers should not be Luddites because they worry that AI could make schools too robotic (Viljoen, 2021). Lastly, the offered hypothetical cases center on issues like the generation gap and the knowledge gap, as well as worries about inequality and injustice in technological access, solutions that are too focused on technology, and related themes. Previous studies made some of these assertions, and the stories may be more instructive and thought-provoking. It addressed concerns about ethics, privacy, and data ownership, and Cotton *et al.* (2023) addressed academic integrity issues.

Advances in artificial intelligence may need new approaches to teaching and learning based on different epistemological and ontological tenets. If teachers are well-versed in the latest and greatest in educational pedagogy, technology, and practice, as well as the new literacies necessary to effectively employ AIEd and other cutting-edge tools of the future, they will be in a better situation to do so (Ng *et al.*, 2022). Nonetheless, every advancement involves risks and drawbacks. Examples include how ethics and privacy have never been more at risk than in today's surveillance society. Before initiating any major project, one must carefully analyze and comprehensively resolve the commoditization of AIEd.

Removing injustice and discrimination is also crucial for the development of AIEd. When used fairly, AI can improve educational opportunities for all students. When governmental apparatuses or other groups use this for political or ideological indoctrination, the results may be devastating (Selwyn *et al.*, 2021). The question of how to make AI available to everyone has been and will continue to be a significant concern for governments throughout the globe. In order to prevent the stagnation of societal dynamics under the influence of risk-averse artificial intelligence entities, commonly referred to as "neophobic, conservative AI overlords" proactive measures are imperative. It is crucial to safeguard against the potential adverse effects of AIEd, which has been identified for its inclination to uphold and perpetuate prevailing norms and dominant inclinations that reinforce the existing status quo (Gault, 2023).

Utilizing collaborative fiction, a global cohort of participants engaged in an exploration of potential futures for ChatGPT and generative AI. Optimistic accounts from collaborators underscored the promise of conversational AI agents as efficient teaching tools. Conversely, cautious narratives emphasized the imperative to address significant concerns prior to widespread adoption. These diverse narratives underscore the nuanced, intricate, and context-dependent nature of incorporating AI in education. Beyond the delineation of advantages and disadvantages, a fundamental question persists at the heart of these discussions—the implications for human identity and agency as computers assume tasks traditionally carried out by individuals. The evaluation of the relative worth of human and machine-generated content emerges as a central theme, urging a critical examination of the evolving dynamics in this technological landscape (Shaikh *et al.*, 2022).

This research posits several potential avenues for further exploration. The swift advancement of technology necessitates a judicious approach, urging caution in the unbridled endorsement of any singular solution. The fluidity of these consequences underscores the need for a forward-looking stance.

Educators may benefit from adapting their curricula and developing new assessment and evaluation methods in light of the difficulties introduced by generative AI-powered devices. Although people have expressed these concerns previously, to properly use AI, for example, when retrieving knowledge and learning to store, spontaneous AI advises that we should rethink our innovative learning procedures and create new evaluation methodologies and realistic assessments.

- Recalibrate teaching or learning processes beyond assessment and evaluation methodologies to adapt to a dynamic global environment. Epistemological and ontological shifts may be prompted by or necessitated by technological progress. The use of technology in the classroom may open the door to novel approaches to learning and teaching.
- Be receptive to the possibilities that technology may provide. In the same way that we teach students to responsibly utilize technology like calculators, computers, and even paper and pen, artificial intelligence's social, educational, and occupational ethics can be imparted to students throughout their formative and early life. Others could argue that it is not enough to forbid or limit access to ChatGPT merely or to frighten students with consequences if they use it to address the issues it raises or take advantage of its educational benefits. In addition, it will lead to friction, a widening of transactional distance, and a reduction in trust. Inequity arises because students who need help to utilize their own devices at school or college will need to catch up to their peers who can. Students with access to ChatGPT may ask questions and get explanations of complex ideas in various formats. Students doing poorly academically or with special needs may fall into this category.
- Educating people is fundamentally a human endeavor. This exchange occurs only between humans. Education's unique quality is its emphasis on humanity, which is necessary to achieve its primary goal. Every advancement in technology must not come at the expense of people. Education should prioritize what learners need to learn rather than what is already known.
- There is no neutral technology; each has advantages and disadvantages, benefits and threats. As a result, we elicited potential benefits and drawbacks of using big natural language processing models like ChatGPT while creating our speculative future narratives as an internationally varied research team. There are now intriguing new avenues for educational research and development because of these generative AI models.

Customized instruction: With ChatGPT, educators may design lessons based on their student's interests, backgrounds, and skill levels.

- To aid teachers in creating courses and materials that are welcoming to students of various genders and cultural backgrounds, ChatGPT can sift through vast amounts of information written in a variety of languages.
- More cooperation and collaboration in the classroom are possible when teachers, students, and other stakeholders have better access to one another using ChatGPT.
- ChatGPT's automated grading features provide faster feedback to students and less work for educators.
- ChatGPT can automate additional functionality like captioning and text-to-speech and provide alternative ways for specially-abled students to interact with academic material.

- Saving time and effort: ChatGPT may help teachers finish chores like sending emails, summarizing lessons, and taking quizzes and tests, freeing them up to spend more time interacting with their students.
- ChatGPT may be utilized in several ways to help students with their language skills, including offering instant feedback and suggestions and functioning as a textual communicator.

Using ChatGPT to provide students with materials and assistance whenever required is especially beneficial for those facing geographical or time constraints in regular classes.

Although there are certain advantages to education, processing natural language methods has caused considerable problems. Educators, technologists, students, and other stakeholders must collaborate and invest extensively in R&D to tackle these challenges. The following are examples of such difficulties:

Because of their speed and ease, ChatGPT and some other language models potentially replicate or exaggerate learning data biases. For instance, biased or incorrect information may be supplied to students if teachers need more literacy to examine online materials critically and if they consciously urge ChatGPT to include varied instances and opinions.

As the amount of data and interactions expands, it becomes more challenging to ensure that the information supplied by ChatGPT and other language models is accurate and reliable.

- Disparities in using specific innovations: Despite ChatGPT's advantages, it may widen the gap between the digitally strong and the weak. However, some users may find ChatGPT's premium features unappealing because they are available at different cost levels. Hence, inequality and injustice seem unavoidable until we can guarantee equitable distribution.
- Inability to think critically or creatively, as well as dishonesty: GPT is a computer that can answer questions but cannot think for itself in the same way a person can. Moreover, utilizing AI models trained by others to generate content could decrease the diversity of information over time.
- Manipulation of AI models or manipulation by AI trainers as a matter of academic misconduct: The unethical use of artificial intelligence and related technologies in educational settings is called "academic misconduct" in this context. The unauthorized use of artificial intelligence to create academic content like essays, reports, and homework answers is a significant issue. Learning undermining includes using AI-generated content to cheat on exams and assignments. It also addresses ethical issues related to AI's effects on academic integrity, privacy, data ownership, and learning authenticity.

It is essential to recognize that the definition of "academic misconduct" in artificial intelligence is complex and dynamic, with both positive and negative effects on education. AI technologies like ChatGPT can improve learning and instruction. However, their misuse and effects on academic honesty and integrity raise ethical concerns.

Teaching and learning are social processes, with a premium on individual teacher's and student's knowledge and relationships. Nevertheless, this might counter the whole purpose of education if it leads to the automation and mechanization of educational processes that rely on human interaction.

- Teacher replacement: If society and stakeholders do not recognize the vital function of educators in formal learning environments, CLinguistic systems like ChatGPT could

be promoted as a replacement for human teachers, leading to layoffs and further dehumanizing the classroom.

- Safeguarding and ethically utilizing student data for educational purposes is critical, and it raises significant privacy concerns.
- Technological challenges: Integrating ChatGPT and other language models into a classroom context may be technically challenging and require substantial expenditures of time, money, and resources.

Students' ability to think critically and solve problems may be improved if they become excessively reliant on technology due to their extensive use of ChatGPT and other language models.

The integration of AI in education prompts questions on how, when, by whom, and for what purposes it should be used, fostering critical, cross-disciplinary thinking. Despite technological advancements, human teachers remain crucial. Historical trends show education progresses not from technology but human initiative. The future depends on understanding and strategically placing these technologies in the classroom, emphasizing human-centric approaches.

Conclusion

This study investigates the ethical considerations of incorporating AI, specifically ChatGPT, into educational environments. This paper provides a comprehensive analysis that explores optimistic and pessimistic viewpoints regarding AI's impact on education. The optimistic scenarios emphasize the potential advantages of AI, while the pessimistic tales draw attention to concerns related to academic integrity, inequality, and ethical implications. These results emphasize the importance of thoughtfulness, the formulation of moral principles and proactive actions to leverage the benefits of artificial intelligence while minimizing any drawbacks. Nevertheless, it is crucial to recognize specific constraints within the research, including a significant emphasis on ChatGPT while lacking a comprehensive investigation of alternative AI models. Future research endeavors should further investigate the existing gaps in knowledge by conducting in-depth analyses of the multifaceted field of artificial intelligence (AI) in education. It entails exploring different models, potential biases, and the ever-evolving ethical concerns that may emerge. The continuous discourse among educators, technologists, policymakers, and other relevant parties remains essential in effectively navigating the complex convergence of artificial intelligence and education. This discourse aims to guarantee a harmonious and morally responsible incorporation of new technologies into educational methodologies.

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