Leveraging Persuasive Language and Critical Literacy to Foster Ethical AI Practices among Students

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ABSTRACT

Effective language use and critical literacy are means of solving different problems. This study examines the place of persuasive language and critical literacy in ensuring students' ethical use of artificial intelligence (AI). The study relies on secondary data. Analytic descriptive design and qualitative method are employed along with their suitable tools like interpretation, criticality and objectivity. The analysis shows that if teachers consistently use language persuasively to rouse students' critical awareness and consciousness to ethical use of AI for academic purposes, students would halt or reduce their current trend of misusing AI for malpractice in assignments, tests,

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examinations and research works. In conclusion, the research addresses a significant gap and has potential implications for both educational practice and policy as regards unethical AI practices among students through the teacher's use of persuasive language and critical literacy to make students change from negative to positive uses of AI for academic tasks. Stakeholders are charged to make concerted efforts toward halting students' misuse of AI in tertiary institutions across the world. The efforts include making decisive and operational legislations that penalise all defaulters who resort to unethical use of AI for pedagogic purposes.

keywords: Pedagogy; ai ethics; educational technology; persuasive language; critical literacy.

1. INTRODUCTION

Different studies show the increasing beneficial impact of artificial intelligence (AI) on different spheres in contemporary times [1-5]. On the other hand, the advent of AI has ushered new ways of malpractice into the school system across the globe. The implication is that the misuse of AI increases as well as worsens the conventional problems engulfing the school system decried by scholars like Robert and Besong [6] and Ndubuisi [7], among others. Seeking solutions, including taking proactive measures, to the adverse effects of AI has become imperative so as to mitigate the ethical issues associated with AI (usage).

There are different language-based techniques [8,9] for ensuring ethical use of AI among students. Scholars agree that language-based techniques can be deployed to proffer solutions to different problems in society [10,11,12, 9,13]. While there are diverse language-based techniques for ensuring students' ethical use of AI, this study focuses on persuasive language and critical literacy as language-based techniques for ensuring students' ethical rather than unethical uses of AI.

Statement of the Problem: The unethical use of AI by students raises concerns and requires the devising of different workable measures to tackle the challenges it poses to teaching and learning. The unethical use of AI by students leads to widespread ill-practices, and technology-based means of cheating in and during tests, examinations, and research works. It causes knowledge inhibition and allows for the perpetration of different kinds of irregularities. These issues ought to be addressed proactively before they escalate. To that end, this study proposes the use of persuasive language and critical literacy to mitigate the unethical practices among students in their use of AI for academic purposes.

Aim and Objectives: The general objective of the study is to examine persuasive language and critical literacy, as language-based techniques for ensuring ethical use of AI by students. Its specific objectives are to:

(i) Make an exposition of how to ensure students' ethical use of AI through teachers' deployment of persuasive language and critical literacy to consistently sensitise them;
(ii) Describe the implications of students' misuse of AI.

Research Questions: The following research questions are designed to guide the study:

(i) How can students' ethical use of AI be ensured through persuasive language and critical literacy?
(ii) What are the implications of students' misuse of AI?

Contribution and Innovation: The impact of this study is quite glaring. First, it contributes to strengthening knowledge and addressing the challenges of education in the 21st century. It rouses the consciousness of teachers, school administrators and other stakeholders to students' misuse of AI. This means that the study has the capacity of changing the current tendency of under mining the negative sides of AI, including its use for malpractice and 'copy and paste' research by students, and the inhibition of knowledge by AI. It emphasises that amidst the huge prospects or positive benefits of AI, there are ethical issues associated with and arising from its use, which have to be mitigated. By mitigating the rising issues of students' abusive or illegitimate uses of AI, uncontrollable increase in unethical practices in the education sector are averted.

Thus, while creating awareness about ethical uses of AI, the study awakens users' consciousness to the right uses of AI. Also, the it triggers further studies on the thematic concerns, thereby increasing the education of students and

teachers on ethical and unethical use of AI. The study also serves as a research material to futuristic studies. The study has policy implications, as it impacts on policy-making on AI use by students and teachers too. To that end, positive decisions, legislations and actions leading to momentary and futuristic changes and improved use of AI in the education sector will be attained. Thus, the study offers several innovations in various regards.

2. METHODOLOGY

The analytic descriptive design and qualitative method are employed. Systematic review is made thematically. Saunder et al. [14] point out that the data for systematic review include articles, diaries, blog posts, interview transcripts, theses, web pages, social media, audio narrations or messages, and video files. Those used herein are articles and other scholarly materials, including several theses, narrative scripts and special documents. The four stages of systematic review, identified by Grant and Booth [15] and Nunn and Chang [16], are followed. The first stage is familiarising with the thematic concerns. Identifying the thematic framework of the study is the next stage. The third stage is indexing of themes and codes. The last stage is to mapand interpret the collected data, relating them to research objectives and questions.

The selected data were chosen using the inclusive criteria of systematic review.Thematic analysis allows for an examination of different qualitative data, drawn from different sources and themes, which are synthesised and analysed accordingly for scholarly evidence [14]. The findings of extant studies form the evidence of a fresh study of this kind that engages in a systematic review.Using the exclusion criteria, the closely related literatures are included, while those not directly related to the theme of the study are excluded.

The reputable databases and search engines involved in the search include Google Scholar, Semantic Scholar, ERIC, Ref Seek, ResearchGate, Academia.edu, BASE, Microsoft Academic, CORE, and iSEEK. The gathered data are analysed using systematic review, content and thematic analyses, interpretive devices, and descriptive techniques for data analysis. The contents of the selected secondary data are synthesised, reviewed, and analysed qualitatively (i.e. descriptively) and interpretively.

AI in Pedagogic Context: Adams et al. [17] confirm that different techniques, including developing ethical guidelines, have to be devised and deployed sustainably for mitigation of the ethical issues associated with or arising from the misuse of AI. Their study proposes the following techniques: pedagogical appropriateness, AI literacy, children's rights and teacher well-being. Although these are not language-based techniques, they can only be employed through the use of language. Since they require the use of language to take effect, language-based techniques, as noted in the introduction section, have to be deployed accordingly. By so doing, the Adams' et al. [17] identified techniques and those of other scholars can be integrated and imbibed for comprehensive results, all using the instrumentality of (persuasive) language.

The study by Niedbała et al. [18] examines ChatGPT, a generative AI tool. The aim of the study is to determine the extent to which ChatGPT language model can be applied in the learning process for full- and part-time students. It proves that ChatGPT is revolutionising the way information is being sourced and used for personal and professional purposes. It is also proven to be a viable AI tool for carrying out different tasks. The study submits that ChatGPT language model is more beneficial to full-time students, as a result of which they differ in their chat ability and functionality from those of the contemporaries of part-time. It follows that their study validates the claims of the present study on the impact of AI on efficiency, functionality and ability. The study does not look at the techniques for addressing the abusive use or misuse of AI. The present study does, as it takes up.

Ganeesh and Rani [19] explore the role of AI in teaching English language, following the shift from analogue to digital ways of doing things. Their study demonstrates that AI plays a crucial role in the teaching of English language in the 21st century. The AI technologies involved include intelligent tutoring systems, virtual language assistants, and language learning apps. With these, AI is beneficial to English language teaching because of its flexibility, feedback, instantaneousness and efficiency. The present study does not argue against these realities about AI. Rather, it emphasises the need for language-based techniques that can be used to solve the problems AI poses. That is part of its novelty.

Nguyen et al. [20] engages with ethical principles of using AI in education. Their study discusses

the looming debate on ethical principles and guidelines for using AI in education. It indicates that AI has the potentials of transforming the education sector with its activities. The study emphasizes that AI techniques have been offering better understanding of students' performance and learning challenges. It sees the potentials of AI on one hand and its ethical issues on the other. The paper calls on all stakeholders and users to see to effective use of AI and adherence to guidelines and ethical principles for using it. Thus, the paper shows that there are ethical issues with using AI. However, it does not look at the techniques for addressing the issues. The present study does, as it proposes the deployment of language-based techniques for the mitigation of the issues.

Kushmar et al. (2022) engage with AI in English language learning, with a view to ascertaining the extent to which AI techniques can be used effectively for teaching learners the language and to determine how effective they can be applied in the language learning class. Their study indicates that AI has been transforming different educational activities, increasing effectiveness and competitiveness, and empowering teachers and students across all tiers of education. It also states that with AI, content instructions and tests have got better in the education system in the 21st century. For the study, amidst the risks posed by AI, it has been influencing learning, teaching, and the understanding of the English language.

The risks include cyber attacks, losing naturalness and real-time emotions and undertakings, and privacy invasion. Kushmar's et al. (2022) study concludes that human wisdom is largely required in using AI for language learning. In other words, human experts skilled in content designing and language education are needed for the attainment of efficacious language learning using AI. The foregoing underscores the need and the call for as well as the application of language-based techniques for solutions to AI usage issues.

Dewi et al. [21] analyse the AI platforms that can be used to impart on students and for the evaluation of their performance. The result of the study shows that AI can be used to develop English learning materials for students. This finding reflects those of some previous studies. The use of AI to develop English learning materials for students can be done through virtual reality technology, websites, applications and other AI-based learning and teaching systems. The study does not look at the extent to which the role played by AI obtains. Its recommendation is that further studies should look into that uncovered area. The keys into that recommendation, as it sees to the extent to which AI is used by students and that which language-based techniques can be used to mitigate the issues of misuse of AI by students.

How to Persuade Students to Use AI Ethically: Here, the study attempts to describe how the teacher can deploy persuasive language to ensure students' ethical use of AI. Several examples are given here to strengthen the views on using persuasive language to make students change from unethical to ethical uses of AI. The study avers that to achieve the targeted goal, the teacher ought to deploy different techniques of persuasive language. Examples of persuasive language techniques include:

(i)   Inclusive rather than exclusive language,
(ii)   Emotive appeals,
(iii)   Repetition,
(iv)   Claim,
(v)   Colloquial language,
(vi)   Jargons,
(vii)   Figures of speech,
(viii) Proverbs and axioms,
(ix)   Flattery,
(x)   Analogies, and
(xi)   Imageries.

The teacher ought to deploy claim as a persuasive language technique for expressing strong statements or propositions about the need for ethical use and the implications of misusing AI for academic purposes. Upon stating one's strong claims clearly to the students, the teacher should deploy repetition for emphasis. That is, the key messages or points should be reiterated emphatically and repeatedly. In order to pass strong or emphatic messages about the use of AI, the teacher ought to resort to using colloquial language and jargons for communicating with learners only during the lessons targeted at changing their mentality about and attitude towards using AI for pedagogical purposes.

Also, by using sensitive words that appeal to learners' emotions, they are bound to yield to the lesson intent(s) of the teacher. The use of inclusive language, which gets learners involved in the discourses on ethical rather than unethical uses of AI, would serve as a result-oriented technique for achieving the targeted goal of

persuading students to use AI ethically and legitimately. It is important to attempt an answer to the question of the connection between AI ethics and language (use). AI and language are both phenomena. While the former is artificial, the latter is natural. AI relies on language for functionality, performance and revelation of all that it has in vogue for the contemporary society. Language is used to express all that concerns AI.

Humans use both language and AI. The use of AI by non-humans like robotics and computers reflects the use of language by animals. The indispensability of language is evident in AI particularly in terms of natural language processing (NLP), an integral part of the whole AI. All other AI technologies also involve language use. Just as language is rule-governed, there are various rules in place for the use of AI in ethical and legitimate ways. Such rules demand for fair and transparent usage or uses of the AI wherever applied. That is the advocacy of this study. It considers persuasive language and critical literacy (CL) as viable means of achieving fairness, transparency and ethical AI practices in the education sector.

Critical literacy informs the application of the ethical principles of using AI and using language persuasively. CL makes it obvious that rules have to be made to guide logical and formal use of AI and language respectively. CL also makes students realise the importance of using AI ethically rather unethically. Again, the teacher can rouse the consciousness of students to ethical use of AI by deploying the above language-based techniques. Several examples of persuasive statements, which the teacher can use to achieve the goal of changing students from unethical to ethical AI practices, are given hereunder:

(i) You all are too intelligent to rely exclusively on artificial intelligence; doing so means neglecting or undermining your natural human intelligence.
(ii) My dear students, please always remember that AI is a human innovative creation; I charge you to be creative and productive, so you can create innovations someday too.
(iii) How many of you know or have realized that AI inhibits knowledge? I am not against you using AI. My point is that use it ethically and legitimately to facilitate your learning. Please, do not use AI for malpractice in tests, examinations, research writing, and so on. If you are caught, that is expulsion. Would you like to waste the years you have spent so far?
(iv) I always boast of my students being more intelligent than artificial intelligence. Thus, I don't expect any of you to disappoint me by getting into unethical use of AI for any kind of malpractice.

Using Persuasive Language to Ensure Students' Ethical Use of AI: Persuasive language use involves politeness, which requires applying language skills and techniques to manipulate or persuade an audience to achieve an aim. In this case, teachers are expected by this study to use language persuasively to achieve the goal of ensuring that students use AI ethically for academic purposes rather than abusing its usage for malpractices. Qari [22] agrees that persuasive language is a tactical and complex language-based technique that can be used as a strategy for achieving a given goal. According to Qari [22], politeness requires tactical skills to achieve different goals through persuasive language use. For this study, such skills include criticality and literacy skills.

The foregoing is captured by Sifianou [23] viz: "performing in a polite way is a complex ability which requires acquisition of a combination of linguistic, non-linguistic, and social skills" (p. 78). She adds that "the system of politeness is both taught and learnt directly, and acquired indirectly through the observation of the other members of one's society" (p. 78). Similarly, Palanques [24] righty notes, "the performance of linguistic utterances and non-linguistic, or non-verbal acts, might affect the interlocutors' perception and understanding of the message conveyed in the interaction" (p. 13). Clearly, performance is linked to both linguistic and non-linguistic deeds, skills and techniques. Of course, that is why competence can be thwarted or constrained by performance error, where performance skills are lacking in an individual. This study argues here that non-linguistic performance is only possible with the underground role of linguistic performance, as language is used to express thoughts and show competence and performance.

As Palanques [24] affirms, while communicating, individuals and groups perform several speech acts, through which they "express their communicative purposes in different contexts and with different interlocutors" (p. 1). Thus, teachers can achieve the aforementioned when

communicating pedagogically with students on the use of AI. Of course, language-based techniques like politeness, specific features of communication context, interlocutors, and the actual communicative intent, among others, are usually considered when we adapt to language use in certain situations [24]. From the foregoing quotations, it should be noted that polite language is characterised by politeness that also has different communicative characteristics with which individuals can achieve even complex or seemingly impossible intents and goals. Haboobi and Rikabi (2022) show that politicians use language persuasively to assert themselves and gain pity or favour from members of the public, being the masses. It follows that teachers can also use language persuasively and critically to educate (create literacy in) students on how best to use AI for pedagogic purposes.

One of the ways to ensure students' ethical use of AI is by integrating ethical language into the curriculum and teaching out same to students. Critical dialogue is another language-based technique for achieving such purposes [25,8,26]. Critical dialogue is not just a language-based technique but also a technique of critical literacy. This is because such a dialogue is characterised by criticality, objectivity, and persuasive and positive use of language in discourses. In this case, when dialoguing with students on AI and the imperative of its positive and ethical uses, the teacher ought to resort to critical dialogue, as a critical literacy technique for ensuring that the students' interest is roused to the discourse on both negative and positive uses of AI and why they should make positive rather than negative use of AI for academic purposes.

Students should be encouraged to make use of language critically in discourses concerning AI. More so, by using real-world situations where AI is being used unethically, language can be used technically and strategically to examine students' use of AI in different scenarios. As Adams et al. [17] agree, ethical guidelines can serve as a viable language-based technique for mitigating the negative impact of AI on students. Developing these guidelines require using language effectively, constructively and persuasively to educate students on how to use AI ethically rather than unethically.In addition, the promotion of ethical communication among students would lead to their ethical use of AI.

Essentially, the teacher's unending tasks of ensuring students' ethical use of AI include stressing the importance of using AI ethically for assignments, research works and personal teaching and learning. The benefits of using language-based skills to create ethical awareness about ethical use of AI among students cannot be over-emphasised. On the whole, the point is that students can be influenced positively to cease from the negative uses of AI for academic purposes, having being persuaded by teachers. The persuasion requires effective use of language to convince students on why they have to use AI for legitimate and positive pedagogic purposes rather than the otherwise.

Using Critical Literacy to Ensure Students' Ethical Use of AI: Critical literacy (CL) is noted to refer to "learning to read and write as part of the process of becoming conscious of one's experience as historically constructed within specific power relations" ([27] p. 82).This definition highlights the point that students can be consistently made to be conscious of how to use AI ethically, as they engage in learning to read and write about AI in all regards. In the process, they see the dire need for ethical use of AI for pedagogic purposes rather than the otherwise uses. Also, with CL, students become aware of the historical constructs of the power relations in the formation of AI and the ethical issues of its uses in various contexts. They are also exposed to other historical realities and myths in the school setting and beyond.

Critical literacy locates where learners are positioned to operate beyond the confine of the traditional practice of teacher-to-student alone flow of knowledge, whereby the teacher used to be the monopolist of knowledge in teaching-learning activities [27]. This point underscores the place of AI integration into teaching and learning. Beyond its integration, which is currently insignificant in many countries of the world, are the ethical concerns. The present study engages with the imperative of using persuasive language and critical literacy to proffer solutions to the ethical issues of students' use of AI. CL offers grounds for, or insights to, ethical imperatives meant to examine contradictions in society (e.g. freedom, obligations, justice, and political immunity) in relation to the meaning of these contradictions and the constructed and institutionalised silence that permeates incidences of suffering in everyday life. These are contextualised by the present study in the school cum classroom setting. As Norton (2007) rightly notes, "literacy is

not only about reading and writing, but about relationships between text and reader, student and teacher, classroom and community" (p. 13).

The foregoing points are shared by Lankshear and McLaren [28], who note that CL concerns making concerted efforts to attain reading and writing skills at a high or considerable extent in productive ways that are of great benefit to oneself, others and the society as a whole. The benefits include"enlightened engagement in different affairs, and the attainment of democratic emancipation at both individual and group levels" [28]; p. xix).This quotation is captured by Bishop [29] thus: "Critical literacy is built on exploring personal, socio-political, economic and intellectual border identities" (p. 51).Anderson and Irvine ([27], p. 82) are of the opinion that the pedagogic relevance of CL is the peak of its importance. Thus, critical literacy plays a crucial role in ensuring students' ethical use of AI.

More so, reflective practices are aspects of CL through which positive use of AI by students can be ensured. Reflective practices among students would rouse their ethical use of AI for academic purposes. These practices involve using language. It is very important to use language in positive light to achieve the goals of the practices. Basically, the idea of language-based techniques for addressing the rising issues of students' misuse of AI rests on:

- ❖ Tactical, strategic and professional use of language to attain positive impact on students in their use of AI;
- ❖ Deepening their understanding of how to use AI ethically;
- ❖ Creating as well as increasing awareness among students on how best to use AI for academic purposes;
- ❖ Persuasively and critically guidingstudents on the good, the bad and the ugly of AI and thereby instilling in them reflectivepractices, with which they remain guided by their conscience against illegitimate uses of AI;
- ❖ Ensuring students avoid using AI for illegitimate purposes that rather affect ideal learning and their academic achievements.

Reflective thinking is also regarded as critical thinking (CT), which Besong [30] defines as "an act of careful, logical, in-depth, reason-based and result-oriented thinking directed at achieving a given goal" (p. 2). The use of CT in the academic or educational circle is attributed to

John Dewey, who had used it interchangeably with 'reflective thinking' in 1910 ([30], p. 2). To Dewey (1910), CT refers to "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it and the further conclusions to which it tends" (p. 6). For Robert et al. [8], CT comprehensively refers to the act and art of engaging in decisive, logical and sustained deep(er) mental reflections on various ideas, aspects, matters and things of life about cosmos, self, others, the Supreme Being, beings, humans and non-humans, and the universe, with a view to making tangible observations for cogent and valued results in form of answers to questions of and about life and existence.

According to Besong [30], critical thinking involves thinking critically, logically, creatively diversely about issues; thoroughly processing and organising facts, data and other kinds of information to identify and describe a problem; and evolving, implementing and sustaining efficient solutions to the problems at stake. As scholars [30-35] affirm in the literature, the skills of CT, which the exposure of students to CL arms them with, include:

- ❖ Identification (e.g. identifying biases)
- ❖ Problem-solving
- ❖ Decision-making
- ❖ Critical consciousness
- ❖ Research and empiricism
- ❖ Curiosity (the quest to know)
- ❖ Observation
- ❖ Inference, introspection and retrospection
- ❖ Inductive and deductive reasoning
- ❖ Critical reflection, examination and analysis
- ❖ Creativity
- ❖ Multitasking
- ❖ Pre-empting situations (i.e. predictions)
- ❖ Determining relevance
- ❖ Effective communication
- ❖ Self-reliance, self-content, self-worth, responsibility, and self- development.

3. CONCLUSION

This study decries students' unethical use of AI among students. For solutions, it proposes teachers' consistent use of persuasive language and critical literacy to ensure teachers' ethical use of AI for pedagogical purposes. By ensuring the right use of AI among students, the emerging ethical issues arising from the use of AI in the tertiary education setting would be addressed or

mitigated considerably. By affecting changes in this regard, the study is novel. The right use of AI would make it possible for schools across the globe to do better than ever.

Indeed, persuasive language and critical literacy are capable of arming students with critical knowledge and more skills that improve on their uses of AI and produce more results than what obtains currently among students of tertiary institutions across the globe.This study submits that it is through the right use of AI that the school system across the globe can gain meaningfully from AI, as the otherwise use of AI rather generates new sets of problems that aggravate the conventional challenges facing the education system. The study emphasizes the need for stakeholders to make concerted efforts toward halting students' misuse of AI across tertiary institutions of all nations of the world.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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