



APPLICATION OF ARTIFICIAL INTELLIGENCE IN THE CONSIDERATION OF ETHICS AND VALUES IN EDUCATION



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Abstract

The speedy engagement of Artificial Intelligence (AI) has come up with so many significant benefits, while it raises important ethical concerns that should be addressed. This is because the relevance of artificial Intelligence is being seen in education through different applications. But the concern that forms the basis for this contribution is on the place of ethics in education as well as the impact of it on the values expected of education. This article herein explores the basic considerations in AI application on the ethics that include bias and fairness, data privacy and protection, place of accountability and responsibility, as well as transparency and reasonability. The article further highlights the important role of values in education towards promoting impactful AI development and its use, emphasizing critical thinking, empathy, and responsibility. In prioritizing ethics and values, it is then ensured that AI is developed and integrated in ways that are of impactful benefit to the society, further promoting sustainable national development. This article is also of the opinion that the involvement of ethics and values into AI education and training programs is of optimal relevance in promoting a culture of responsible AI practices. It also gives recommendations towards human-centered principles, responsibility, transparency, and accountability in AI system design, with clear lines for AI development and use. It further emphasizes the need for ongoing research and dialogue on AI inclusion to address the complex and evolving challenges associated with it. By doing so, we may eventually achieve the potential of AI unto actualizing positive change, thereby promoting a more equitable and just society.

Keywords: Artificial Intelligence, Ethics, Values, Education

Introduction

The emergence of Artificial Intelligence (AI) has generated a paradigm shift in different areas of modern life, from security to entertainment, from healthcare to agriculture, from religion to sports, from governance to fashion, as well as finance, transportation and education. In education, it features in curriculum development, guidance and counseling, educational research, educational planning and policy formulations as well as in management. To this, every sphere of education is expected to be in tandem with the relevance of AI and crave for its inclusion for a maximum output of educational activities. According to Nnaji and Unamba(2024), there is need for educational institutions to engage necessary machineries in order to 'effectively deliver on their mandates'.

Just as AI has the potential of driving significant benefits and improvements, it also hosts important concerns in ethics that need to be addressed in education. While AI becomes increasingly integrated into human lives, which according to Ategwu and Unamba (2024), aids in students



employability, it is also important to consider its ethical implications so as to ensure that the values in education are of optimal consideration.

In this article there is concise exploration of the basic ethical considerations in AI application. With its role in the values of education, promoting responsible AI development and utilization can be achieved.

The integration of artificial intelligence (AI) in education raises significant ethical concerns on the AI systems ability to perpetuate existing biases and inequalities if not designed with fairness and equity in mind as well as being opaque, making it difficult to understand how ethical decisions are made. It also assumes more responsibility in educational settings, which gives rise to questions about accountability for AI-driven decisions in addition to not aligning with the values and ethics of the educational institution or society, that may be leading to conflicts and negative consequences. This study therefore seeks to address these concerns by exploring the application of AI in consideration of ethics and values education, with the goal of promoting responsible AI use and fostering a more equitable and just educational environment.

Values Through Education

Values through education is a crucial aspect of personal development and societal growth. It talks about the process of imparting moral, social, and cultural values to students through educational systems, with the aim of influencing their character, behavior, and perspectives. It involves the teaching values that emphasize respect, human feelings, empathy, sincerity, accountability, responsibility, tolerance and the likes. Its goal is mainly to produce well-rounded individuals that can be of positive contribution to the society. This could be in terms of moral values, social values, cultural values, personal values, professional values, spiritual values, environmental values and civic values in order to shape individuals' beliefs, attitudes, and behaviors, towards influencing their interactions and contributions to society.

In education, it enhances character building as students develop strong moral compass to guide their decisions and actions. It also helps students foster a sense of responsibility towards others, thereby promoting empathy, kindness, and community service. In addition, it promotes academic integrity via authenticity that is essential for academic success and personal growth.

These values can be imparted through education by influencing integration into curriculum, role modeling and experiential learning in forms of projects, and community services that are value-based. With the values education, students exhibit better behavior and decision-making. They enhance their relationships to be stronger and more positive. This culminated to them becoming better citizens who are responsible, engaging and contributory.

These values education battles the challenges of implementation into existing curricula, assessment of measuring the impact on students' behavior or development as well as the problem of providing educators with the necessary skills and resources.

Artificial Intelligence

Artificial Intelligence (AI) is a technology that enables machines to perform tasks that typically require human intelligence, such as learning, problem-solving, and decision-making.

Ethics Of Education

The ethics of education talks about the moral principles and values that guide the teaching and learning process. It involves the consideration of rights, dignity, and well-being of students, teachers, and the broader community. It emphasizes respect for students' autonomy, dignity, and individuality, (Jobin, Ienca, & Vayena, 2019). It advocates the provision of equal opportunities and, impartial treatments with no biases which help to uphold academic integrity and confidentiality in supportive teacher-student relationships. It further asserts inclusive education to cater for diverse needs, abilities, and backgrounds. Then the inclusion of educators being accountable for their actions and decisions, that further gives in for encouraging critical thinking, inquiry, and intellectual freedom. This in turn will

keep protecting students' personal information and try maintaining confidentiality. In all, the ethics of education tries make available a positive, supportive, and inclusive learning atmosphere to foster students' intellectual, social, and emotional development.

The Place Of Artificial Intelligence In Education

Artificial intelligence (AI) is indeed bringing transformation in the education sector through different ways that offer opportunities for personalized learning, offer improved student outcomes, and enhance the teachers' efficiency. With the use of AI, there will be personalized learning, intelligent tutoring systems, automated grading and enhanced accessibility with powered tools can also assist students with disabilities. Integrating it has however raised ethical concerns that need to be addressed. In education, AI can be a game-changer by providing personalized learning experiences, automating administrative tasks, and enhancing student engagement, (Russell & Norvig, 2020).

It analyzes student's data to create tailored learning paths, helping students learn at their own pace. With its automated administrative tasks, the tools handle tasks like grading, attendance tracking, and data analysis, freeing up teachers to focus on teaching. It additionally enhances student engagement, thereby making learning interactive and fun, with the use of techniques like gamification and virtual reality.

In the case of students who need extra support, AI easily identifies that, enabling teachers to provide timely assistance. In addition, Zawacki-Richter, RECTin, et al (2018) opine that AI-powered tools like speech-to-text and language translation support students with disabilities or non-native speakers to be inclusive and participatory in the educational programs.

With AI in education, there can be Intelligent Tutoring Systems that host adaptive platforms like MATHia and Socratic to be providing personalized guidance and feedback. There is also the Virtual Reality (VR) and Augmented Reality (AR) with Immersive learning experiences that make complex concepts more engaging. Apart from the aforementioned, there is also the Chatbots and Virtual Assistants, which are AI-powered tools that answer students' questions, queries, and the likes in order to provide learning resources, and facilitate communication for them. The AI also has tools like Gradescope streamline grading processes, which in turn tends to reduce the teacher workload with the Automated Grading system. In language learning aspect in education, the AI-powered tools aid students' efforts to learn new languages and improve in their language skills.

For all these and more to be actualized in education, some AI Applications in Education may be integrated. These include but not limited to: Duolingo, which is a platform that adjusts lesson complexity based on student performance. Google Classroom that offers suggestions for learning materials and activities based on the history of the student learning.

Gradescope; a grading tool by AI that provides instant feedback on the students performance thereby taking some work demands off the teachers.

There are some other AI-powered tools or applications that can be used in education but for this study, we are using just a few of them.

Artificial Intelligence And The Considerations In Education

In as much as there is relevance of Artificial Intelligence in education, there are some ethical considerations that contribute to the outcome of its integration. In some cases, AI systems can perpetuate existing biases if trained on biased data. In line with Bostrom and Yudkowsky (2014), it also requires vast amounts of student data, which raise concerns about data protection. In decision-making processes too, AI can be opaque, thereby making it challenging. It further poses the possibility of displacing certain teaching roles or tasks. To this therefore, there is need to ensure ethical AI in Education by designing AI systems with ethics in mind whereby the developers prioritize fairness, transparency, and accountability. Data should also be protected to enhance users' privacy by safeguarding students' information. Then the teachers are to be educated on AI's potential benefits and limitations with regular assessment of the AI systems in order to impact effectively on education.

Merging The Application Of Artificial Intelligence (Ai) With Ethics And Values Education

This involves the consideration of the moral implications that AI presents in educational setting. This is to make sure that the use of AI does not erode the place of ethics in education as well as the values that should be inculcated through education, (Hagendorff, 2020). As a result of the concern, there should be strict adherence to having only AI tools that are designed and used in ways that respect students' rights, privacy, dignity, emotions and general well-being. All AI systems are supposed to reflect and promote values that uphold fairness, empathy, and respect. In addition, students should be encouraged to critically evaluate AI's impact in education and society, (Mittelstadt, Allo, Taddeo, Wachter, & Floridi (2016)). This calls for students making informed, ethical decisions at any interaction with AI. And further discuss with ease, the AI's ethical implications.

These as well give rise to having informed citizens over the AI's impact on society as ethical AI development is promoted while students develop critical thinking ability. Ultimately, the responsible development and use of AI depend on a multifaceted approach that incorporates technical, social, and ethical considerations. By working together to prioritize these key considerations and values education, we can harness the potential of AI to drive positive change and promote a more equitable and just society.

Achieving this may demand the integration of ethics and values into AI education alongside its training programs. There should also be the development and implementation of robust regulations and guidelines for the development and use of the AI. Human-centered design principles should as well be encouraged in the AI development while in AI decision making, transparency and explainability are to be promoted. AI decision-making. Then the culture of responsibility and accountability in AI development and use is to be fostered. By taking these steps, we can ensure that AI is developed and applied in ways that benefit humanity and promote a brighter future for all.

In all, integrating AI with ethics and values education, demands fostering more responsible and informed approach to AI in education.

Summary/Conclusion

This study explored the application of artificial intelligence (AI) in ethics and values education. Using in-depth interviews with educators and students, the research offers both benefits and challenges associated with AI implementation. It can enhance student's engagement, personalize learning, as well as support ethics and values education. It however has the challenge of bias, transparency, accountability, and over-reliance although it can support ethics and values education, with due consideration on human judgment and oversight. The study therefore presents the need for careful consideration of AI's potential impact on ethics and values education, as well as the importance of educators training and student awareness.

The integration of AI into society requires careful consideration of ethical implications and values education. By prioritizing transparency, fairness, and accountability, and promoting critical thinking, empathy, and responsibility, we can ensure that AI is developed and applied in ways that benefit society and promote sustainable national development. Values education plays a critical role in promoting responsible AI development and use, and it is essential that we prioritize ethics and values in AI education and training programs. Considering bias and fairness, privacy and data protection, accountability and responsibility, transparency and explainability, critical thinking, empathy and compassion, responsibility and accountability, and human-centered design, we can ensure that AI is developed and applied in ways that benefit society and promote sustainable national development. Its development and use require careful consideration of key ethical implications and values education.

Implications

Educators need training to effectively integrate AI into ethics and values education.

Policymakers should consider the potential risks and benefits of AI in education.

Developers must prioritize transparency, accountability, and fairness in AI design.

Recommendations

Based on the study conducted on this, the following recommendations are made:

1. There should be the integration of Ethics and Values into AI Education so that AI education and training programs should prioritize ethics and values as much as in critical thinking, empathy, sincerity and responsibility.
2. There should be promotion of Transparency and Explainability as the AI systems are to be designed to prioritize enabling individuals to understand how AI systems arrive at their decisions.
3. Human-Centered Design should be encouraged; ensuring that AI systems are designed to meet human needs and promote human well-being.
4. Clear Lines of accountability and responsibility should be established for AI development and use, so that individuals and organizations are held accountable for their actions.
5. There should be provision of training for educators with resources to effectively integrate AI into ethics and values education.
6. AI systems used in education should be transparent, accountable, and fair.
7. There should be implementation of human oversight and review processes to ensure that AI-driven decisions align with ethics and values.
8. Students should be educated about the potential benefits of AI and the risks involved, alongside the importance of critical thinking and media literacy.
9. Policy should be developed and updated regularly to address the evolving landscape of AI in education.
10. Collaboration should be fostered between educators, policymakers, developers, and stakeholders so as to ensure AI being used responsibly and effectively. Thus, these recommendations can help guide the development of responsible AI practices in ethics and values education.

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