

## Ethical Implications of AI in Shaping Online Discussions (Deepfakes, Bots)

Ayesha Nazir Gill <sup>1</sup>

**Abstract:** *The growing prevalence of artificial intelligence (AI) technologies in the classroom has ramifications for how the teacher and student perceive the experience of meaningful student labor. Despite the development and organizational deployment of AI, the promotion or limitation for online debates, as well as the ethical implications of these changes, are deficient. This research is situated at the intersection of the literatures on ethical AI and online conversations, and it provides a comprehensive analysis of the implementation of AI to either improve or degrade the management of online discussions. Firstly, to determine the ethical significance of online talks is an overview of the nature of these conversations and to draw on philosophical and educational ethics explanations. Following this, the researcher investigates the effects of three different ways of deploying artificial intelligence (replacing some duties, tending the machine, and enhancing student talents) across five aspects that constitute a holistic picture of online debates, and ultimately, the ethical implications of these three approaches are evaluated. This allows the contextualization of the online discussion literature for the era of AI, extension of this ethical literature into the education sector, and to the conclusion of a variety of practical consequences and future research possibilities.*

**Key Words:** Ethical Implications, Online Discussions, Artificially Intelligent, Organizational Deployment

### Introduction

The increasing use of AI in classrooms has already begun to alter both students' and educators' views on the value of their work (World Economic Forum, 2018). Computers and other artificial entities can be said to possess artificial intelligence (AI) when they can reason, plan, solve problems, and learn from experience, just like a human student would. This includes skills like experience-based learning, planning, and reasoning. Berry, & Hughes (2020) states that online discussions provide teachers with the sense that their work is valuable, relevant, or serves a higher purpose. In order to aid other people, this typically requires the coordinated application of a number of complex abilities. As a morally crucial foundation for students' growth and well-being, offering online discussion forums promotes favourable results for teachers (Gross et al., 2019). (McLaren et al., 2019; Page, & Vella-Brodrick, 2009).

While AI is quickly becoming a standard feature in classrooms, very little is known regarding the ethical implications of these advancements or how they have affected online conversation opportunities. Opportunities for online talks have changed historically due to technical improvements, which have changed instructors' jobs, their abilities, and their feelings of being part of or apart from the production process. This has been going on since at least the first industrial revolution (Eynon et al., 2017). The unique capabilities and uses of AI likely slowed these advancements, but they also have novel and conflicting implications for online debate. Some argue that AI will reduce or eliminate student labour altogether, while others argue that it will expand the variety of meaningful higher-order assignments students are required to do (WEF, 2018; Frey & Osborne, 2017). There is a lack of conceptual clarity about the implications of AI on online discussions, and these ongoing tensions suggest that more research in this area is needed (Rosé, & Ferschke 2016).

<sup>1</sup> M.Phil. Linguistics, Department of English, Fatima Jinnah Women University, Rawalpindi, Punjab, Pakistan.

By exploring how classroom use of AI has the ability to both improve and detract from online discussion experiences, mostly depending on students' implementation choices, this conceptual framework seeks to fill in these gaps. This study provides two significant contributions and sits at the nexus of ethical AI literature and internet debates. By creating conceptual resources to analyse how the use of such technology impacts instructors' online discussion chances, we first contextualise the literature on online conversations for the AI era and relate this assessment to the ethical ramifications of these developments. Second, by providing a thorough analysis of AI's consequences for online discourse, we contribute to addressing a gap in the ethical AI literature.

Analyse the effects of three AI deployment paths including "tending the machine" (generating new types of student work), replacing some easy and complex chores, and enhancing student skills (helping teachers)—across five online conversation aspects. These factors combine the more comprehensive and job-specific (Hackman & Oldham, 1976) factors that influence online conversations. The Deepfakes, bots AI ethics framework (Battista, 2024) and its five guiding principles—beneficence, non-maleficence, autonomy, fairness, and explicability—are then used to further clarify the ethical implications of our investigation. We provide numerous recommendations for future study and conclude with useful insights on how online discussion experiences may evolve as AI becomes more pervasive.

## Problem Statement

Artificial intelligence (AI) is being used in education, especially to facilitate online debates, raising worries about how technology affects meaningful student labour and engagement. AI has the ability to improve communication by expanding online debates, but its ethical consequences are unknown. It is unclear if systems powered by AI in online debates increase or decrease student engagement, which could affect educational quality and meaning. This work addresses the gap by evaluating how AI deployment strategies—replacing duties, assisting with operations, and augmenting student capabilities—affect ethical aspects of online educational exchanges.

## Research Objective

- To examine the ethical consequences of AI-driven systems on educational online conversation management and experience.
- To evaluate job replacement, and systems support, and student capacity augmentation AI deployment options on relevant online educational talks.
- To add to ethical AI literature by contextualising AI's impact on educational online debates.
- To explore practical consequences and offer ethical research directions for AI in education.

## Research Questions

**Q1:** What are the ethical implications of AI-driven systems on educational online conversation management and experience?

**Q2:** To what extent do AI deployment options ( job replacement, systems support and student capacity augmentation) impact the effectiveness of Online educational conversations?

**Q3:** How do cultures and socioeconomic factors influence the impact of AI -driven systems on educational online conversations?

**Q4:** What are the key areas for future research on the ethical implications of AI-driven systems in educational online conversations?

## Literature Review

AI is artificial intelligence, or AIs that are constrained to doing tasks inside a certain area, such as classifying cat photographs (Boden, 2018). The "holy grail" of artificial intelligence research is an AI that can perform at least as well as humans on every intelligent task (Boden, 2018). (Farooqi et al., 2024; Bekey, 2005; Tang & Su, 2024) We focus only on limited AI because it is already in use in many other fields, including healthcare, education, the military, and the legal system. Because limited AI has already been used in the real world, we can utilise real-life examples to assess its effect on online disputes. We explore the potential consequences for online discussions in our future study topics, although there are still



continuing debates about when artificial general intelligence was achieved (Boden, [2018](#)).

Bankins and Formosa, ([2023](#)) emphasise the need of studying how AI capabilities impact online conversation opportunities both now and in the future. Research has demonstrated that technology influences online conversations in both positive and negative ways. The use of technology in the classroom has the potential to both empower and constrain educators; on the one hand, it can facilitate greater independence and competence on the part of educators (Eynon et al., [2017](#); Stevenson, [2016](#)), but on the other hand it poses a threat to their autonomy and credibility. As a general rule, one feels more fulfilled in the former situation. While teachers may find that technology confirms their assumptions about online discussions, they may also have to reevaluate and adjust their assumptions when the negative effects of technology become more obvious, such as the fact that it provides on-demand access to work while also increasing distraction from other responsibilities (Danaher, [2017](#)).

Such conflicting effects are still seen in developing technologies, including classroom robots, which present both advantages and risks to students' ability to complete worthwhile assignments (Bruder & Wedeward, [2003](#)). While we concentrate on artificial intelligence (AI) and its consequences for online discourse, these findings are important, but also concentrate on more general forms of ICTs. These kinds of dual impacts should also result from the employment of AI, but its special characteristics call for special consideration. For instance, AI can perform more cognitive functions than previous technologies, moving into more "white collar" jobs and away from "blue collar" jobs in manufacturing, where technology has traditionally been used to replace student labour (Farooqi et al., [2024](#)). Furthermore, a lot of data is needed for machine learning in AIs, and the collection of this data poses significant privacy, permission, and surveillance problems that have an impact on worker autonomy (McLaren et al., [2019](#)).

As demonstrated by certain AI-driven hiring practices (Dastin, [2018](#)), potential biases in data collection, the use of AI models constructed from biased data, and the replication of systemic injustices (Tang & Su, [2024](#)) raise additional concerns about the possibility that one's AI-informed work could cause harm to others. The scale at which AI can be implemented further increases the possibility of such negative effects. Important concerns are also raised by the way AIs increase the possibility of controlling and manipulating students (Ienca et al., [2023](#)), especially when it comes to the way it can serve as a gatekeeper for student teachers' access to knowledge (Bankins et al., [2024](#)).

End users and even AI developers are unable to comprehend how AI produces its outputs due to the "blackbox" nature of the neural networks that many AIs employ (Buşu, [2024](#)). This can make it challenging to develop responsible systems for which students and instructors can be held meaningfully accountable, to trust AIs, and to feel competent working with them (Ardichvili & Kuchinke, [2009](#)). These AI characteristics have implications for online conversations that we investigated. We start by outlining the elements of online debates and their significance from an ethical standpoint.

### **The Ethics of Online discussions and Ethical AI**

The activities and connections that make up a well-lived life, or what makes life itself worthwhile, are often the subject of recent philosophical arguments (Wolf, [2012](#)). Sisyphus, who is sentenced to repeatedly roll a boulder to the summit of a mountain as punishment, serves as the archetype for online work (Camus, [1955](#)). Sisyphus' activity is uninteresting, repetitious, straightforward, unhelpful to others, and not freely selected. It follows that online conversations ought to be interesting, diverse, demand the application of sophisticated abilities, be advantageous to others, and be open to selection. This highlights what Wolf ([2012](#)) refers to as the subjective and objective components of meaningfulness.

Our definition encompasses both subjective (it is personally significant) and objective (it is worthwhile) elements since we consider online talks to be "personally significant and worthwhile" (Page, & Vella-Brodrick, [2009](#)). The ethical significance of online interactions is examined in political philosophy and corporate ethics literature (Berry, & Hughes [2020](#)). Because they are valuable in and of themselves (first basis), as a component of a larger good (second basis), or as an instrumental good that leads to other valuable goods (third basis), online discussions can be considered ethically significant (Berry, & Hughes [2020](#)). These three pillars allow us to conclude that there are solid reasons why online debates are morally significant from the perspectives of our three most popular ethical theories: utilitarianism, virtue theory, and Kantian ethics.

Kantian ethical theories emphasise treating teachers and students with respect and dignity as rational beings with normative control over their lives. This includes imperfect obligations to advance and develop the self-selected goals and rational abilities of moral agents (Farooqi et al., 2024). Online debates are vital for developing and exercising one's reasoning abilities and using them to further the goals of others, which makes them ethically significant. The work is "freely entered into," "not paternalistic," "provides a wage sufficient for physical welfare," permits teachers to exercise their "autonomy and independence," "develops" their "rational capacities," and fosters their "moral development," according to Bowie (1998), who lists six characteristics of online discussions that explain why Kantians should be concerned about them. Regarding the second premise, a lot of virtue ethicists contend that participating in online debates is essential to thriving as a student. One key student capability, according to Murray (2024), is "being able to work as a student being." This entails having some control over our working environment, exercising our practical reason, using our senses, imagination, and brain, as well as having "meaningful relations of mutual recognition with other teachers" (Murray, 2024). Thus, the capacity to participate in online debates is a crucial right and element of students' success. Regarding the third premise, research demonstrates the beneficial instrumental effects that online conversations have on wellbeing and a variety of other benefits (Gross et al., 2019).

For this reason, we have excellent reason to care about online debates because they contribute to and promote other essential commodities, like student wellness, which are valued according to a variety of ethical theories, including utilitarianism. Ultimately, online discussions are important because they respect teachers' autonomy and their capacity to use complex skills to help others, promote their wellbeing, and enable them to develop as complex student beings, all of which are supported by the three most widely accepted moral theories. Organisations have compelling pro tanto reasons to encourage, facilitate, and provide online debates due to their ethical value (Berry, & Hughes 2020).

Changes that result in fewer online debates are not always unethical because, of course, pro tanto arguments are not indefensible and may be outweighed by other factors, such as increased efficiency. Furthermore, some teachers might be willing to forgo fewer online debates in favour of other benefits like increased pay or free time. Even Nevertheless, online talks continue to be morally significant, and even while they are not always paramount, any changes that affect how many online discussions students participate in must be ethically considered.

## **The Ethical Implications of AI Use**

More research is required to examine the possible effects of AI on online discussions, given their ethical significance. Due to the widespread recognition and discussion of the ethical relevance of AI use (Battista, 2024; Jobin et al., 2019), numerous national, international, and organisational papers describe ethical standards for the deployment of AI. However, none of these principles focus on how AI affects online discussions. For instance, the meta-analysis of ethical AI standards by Jobin et al. (2019) identified 11 principles, but none of them specifically address online conversations.

Jobin et al. (2019) research does not recognise it, although discussing comparable questions regarding the "future of employment." Kim et al., (2022) analysis do bring up the need to "retrain and retool" future student instructors in the event that AI entirely replaces them, it fails to take into account the ways in which students and AI work together in the classroom or the broader impact of AI on online discourse. While the Deepfakes, bots AI model discusses how AI could alleviate the "drudgery" of some chores for both students and educators, it does not expressly mention online conversations (Battista, 2024). While these frameworks don't tackle AI-related ethical concerns head-on, we can nevertheless utilise them to find them in online discussions. We achieve this by applying the Deep Fakes, bots AI ethically framework's five criteria: kindness, impartiality, independence, fairness, and explicability. Through a rigorous consensus process this model was attained and has been extensively analysed. To establish ethical principles for artificial intelligence this approach is employed. Numerous researches have been conducted for the purposes to investigate the development of morality and the application of intricate technological instruments. Both deep-fakes and bots are computer applications powered by artificial intelligence and operate according to five fundamental principles. It helps us in examining how artificial intelligence (AI) alters our technological utilisation (Battista, 2024). It termed "beneficence," which asserts that provided it does not harm the environment, artificial intelligence should prioritise students' rights and function for their utmost advantage.



Adherence to the principle of non-maleficence is essential to ensure the protection of artificial intelligence systems and personal data. This condition guarantees the safeguarding of young individuals solely from the risks posed by artificial intelligence systems. When afforded, students get the chance the autonomy to make their own judgements and have the opportunity to comprehend the various applications of artificial intelligence. Florida et al. (2018) assert that employing artificial intelligence to "nudge" adolescents towards perilous behaviours infringes against their rights. This facilitates the connection between the initial two thoughts. The distinction between deliberate and inadvertent actions is not fundamentally significant.

## Research Methodology

This exploratory qualitative study focusses on AI-based technologies, particularly bots and deepfakes, to investigate their effects on social relations in online learning environments. Deepfakes and algorithms possess significant potential to fundamentally alter communication and engagement in educational environments by mimicking, enhancing, or substituting genuine students. This alteration can be perceived as either beneficial or detrimental. To fulfil my obligation, I first examined the issue and subsequently reviewed the pertinent data. This literature review examines the social difficulties arising from the implementation of artificial intelligence (AI) in educational settings to achieve technological objectives. This work aims to examine the ethical implications associated with this strategy and thoroughly review prior research utilising smart technology in virtual meetings. The research was directed by the data's topic structure and aimed to investigate the social impacts of utilising artificial intelligence technology in online learning. Research papers from 2021 to 2024 demonstrating advancements in artificial intelligence (AI) in education are selected using a systematic approach. Primary method for data collection in this research will be a comprehensive evaluation of all theoretical models, issues, and pertinent studies related to the subject. This particular project aids in collecting and organising material from many sources, enhancing public awareness of the ethical issues associated with using artificial intelligence in online debate platforms. Secondary products, including corporate reports, research articles, ethical and theoretical lectures on artificial intelligence, and educational resources will be involved in the final phase. This approach examines the ethical implications of AI-driven technology in online discourse by integrating diverse perspectives with statistical analysis. An analysis of the data by theme elucidates the ethical dilemmas associated with using robots and deepfakes in online education. This research examines ethical concerns like as privacy, trust, manipulation, and stability, along with the impact of AI on students' relationships and social interactions.

## Results

The authenticity and credibility of the online classroom environment have been notably undermined by interactions, as specialists have recognised the utilisation of technology like artificial intelligence and deepfakes. Their main concerns relate to the institution's transparency and compliance with privacy policies. Some assert that artificial intelligence can improve educational effectiveness, whilst others express apprehension regarding the risk of excessive dependence on technology and its governance. Implementing stricter ethical standards in educational institutions can offset the potential negative consequences of artificial intelligence.

## Authenticity and Trust

Artificial intelligence-driven deepfakes, bots, and other technologies diminish students' interest in and trust towards educational resources. This occurs due to students' diminished motivation to acquire knowledge. Identifying accountability for these behaviours is challenging when bots masquerade as students or deepfakes impersonate genuine academics. Children must develop trust in their teachers to facilitate effective learning. This is a significant challenge for the organisation. Chesney and Citron (2019) assert that the widespread utilisation of "deepfakes" in online disputes complicates the differentiation between authentic and fabricated assertions. Both teachers and students can examine the validity of different modes of communication. Educators encounter difficulties in fostering confidence among their students, as automated systems can emulate human behaviour and responses.

## Privacy and Data Security

Two artificial intelligence technologies that pose significant privacy concerns are deepfakes and bots. Both technologies primarily rely on user data to generate pertinent and precise responses. The safeguarding of data in educational institutions is a critical concern, as confidential information of educators and students may be disclosed. Floridi et al. (2018) recommend adopting ethical AI design principles that prioritise data protection for the effective management of private information. Deepfakes, utilising extensive databases to create convincing identities, significantly worsen the issue and jeopardise sensitive data for potential exploitation in the absence of robust privacy legislation, so endangering individuals. The delicate nature of the issue necessitates the meticulous execution of comprehensive security protocols for artificial intelligence systems utilised in educational institutions.

## Openness

The use of bots and deepfakes requires a thorough evaluation of relevant ethical issues. OpenAI may exemplify a model. The first step in promoting ethical engagement is to comprehend the differences between interactions with artificial intelligence and those with human learners. Floridi (2021) contends that individuals may discern dishonesty even in the absence of transparency. The achievement of educational goals depends on the involvement of every student. If students perceive that their questions are being handled by a computer instead of a human, they may display reduced excitement for the learning process and possess lower expectations. The revelation of artificial intelligence ambitions may improve the ethical standards and impartiality of the educational setting by raising awareness among a wider audience.

## Deception And Manipulation

Certain individuals believe that deepfakes, specifically, and artificial intelligence, broadly, cannot be utilised to execute deception about purpose. AI and likewise software are unsuitable for classroom because Deepfakes are unsuitable for classroom application, as they can mislead both students and educators. Alarm indications will be triggered in reaction to this incidence. Vaccari and Chadwick's 2020 study indicates that incorrect usage of digital communication technology may lead to biased data and erroneous findings. This style of deceit can compromise the integrity of online learning systems, since students may be inclined to accept knowledge from artificial intelligence-generated content without prior verification. The regulation of artificial intelligence systems is imperative due to the immoral implications of deepfakes and bots. This allows them to ensure that their products are devoid of deceptive information and that they are dedicated to fostering education.

## Interaction Between Students and Machines

The use of artificial intelligence (AI) in the classroom, particularly chatbots, is altering the dynamic between students. Students' confidence and happiness with their educations could take a hit if machines mimic human interaction and they can't tell the difference. One source cites Marr (2018). There is an increasing need to define the responsibilities of students and AI as AI interactions get more realistic, for as with deepfake apps that mimic teachers. Artificial intelligence (AI) has the potential to cause shallow engagement devoid of empathy and complicated comprehension, which are crucial in educational settings (Floridi, 2018).

## Collaboration Between Teachers and AI

AI does not undermine teachers' duties; it is important for them to work together carefully to automate monotonous jobs and provide extra resources. So, for instance, bots can do administrative tasks so teachers can concentrate on individual students. Student teachers provide emotional intelligence and flexibility that bots and deepfakes do not, according to Brynjolfsson and McAfee (2014), who contend that AI is most effective when used to supplement student abilities rather than to replace them. It is essential to remember that AI should only supplement student teachers and not replace them totally, even though online instruction assistants and other artificial intelligence (AI) resources can help instructors enhance student learning.



## Ethical Design and AI Bias

Just like other AI systems, the data used to train deepfakes and bots could potentially add bias. Another potential consequence of biased AI is the reinforcement of prejudices or unfair treatment of students in educational environments. Mehrabi et al. (2021) propose that algorithm biases may worsen inequality by disproportionately impacting marginalized groups. In this respect, responsible artificial intelligence design is crucial. In order to combat these biases, we need open-source algorithms and ethical standards that value diversity and inclusion. To avoid biased outcomes, it is crucial that artificially intelligent (AI) systems be reviewed and updated frequently; this is especially true for educators who interact with diverse student groups.

## Student Ability Enhancement Versus Replacement

Students' skills can be greatly improved with the help of artificial intelligence (AI). It can make grading and mediating online discussions easier, freeing up teachers to focus on what's really important. On the other hand, if we put all our eggs in the artificial intelligence basket, it might end up replacing important student employment. While AI can handle mundane jobs, Brynjolfsson and McAfee (2014) warn that eliminating classes could lead to students losing their ability to think critically, morally, empathically, and comprehend complex ideas. That is why AI primarily serves to improve students' performance, allowing teachers to devote more time to really teaching and less to paperwork. A middle ground would be to make sure that AI aids students instead of hurts them as they strive to achieve their academic potential.

## Consent and Autonomy

Artificial intelligence (AI) systems, including bots and deepfakes, possess moral concerns related to autonomy and consent. Students must be informed of the risks associated with artificial intelligence-driven programs and deepfake content before utilising these technologies. Binns champions the independence of educators and students in deciding their engagement with artificial intelligence technologies. This autonomy is essential for ethical interactions. Students ought to be informed of the advantages and drawbacks of bots and other artificial intelligence systems in the classroom; otherwise, they should possess the autonomy to reject their utilisation. Students must have authorisation to employ deepfakes or other AI-generated content for their academic assignments or projects. It is essential to honour and protect students' autonomy to ensure they are confident in their views on the use of artificial intelligence.

## Effects on Critical Thinking and Authentic Learning

Both deepfakes and bots are very dangerous for students as they stopped completely their reasoning and critical thinking inside and outside of the classroom. Deepfakes can simulate emotions that seem authentic, yet are fundamentally fabricated. This may intensify the difficulty of differentiating between a hallucination and reality. Pupils may struggle to enhance their critical thinking skills if they cannot assess the veracity of content produced by artificial intelligence. Zawacki (2019) asserts that educators who overly prioritise artificial intelligence (AI) may cause their students to adopt a narrow view of the learning process. Students cannot participate in critical thinking training because algorithms can respond swiftly and independently. This undermines the importance of rigorous intellectual effort. The advancement of authentic analytical or educational skills must not be hindered by the deployment of artificial intelligence.

## The Ethics of Deepfake Technology

A bunch of individuals examine the ethical quandaries posed by the utilisation of deepfake technology in educational settings. In the realm of education, deepfakes can be utilised both constructively and detrimentally. They can offer compelling educational possibilities. They can also replicate the interactions between prior teachers and students. Concerns regarding the proliferation of misinformation have intensified as deepfakes have advanced, making it increasingly challenging to differentiate between authentic and fabricated content. Tight regulations are necessary, as per Mirsky & Lee, (2021), to prevent the illicit use of deepfakes. Deepfakes in educational settings, accompanied by adequate disclosure, facilitate students' understanding that the content is artificial. Allow students the option to refrain from

engaging with deepfakes, especially those that resemble genuine educators, peers, or school authorities, thereby mitigating consent issues.

### Long-Term Social Impacts

The utilisation of bots and deepfakes in artificial intelligence systems has led to considerable social transformation. Educators and learners must exercise vigilance when engaging with such materials, as deepfakes can jeopardise public confidence in the media. In their 2019 research, Chesney and Citron, (2019) contend that the rise of misinformation may intensify existing social problems, as individuals exhibit diminished trust in online sources. The use of bots and artificial intelligence in educational institutions is rising, potentially leading to a reduction in the need for student teachers and a transition towards more automated processes. If passive learning is encouraged unintentionally, or if artificial intelligence technology hinders students from actively engaging with the material, they may ultimately forfeit their autonomy and capacity for critical thinking. It is essential to meticulously oversee artificial intelligence (AI) technologies to ensure their safety for human utilisation. With technological breakthroughs, the social challenges stemming from artificial intelligence have become increasingly prominent.

### Discussion

A number of AI tools, such as bots and deepfakes, find use in educational settings. You should think carefully about the pros and cons of this integration. In the event that AI-generated content, especially deepfakes, tricks students into thinking that fake news is real, the credibility of educational resources could be compromised. Unless the deception of the deepfakes is pointed out right away, students may begin to doubt the validity of the course contents (Zawacki, 2019). This matter emphasizes the significance of honesty and openness in educational settings. Students need to know about AI in the classroom so they can be cautious of manipulation and take an active role in their own education. A lack of openness in the classroom can create a misleading setting where students may engage with AI-generated content without realizing it (Brynjolfsson & McAfee, 2014).

Privacy and data security must be prioritized when integrating AI into educational settings. This is because these technologies frequently need access to personal data to work properly. To illustrate the point, deepfakes and bots keep tabs on and record all of the classroom discourse, actions, and outcomes. Students' private information can be at risk of disclosure or breach in privacy if strong data protection procedures are not implemented. Institutions of higher learning have a responsibility to its students to advise them of the potential use of their personal information in artificial intelligence systems and to obtain their informed consent before doing so (Kieslich et al., 2022). The erosion of trust and the emergence of major ethical dilemmas surrounding the ownership and control of personal data could result from a failure to respect data privacy.

AI technologies pose ethical concerns. Artificial intelligence (AI) can automate some pedagogical processes, like grading and moderating online debates, but it still can't replace student teachers' empathy and sophisticated judgement. Instead of trying to supplant student teachers, Brynjolfsson and McAfee (2014) suggest that AI should work in tandem with them. Because AI isn't yet up to snuff in areas like social-emotional development, creativity, and critical thinking, teachers are more important than ever. To maintain a well-rounded and student-centered learning environment, it is essential that student teachers continue to play a prominent role in the educational process, even as AI and student teachers work together to improve learning results.

Concerns about autonomy and consent are likewise brought up by AI. Prior to the collection of any personally identifiable information, students must be given the chance to consent clearly and comprehensibly regarding the utilisation of artificial intelligence in educational contexts. The unconsented use of artificial intelligence tools in the classroom may gradually undermine or obliterate pupils' capacity for logical reasoning. Researchers, Mehrabi et al. (2021), assert that addressing ethical concerns around permissions will significantly enhance the efficacy of AI systems in educational settings. The children's right to privacy must always be respected. With the emergence of new technology, deepfakes have increasingly posed challenges with consent, manipulation, and deception. Employing these techniques to fabricate plausible misinformation can deceive pupils and alter their worldview. Mirsky, & Lee, (2021)



raises valid worries over the potential for dishonesty due to AI's ability to replicate interactions typical of a conventional classroom setting. Implementing rigorous monitoring ensures that deepfakes and other AI systems are utilised ethically in educational environments. It also prevents individuals from engaging in deceitful actions that may adversely affect pupils' education. In educational environments, it is crucial to understand the significant societal transformations that AI may induce. If advancements in technology are not equitably distributed due to the misuse of artificial intelligence, disparities in education may become more pronounced.

Students from economically disadvantaged backgrounds or lacking access to artificial intelligence-driven educational technology may have greater challenges in achieving their academic objectives. Kieslich et al., 2022 recommends that educators enhance the quality of learning settings and employ artificial intelligence-driven technology to mitigate the expansion of social inequality. To ensure that artificial intelligence benefits society broadly and students specifically, this technology must be rigorously supervised, regulated, and modified. This is crucial due to the escalating ethical concerns arising from its application in educational settings.

## Conclusion

Educational institutions frequently utilize deepfakes and algorithms, as their application can present significant opportunities alongside challenging ethical dilemmas. We can enhance student learning through the automation, personalization, and modernization of technology. However, we must consider the social implications of integrating artificial intelligence (AI) into educational institutions. When employing artificial intelligence (AI) systems in educational institutions, it is crucial to consider factors such as privacy, integrity, impact, transparency, and trustworthiness. A primary advantage is that it will enhance learning outcomes and safeguard the institutions' reputations. Student teachers are responsible for monitoring the advancement of artificial intelligence to ensure that the benefits outweigh the drawbacks. Students' rights and freedoms can be safeguarded by addressing societal issues such as potential AI misconduct, consent, and data privacy. It is crucial to consider the potential societal impacts of advancements in artificial intelligence, as they may exacerbate existing issues. The implementation of moral AI in education will be effective only if innovative methods are developed to enhance learning while adhering to ethical principles.

## Recommendation

1. To prevent the abuse of deepfake technologies, allow transparency, and secure student information, educational institutions should set explicit ethical standards and procedures for the proper use of AI.
2. Teachers need consistent professional development on artificial intelligence tools, especially on how to use them effectively in educational settings without sacrificing educational or ethical concerns.
3. Rules and oversight procedures for the use of artificial intelligence in the classroom must be established by both governments and educational institutions. By doing so, we can protect students' rights, eradicate bias, and promote equity.

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