Responsible AI in Education: Emerging Effects, User Views, and Governance Imperatives

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ABSTRACT

The integration of artificial intelligence (AI) into higher education has been rapid, creating opportunities and challenges and underscoring the need for responsible implementation. This study addressed the perception of AI by university teachers and the impact it has on teaching and learning and the governance requirements to use AI ethically. A quantitative survey design was used which targeted 150 teachers from public and private universities. Data were gathered using structured questionnaire of AI effects, responsible practice, and governance perception and analyzed using descriptive statistics, correlation, regression, and ANOVA. Findings show that teachers have a generally positive view towards AI, especially in terms of improving teaching efficiency and personalising learning, while having a moderate level of concern about the potential effect on critical thinking. Teachers strongly support responsible AI practices, including transparency, ethical compliance, and teacher control, as well as governance measures such as institutional policies, audits, and data privacy measures. Correlation and regression analyses show that the teachers' perception of the impact of AI is greatly affected by their views on responsible practices and governance, the interconnectedness of utility, ethics and institutional oversight. Additionally, the teaching experience was also found to have a significant impact on the perception of AI, with more experienced faculty members demonstrating higher levels of acceptance. The research highlights the need for incorporating ethical and governance frameworks with AI implementation processes and offers actionable insights for policymakers and administrators. These findings indicate that fostering trust through responsible AI practices and governance is necessary to unlock AI's potential in higher education while ensuring the integrity of education.

Keywords: Responsible AI, Higher Education, Teacher Perceptions, Governance, Educational Technology

INTRODUCTION

Artificial intelligence (AI) is transforming educational practice, policy, and research as never before. Intelligent tools, such as adaptive tutors and automatic assessment, learning analytics and generative content tools, are suggested to deliver personalized learning, efficiency in administration, and new metrics and support student learning (Holmes, Bialik, and Fadel, 2019). However, in addition to these possible advantages, researchers and policymakers also indicate that there are serious threats: there is a risk of algorithmic bias, loss of privacy, undermining academic integrity, and the replacement or deskilling of teachers in case the governance and design do not focus on educational values (Zawacki-Richter et al.,

2019; Holmes et al., 2019). This introduction establishes the thorns of the idea of responsible AI in education: the emerging impacts of its use, how users perceive and experience those impacts, and why resilient governance practices are now necessary to align AI use with human rights and pedagogical objectives.

Empirical presence of AI in education has also expanded very fast yet has been theorized unevenly. The review of the literature indicates that the majority of applied research is based on the field of computer science and is more inclined towards technical performance, the pedagogical theory or the critical consideration of harms (Zawacki-Richter et al., 2019). Recent research has expanded this body of work, by mapping more recent generative models, large language models (LLMs), and advanced analytics into learning contexts, with new affordances as well as new failure modes, both of which have a direct impact on learning outcomes and trust (Wang, 2024; Holmes et al., 2019). Such technical-pedagogical dissonance can help explain the common tendency of educators and institutions to integrate AI technologies without a full understanding of their boundaries or the need for proper control mechanisms.

User perceptions (which cover students, teachers, parents and administrators) are the core of responsible AI, are often under-researched or assume them as homogenous. Qualitative and survey studies demonstrate an ambivalent combination of excitement and apprehension: users are thankful because time and personalization will be saved and the lack of human judgment and loss of personal judgement will be prevented due to automation, but they are also worried about fairness, data misuse, and loss of human judgment, as well as the transparency of automated decisions (Selwyn, 2019). There is also the issue of ambivalence among teachers, where some of them appreciate AI as a complement to everyday work, but many others also say that human care, professional judgment, and contextualized pedagogy cannot be replaced (Selwyn, 2019; Holmes et al., 2019). These stakeholder views are also critical to understand as societal legitimacy and procedural fairness would equally be crucial to the acceptance, trust, and productive use of AI in classrooms as algorithmic accuracy.

The ethical and regulatory environment of AI in the education industry has since evolved over the last six months, yet alignment and industry-specific advice are still wanting. Human supervision, transparency, equity, non-discrimination, and data security are some of the main principles that are expressed in international instruments and high-level frameworks, primarily, the Ethics Guidelines on Trustworthy AI by the European Commission and the Recommendation on the Ethics of Artificial Intelligence by UNESCO (2019 and 2021, respectively). Such written documents are sources of foundational values that do not specification on operationalization: how to operationalise principles into procurement rules, classroom practices, model audits, and redress pathways sensitive to the educational intentions and local circumstances. The literature thus recommends models of governance that are multi-layered (institutional policies, sector standards and technical audits) and participatory, in which educators and learners are involved in co-design and control.

Simply put, responsible AI in education should not simply be compliance with abstract requirements, but a way of balancing the promised pedagogical benefits of the technology with the experiences of the users and governance that can be enforced. In practice, it means: (a) research agendas, where technical evaluation is coupled with pedagogical and sociotechnical critique; (b) participatory deployment processes, where teacher and student concerns are surfaced in advance of scaling; and (c) governance ecosystems, where harm is remedied where it arises. By combining those aspects, it might be possible to make certain that AI systems enhance fair learning and do not reinforce the existing disparities or create additional damages. The rest of this paper discusses the empirical findings of AI impacts in education, the synthesis of perceptions by users, and the introduction of specific governance imperative which will be used to promote responsible adoption.

Problem Statement

Despite the growing usage of AI in educational environments, their widespread use has surpassed the creation of responsible governing frameworks. This leads to ambiguities among educators regarding fairness, transparency, data privacy, and the pedagogical value of AI-based systems. The lack of empirical studies concerning the real impact of AI, as well as the lack of knowledge about the perceptions of users, poses a severe gap in informing policy-makers and institutions towards responsible and ethical implementation of AI in education.

Research Objectives

- 1. To examine the emerging effects of AI tools on teaching, learning, and educational processes.
- 2. To explore user views, including those of teachers, regarding the benefits, risks, and trust in AI applications.
- 3. To identify the governance requirements necessary to ensure responsible and ethical use of AI in education.

Research Questions

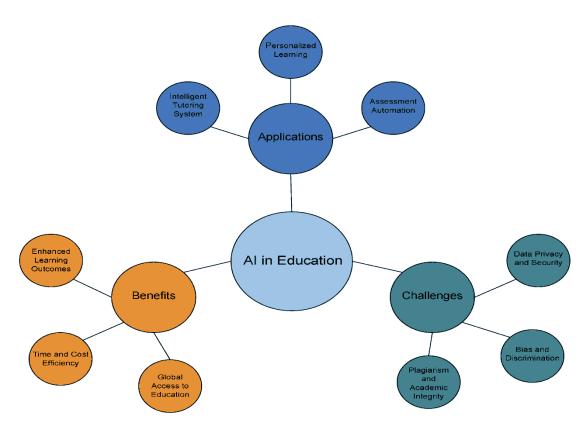
- What are the emerging effects of AI integration on teaching, learning, and educational practices?
- How do users (teachers) perceive the benefits, challenges, and risks associated with AI tools in education?
- What governance mechanisms are required to ensure responsible, transparent, and ethical use of AI in educational contexts?

LITERATURE REVIEW

Benefits and Challenges of AI in Education

Studies have always indicated that AI can contribute greatly to learning results in learning institutions. A systematic review of AI in education found a wide variety of positive outcomes, including adaptive and personalized learning, enhanced motivation, and enhanced cognitive performance (Systematic Review, 2024). Specifically, an AI-based tutoring system and predictive analytics can be used to offer personalized intervention, allowing learners to work at their own pace and to overcome knowledge gaps (Zawacki-Richter, Marín, Bond, & Gouverneur, 2019). AI has also demonstrated to promote accessibility in the context of inclusive learning: e.g., adaptive platforms and MOOCs can address the needs of students with disparate learning needs, such as students with disabilities, who can tailor the content and the nature of engagement (Toyokawa et al., 2023; Patiño-Toro et al., 2023).

Nevertheless, these advantages are accompanied by complicated problems. Possible efficiency benefits, including automated testing and administrative assistance, can be acquired at the expense of overly pedagogical practice (Zawacki-Richter et al., 2019). Excessive use of AI could prevent the development of critical thinking, creativity, and problem-solving skills because students can delegate cognitive tasks to algorithms instead of internalizing processes (Ayeni et al., 2024; Dong et al., 2024). Besides that, the technical constraints of the model bias, the opaqueness of the algorithm, and the quality of data are also threats: AI systems can spread inequality by default or deliver biased results without proper controls.



Ethical and Socio-Technical Concerns

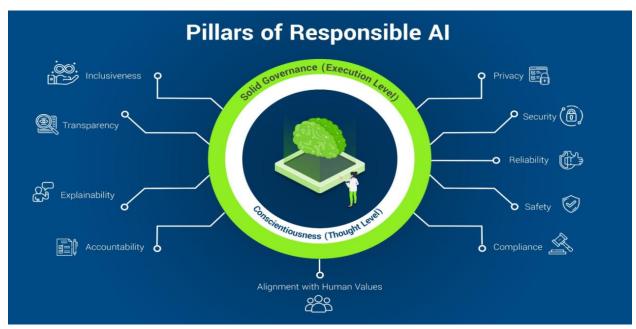
The debate on AI in education revolves around ethical considerations. A methodological survey of AI ethics in primary and secondary schools identified the most critical problems in the field of student privacy, surveillance, data ownership, algorithmic bias, and responsibility of the decision-making systems (Wieczorek, Hosseini, & Gordijn, 2025). The presence of these problems is augmented by the fact that quite a large number of AI ethics educational interventions are not evaluated rigorously. As an example, Wiese, Patil, Schiff and Magana (2025) discovered in a systematic review of the literature that AI ethics education is being integrated into the curriculum, but assessment tools of ethical reasoning are still in its infancy.

These socio-technical tensions can also be explained using stakeholder perspectives. Karran, Charland, Martineau, et al. (2024) also demonstrated that perceived transparency, explainability, and fairness are critical determinants of trust and acceptability of AI in education in a large survey of students, teachers, and parents. Importantly, various groups of stakeholders were more concerned with different issues: teachers may be more concentrated on accountability and data management, whereas students usually need justice in the grading process and prejudice risk.

To make the situation even worse, the voices of students criticize naive ideas of fairness. According to a study conducted by Lee et al. (2025), the AI-based assessment should have a stage-sensitive ethical framework based on identifying procedural fairness and outcome fairness. Their results imply that students can intuitively consider both of them in assessing the ethicalness of AI-mediated assessments.

Additionally, within a social context, Alshahrani, Pileggi, and Karimi (2024) state that AI in higher education can be examined not only in terms of its technical qualities but in terms of its more general social consequences, such as power relations, agency of stakeholders, and institutional preparedness. In

the absence of inclusive design and participatory governance, AI will end up supporting the status quo or relocating power to a small group of influential actors.



Governance, Policy, and the Road Ahead

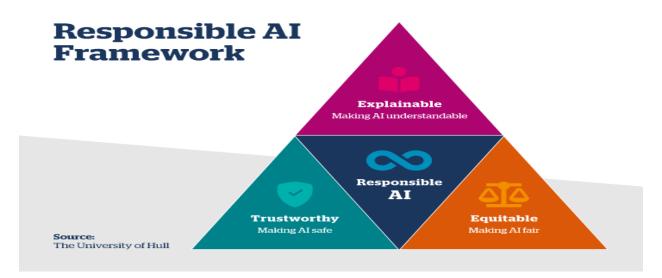
AI governance has become one of the most important themes in newer literature. Recent research on institutional policy revealed a serious loophole: most learning institutions lack official guidelines on the implementation of AI, and the ones that exist frequently do not focus on transparency or the privacy of students (Ghimire and Edwards, 2024). This lack of governance is dangerous since AI systems at schools are not neutral - they are designed, biased in data and institutional interests.

So as to fill in the gaps, researchers are proposing multi-layered governance systems that incorporate participatory practices, technical audits, and ongoing impact evaluation. In line with that, the systematic review of the literature reviews by Ayeni et al. (2024) suggests putting alignment between AI systems and needs of students in the first place, matching technological efficiency with substantial educational interaction, and maintaining the competency that is of primary importance to humans (e.g., critical thinking). Stated differently, the governance should not merely control risks but direct AI toward pedagogical and social targets.

Moreover, human-centred design is also a frequent suggestion. A systematic review by Alfredo Riordan, Vanessa Echeverria, Yueqiao Jin, Lixiang Yan, and others (2023) has shown that human control and trustworthiness are increasingly discussed, although it is very scarce when it comes to the involvement of end users in design. They also stress that students and teachers must be engaged in the entire lifecycle of AI system, such as the conceptualization stage to the deployment and evaluation process of systems so that the systems do not lack genuine needs and values.

Lastly, other issues concerning the most urgent governance concerns are connected to evaluation and equity in AI-driven education. Lee et al. (2025) concur that when it comes to ethical governance, the consideration of both outcome and procedural fairness should be taken, with the policies modified to the level of the educational maturity of students. These subtle insights can be applied significantly:

governance is not universal and should be adaptable to the context, purpose of AI, and the population it addresses.



Theoretical Framework

The two theoretical frameworks used in this study are the Sociotechnical Systems Theory (STS) and the Responsible AI Framework suggested by UNESCO (2021). Combined, these theories can form the basis of the explanation of the effects of AI tools on the educational process, the interaction between users and these systems, and the governance mechanisms that should be in place to guarantee a responsible application of AI tools.

Sociotechnical Systems Theory (STS) states that educational environments are complex, interrelated systems where this technology, people and institutional structure interact to influence outcomes. In educational applications of AI, STS proposes that the impact of AI cannot be assessed by analyzing technical performance, but rather, by learning outcomes, user experiences, and ethical issues arising out of the interaction of AI tools, teachers, students, and institutional policies. This view can be used to understand the fact that similar AI systems can give different outcomes in different settings based on user preparedness, school culture and the structure of governance.

Another theoretical reference point is the UNESCO Responsible AI Framework (2021), which describes such principles as fairness, transparency, accountability, human oversight, and data protection. The principles help to address the ethical standards and governance requirements of AI systems. In this paper, the framework facilitates the examination of how learning institutions can adopt AI technologies in a manner that safeguards the rights of users and the appropriateness in relation to the larger social and pedagogical principles.

RESEARCH METHODOLOGY

The study employed a quantitative approach to examine university teachers' perceptions of AI in higher education, its effects on teaching and learning, and governance requirements for responsible use. The target population consisted of teachers from public and private universities who had experience with AI-based educational tools. A simple random sampling technique was used to select participants, ensuring equal chances of inclusion and minimizing bias. Data were collected through a structured questionnaire containing closed-ended items on a five-point Likert scale, covering AI effects, teacher perceptions, and

governance expectations. The questionnaire was validated by experts and piloted to ensure clarity and reliability, with Cronbach's alpha confirming internal consistency. Data were analyzed using SPSS; descriptive statistics summarized teacher responses, while inferential analyses, including correlation and regression, examined relationships among variables. Ethical considerations, such as informed consent, confidentiality, and voluntary participation, were strictly observed. This methodology allowed for systematic and reliable measurement of university teachers' perspectives on responsible AI in higher education.

DATA ANALYSIS AND RESULTS

Table 1: Demographic Characteristics of University Teachers

Variable	Category	f	%
Gender	Male	90	60
	Female	60	40
Age	25–34	45	30
	35–44	55	36.7
	45–54	35	23.3
	55+	15	10
Teaching Experience (Years)	1–5	35	23.3
5 1 · · · · · · · ·	6–10	50	33.3
	11–15	40	26.7
	16+	25	16.7

Table 1 indicates that the study sample was comprised of 150 teaching staff in universities with 60% of the participants being males and 40% females. The age distribution of teachers was mainly 35-44 years (36.7%), then 25-34 (30%), indicating a relatively young and also a mid-career population of teachers. The experience in teaching was so diverse; the highest number (33.3) was in the experience of 6 10 years. This distribution shows that the study has obtained the views of teachers with various age and experience levels that can be relevant to the comprehension of various views on AI integration in higher education.

Table 2: Teachers' Perceptions of AI Effects on Teaching and Learning

Statement	Mean	SD
AI improves teaching efficiency	4.12	0.76
AI enhances student engagement	3.89	0.81
AI helps personalize learning	4.05	0.79
AI reduces teacher workload	3.72	0.85
AI may negatively affect critical thinking skills	3.25	0.90

Table 2 reflects the perception of the teachers towards AI in the majority of cases as positive concerning the improvement of teaching and learning. The mean of the highest was on the question, of AI improves teaching efficiency (M = 4.12), indicating that the majority of the teachers agree that AI benefits teaching practices. AI also has a high mean (M = 4.05) in personalizing learning, which means that it was recognized as a potential of adaptive learning. The smallest mean was recorded to be on the statement of AI can have a negative impact on the development of critical thinking skills (M = 3.25), the level of concern about the possible negative effects of AI on higher-order cognitive skills is moderate.

Table 3: Teachers' Views on Responsible AI Practices

Statement	Mean	SD
AI should be transparent in decision-making	4.45	0.63
Teachers should retain control over AI tools	4.38	0.67
AI should comply with ethical guidelines	4.50	0.59
AI decisions should be explainable to students	4.22	0.72
Teachers need training to use AI responsibly	4.40	0.65

As mentioned in Table 3, teachers strongly embrace responsible practices on AI. They assessed all items on a 5-point scale (above 4.2) with the highest mean (M=4.50) being given to the item "AI should comply with ethical guidelines. These findings suggest that educators place importance on transparency, control, and ethical alignment of AI systems and that responsible use is no less important than technical functionality. In general, educators were willing to work with AI as long as there are governance and ethical protection.

Table 4: Teachers' Perceptions of Governance and Ethical Requirements

Governance Aspect	Mean	SD
Institutional policies should guide AI usage	4.35	0.61
Regular audits of AI systems are necessary	4.28	0.68
Data privacy of students must be ensured	4.50	0.57
Fairness and bias prevention are essential	4.42	0.62
Clear accountability mechanisms should exist	4.30	0.66

Table 4 shows that teachers have realized the role played by governance structures in the adoption of AI. The greatest mean was in the relation to Data privacy of students must be ensured (M = 4.50) with the strong concern about the confidentiality. Other items with high scores include the necessity of institutional policies (M = 4.35), fairness, and bias prevention (M = 4.42) which points to the fact that teachers want formal governance measures to control the use of AI. It implies that the idea of responsible AI in universities should not be based only on technical solutions but extensive institutional monitoring.

Table 5: Correlation Between AI Effects, Responsible AI Practices, and Governance Perceptions

Variables	1	2	3	
1. AI Effects	1			
2. Responsible AI Practices	.62**	1		
3. Governance Perceptions	.58**	.65**	1	

Note: p < .01 (two-tailed).

In Table 5, positive correlations exist between all key variables significant. The impact of AI was found to have significant correlations with responsible AI practices (r = .62, p = .01) and governance perceptions (r = .58, p = .01), which further implies that teachers who believe AI to have benefits also prioritize responsible and governed use of AI. On the same note, the perception of responsible AI practices and governance associated closely (r = .65, p < .01), which implies that teachers associate ethical implementation with formal governance closely. These associations confirm the idea that the perception of AI effects, responsibility, and governance is correlated.

https://academia.edu.pk/

Table 6: Multiple Regression Analysis Predicting Teachers' Perception of AI Effects from Responsible AI Practices and Governance Perceptions

Predictor	В	SE B	β	t	p
Constant	0.85	0.25	_	3.40	.001
Responsible AI Practices	0.42	0.08	.45	5.25	<.001
Governance Perceptions	0.35	0.09	.38	3.89	<.001

Model Summary: R = .68, $R^2 = .46$, Adjusted $R^2 = .44$, F(2,147) = 62.8, p < .001

Table 6 reveals that responsible practices of AI (8 = .45, p < .001) and the perceptions of governance (8 = .38, p < .001) were significant predictors of teachers in their perceptions of AI effects. The total combined effect was significant as the model explained 46% of the variance (R = .46, F(2,147) = 62.8, p < .001). This shows that the positive assessment that teachers have of AI is not just founded on the functional advantages but it is largely affected by the perceived ethical and governance structures that underlie the use of AI.

Table 7: One-Way ANOVA Comparing AI Perception Scores Across Teaching Experience Groups

Teaching Experience (Years)	N	Mean	SD	F	р
1–5	35	3.70	0.55		
6–10	50	3.95	0.60		
11–15	40	4.10	0.62		
16+	25	4.25	0.58	6.42	.001

Table 7 reveals that there were great variations in the perception of AI among all groups of teaching experience (F = 6.42, p = .001). The mean perception score of teachers with 16 + years' experience was the highest (M = 4.25), whereas the lowest score was 3.70 among teachers with 1-5 years' experience. Post hoc test showed that the overall difference between less experienced and the most experienced group was significant. This indicates older members of the university teaching staff are more willing to accept AI, which may result from having more knowledge about educational technologies or the ability to better see how AI is governed in the institution.

DISCUSSION

The presentation of the research findings combines the theoretical and empirical understanding of the existing literature, specifying both the similarity and the contradiction to the existing literature on AI in higher education. The demographic characteristic on the level of respondents (Table 1) indicates that the sample of participants is rather young (with a big proportion having middle-level experience (6-10 years). This distribution is meaningful due to the fact that previous studies have established that age and experience affect faculty adoption of educational technologies; lecturers who have more years of experience in the academic world tend to view institutional support and pedagogical friendliness of technology in a more positive way (Beyond the hype, 2024).

We obtained the results (Table 2) demonstrating that teachers tend to have a positive perception of AI, in particular, efficiency gains and personalized learning have high marks. It is in line with the previous research where faculty with higher educational degrees has stated that their attitude towards AI is favorable as a helping resource in class preparation, personalization, and administrative tasks (Scitepress, 2024). Moderate level of worry regarding the erosion of critical thinking (mean of 3.25) is a subtle consideration by the teachers: they are not blind to the potential cognitive trade offs but know the advantages of this method. This ambivalence is aligned with the considerations of educators in the

literature, as the issues of over reliance, cognitive offloading, and loss of student autonomy are common (Lee et al., 2025).

As Table 3 shows, teachers have a high score in responsible AI practices: they require transparency, ethical compliance, and teacher control. These results echo on the wider education ethics and governance discourses. As an example, faculty in other higher education settings have highlighted the necessity of explainable AI, and have also indicated that AI must not replace the role of their professional judgment, but must instead assist in it (Ghimire, Prather, and Edwards, 2024). In addition, Lee et al. (2025) have noted that transparency and explainability are essential to ensuring that AI systems align with the values of education; our data show that the former two are not marginal but must be at the center of teachers.

The fact that governance mechanisms (i.e., data privacy, institutional policies, fairness) are strongly supported by the teachers in Table 4 is indicative of their awareness that the responsible implementation of AI can only be achieved through good design but also through well-organized control mechanisms. This aligns with policy research to have multi-tiered governance structures. Other authors observe a policy gap that is concerning: most institutions do not have specific ethics or use policies in place as they implement AI in teaching and assessment (Ghimire and Edwards, 2024)). The support of regular audits and accountability processes by our teachers justifies claims that ethical AI in education needs well-organized institutional architecture.

The correlation analysis (Table 5) also elaborates the connections between perceptions: the stronger the effect of AI occurred, the stronger the teacher is likely to be the supporter of responsible practices (r = .62) and governance (r = .58). This interdependence implies the fact that perceived benefits and ethical issues do not oppose to each other among these educators; they are closely interdependent. The fact that responsible practice and governance (r = .65) are positively related suggests that teachers themselves do not think of responsible AI as only a question of individual integrity, but as something institutionalized. This echoes models within the literature of AI ethics that emphasize the need to incorporate fairness, accountability, and transparency (the FATE principles) into organizational policy (Frontiers integrative review, 2025)

The predictors of the perceptions of teachers regarding the effects of AI are better illuminated in the regression analysis (Table 6). The significant predictive power of responsible AI practices (b =.45) and governance perceptions (b =.38) in predicting perceptions of AI effects (explaining 46% of variance) is an indication that ethical and governance-related factors are not merely reactive additions to how teachers view AI. To put it differently, teachers will think more positively of AI in case they believe that it is being used in a responsible and controlled manner. The implication of this finding is quite potent: higher education should not implement the use of AI tools in marketing their beneficial effects in pedagogy; the use of these tools has to be accompanied by plausible ethical models and policy-making initiatives. Ghimire and Edwards (2024) also claim that policy lag poses a severe obstacle to the responsible AI implementation, and our findings confirm their claim on the educator side.

The ANOVA results in Table 7 indicate that there were differences in teaching experience in AI perception but they were significant. The perception scores were higher among teachers who had the experience of 16 years than those who were less experienced. This trend could indicate higher confidence in institutional change among the more experienced faculty or be simply a result of more time being exposed to policy debates. Or old-fashioned teachers can be more positive, as they have observed previous changes in technology and institutional change. The imbalance also brings up some critical qualifications regarding custom-crafted professional growth: inexperienced faculty might require more formal training, encouragement, and assistance to achieve the equal degree of confidence in using AI. This is in line with the studies that suggested AI literacy and trust as important to faculty acceptance (Mdpi, 2024).

On the whole, these results provide a logical account: university instructors consider AI to be helpful, particularly in terms of efficiency and individuality; however, they are willing to support it based on trust. They are very demanding of responsible usage and sound governance systems. These dimensions interact with each other (correlations and regression demonstrate that the elements of ethical and technical aspects of AI are interrelated), which requires designers, administrators, and policymakers to approach both as highly connected issues instead of distinct ones.

In real life, there are a number of implications in our study. To start with, higher education institutions must invest in creating context sensitive and clear policies that will be used to implement AI. These should include policies regarding data privacy, audit of bias, user transparency and accountability. Such structures would probably not only calm down the suspicious faculty but also positively improve positive feelings towards AI value. Second, it is important to focus on professional development: training programs should not only establish AI literacy, but also governance literacy: to make teachers better understand how policies, audits, and ethical protections work. Third, organizations are to create participatory models of governance whereby faculty are engaged in policy creation, review of AI systems, and feedback. This is capable of promoting feelings of ownership and trust and our data indicate that this is a key to positive perceptions of the teachers.

In theory, the results can be used to affirm models stressing on the co construction of technology and governance in education. The attitudes of teachers have shown that responsible AI is not an ideal of design but an evaluative, lived relationship with technology, which is institutionally inclined in both terms of trust and policy organization. It follows sociotechnical views according to which the adoption of technology cannot be detached regarding social systems and governance (Ghimire & Edwards, 2024).

Nevertheless, it has drawbacks. The cross-sectional survey design gives a picture of perceptions yet it is not able to determine causality. Regression gives an implication of predictive relationships, but it does not confirm the direction of the influence, do positive AI evaluation result in strong governance perceptions or the other way round? Causal pathways could be better unpacked using longitudinal or experimental designs. The sample could also lead to low generalizability: although diverse in terms of experience level, the sample might not represent enough of faculty members in some areas or types of institutions. Future research may contrast discipline or geographic perceptions to determine differences in needs and risks.

Besides, although our survey gauged the perceptions, it failed to capture the actual usage behavior and institutional outcome. Further studies may incorporate self-reporting with behavioral analytics (e.g., monitoring AI tools usage, logs of decision-making, or audit reports) to have a better insight into how perceptions are converted into practice. Research could also address the attitude of students in addition to teachers as collaborative governance and trust require the alignment of multi-stakeholders (Ghimire, Prather, and Edwards, 2024).

CONCLUSION

This research provides empirical data that the attitude of university educators towards AI in education is rather conservative but optimistic: they do not dismiss its possibilities but are seriously worried about the question of ethical and governance protection. Their perceptions do not just have to deal with utility but they are based on trust toward institutional commitment towards responsibility. To ensure that AI is responsibly integrated into higher education, the institutions have to take these issues into action, in terms of policies, professional development, and participatory governance. In that way, they will be able to use the prospect of AI and align its application with pedagogical principles and institutional accountability.

RECOMMENDATIONS

- Universities would be advised to establish explicit and extensive policies to inform the application of AI ethically in teaching and learning so that the transparency, fairness, and accountability are ingrained in the institutional structures.
- To ensure that teachers use AI tools responsibly, faculty professional development programs must involve training on AI literacy, ethical issues, and governance mechanisms.
- To increase trust and ownership, institutions need to form participatory forms of governance where teachers are consulted to make decisions, evaluate the system, and create policies.
- AI system audits and regular monitoring ought to be carried out to guarantee adherence to ethical practices, data confidentiality, and reduction of bias.
- Faculty, administrators and policymakers should be encouraged to collaborate in order to keep the
 guidelines and practices under constant revision according to technological progress and
 pedagogical requirements.

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