

# An Examination of Faculty and Students Perspectives on the Role of Generative Artificial Intelligence in Enhancing or Hindering Educational Experience in eLearning

Sylvia Tuikong<sup>1</sup>, and Anthony Wambua Wambua<sup>2\*</sup>

<sup>1</sup> Department of Peace and International Studies, Daystar University, Nairobi, Kenya

<sup>2</sup> Department of Computer Science, Daystar University, Nairobi, Kenya

awambua@daystar.ac.ke

<https://orcid.org/0000-0001-5110-9071>

## ABSTRACT

The study explored student and faculty perspectives on using Generative Artificial Intelligence (GenAI) tools, like ChatGPT, in eLearning. Understanding stakeholder views is essential for the effective integration of these technologies in education. The research highlighted opportunities and challenges, with faculty expressing concerns about GenAI's impact on critical thinking, problem-solving, and academic integrity, including plagiarism. Despite this, faculty acknowledged its potential to enhance personalized learning and instructional practices, noting the need for formal training. Students viewed GenAI as a valuable tool for simplifying concepts, generating ideas, and improving learning experiences, reporting higher adoption rates for assignments and research. Ethical concerns, like overreliance on AI and reduced independent learning, were shared by both groups. The study emphasized the importance of clear guidelines, responsible usage, and training programs to address these challenges. By fostering ethical integration, educational institutions can harness GenAI's potential to enhance engagement and learning while preserving educational integrity.

**Keywords:** Artificial Intelligence, ChatGPT, Generative AI, Education and AI, eLearning, Large Language Models

**Cite this article as:** Tuikong, S., & Wambua W. A. (2025). An Examination of Faculty and Students Perspectives on the Role of Generative Artificial Intelligence in Enhancing or Hindering Educational Experience in eLearning, *Journal of e-learning Research*, 4(1), 50-64. <https://doi.org/10.33422/jelr.v4i1.923>

## 1. Introduction

Education, just like many other fields, is undergoing drastic changes. From the early days of using emails and hypermedia in education to using Intelligent Tutoring Systems, the education field has seen many transitions and changes orchestrated by rapid technological advances and the need to achieve better learning outcomes through student-centered teaching methods. One of the significant ways technology has revolutionized education is through eLearning, where ICT is used to mediate learning so that the facilitator and the learner can be in different locations. ICT integration into education has been hailed as the future of learning owing to its potential to offer increased access to information and learning resources (Fernández-Gutiérrez et al., 2020), its ability to scale up, personalize learning, and improve learning experiences while offering flexibility, especially for employed learners (Kibuku et al., 2020).

With the advent of artificial intelligence (AI) and specifically GenAI, education is on the cusp of a transformative change. GenAI has begun to impact teaching and learning in seismic and unprecedented ways. Even though significant research has been carried out to improve AI, the

release of OpenAI's Chat Generative Pre-trained Transformer (ChatGPT) in November 2022 awed society and revealed the capabilities of GenAI to the general public (Firat, 2023). ChatGPT is a GenAI chatbot that can read and generate text that has not been seen before, depending on the context created from the text used to prompt the chatbot. GenAI is a branch of AI that can generate data such as text, images, audio, and video (Kanbach et al., 2024) that never existed based on the prompts keyed in by the user. GenAI applications, such as OpenAI's ChatGPT and Google's Bard, are large language models (LLM) capable of answering complex questions in a dialogue manner in a human-like conversation and quickly generating a vast amount of data. Being such a powerful tool, it is no wonder that five days after its release, ChatGPT had 5 million registered users (De Angelis et al., 2023; Kanbach et al., 2024) and has continued to attract millions of users monthly.

Such capable LLMs in the reach of the general public have stimulated substantial discourses regarding their impact on different fields. For example, mixed feelings exist in education concerning LLMs as they can generate articles and answer assignments. While some experts argue that ChatGPT and related applications can enhance learning, others believe such applications can entrench cheating, enhance unethical practices in education, and hinder critical thinking among learners. Zhai (2022) and Oranga (2023) opine that AI in education can enhance personalized learning through adaptive learning and personalized recommendations. Adaptive learning aligns learning content and assessments to learners' learning styles and generates learning paths unique to each learner, while personalized recommendation suggests reading materials to learners based on their prior interactions with the learning content or learning management system (LMS). Other benefits of AI in education fronted by researchers include instant feedback (Oranga, 2023), customized feedback (Bernal, 2024), and alternative perspectives (Carr, 2023).

On the other hand, researchers such as Shidiq (2023) believe that AI, specifically ChatGPT, poses a challenge in developing learners' writing, cognitive, and critical thinking skills. Other experts, such as Mosaiyebzadeh et al. (2023), believe that GenAI encourages exam cheating and affects problem-solving skills among learners. This discourse is necessary given that the use of GenAI in education is a relatively new field in its formative stages with a paucity of research. While most of the research conducted in exploring the role of AI in education is either a review of literature or personal reflections by experts and academicians who have used ChatGPT and related GenAI tools, authors believe that the experiences of students and faculty members are critical in helping form an opinion as to what the role of AI in education is. Higher education institutions (HEIs), academicians, and researchers need to reflect on the impacts of GenAI on education, not only from individual reflections but also from students and faculty members, to have a guided and successful adoption of AI in education. Therefore, this research will seek to add to this ongoing discourse by exploring the experiences of faculty members and students to answer the following research questions:

- In what ways do students and faculty members use GenAI and its applications?
- What views do students and faculty members have about the role of GenAI and its applications in supporting or hindering learning?
- What ethical concerns do students and faculty members have regarding using GenAI and its applications in education?
- What are the faculty and students' views concerning the role of HEIs in GenAI usage?

## 2. Literature Review

Artificial intelligence is causing seismic disruptions in all human aspects; researchers and academicians have therefore sought to understand the implications of AI in education. As early

as the 1990s, researchers began to study AI's use and implications in education. These were the early days of AI, and the state of the art of AI was not as developed as it is today. In those early days, AI was mainly used in intelligent tutoring systems (ITS), designed to offer individualized attention to learners like human tutors (Beck et al., 1996). In the recent past, AI has advanced into powerful LLMs capable of responding to questions and holding human-like dialogues through applications such as ChatGPT. Researchers have explored areas such as the role of AI in education, ethical implications of the use of AI in education, acceptance of AI in education, experiences of learners and faculty in using AI in education.

Famaye et al. (2024) applied the Technology Acceptance Model 2 (TAM2), a model used to predict how users adopt new technologies, to understand students' perspectives on integrating or banning ChatGPT in schools. The authors analyzed students' comments in response to an article published in the New York Times. The study revealed that some students said using ChatGPT was unfair because some students used ChatGPT to complete assignments while others did not. Further, this study revealed that students yearn to be involved in the decision surrounding the use of ChatGPT in education. This study noted that societal expectations and subjective norms influenced students' perspectives on ChatGPT.

Besides, studying how students accept ChatGPT, researchers have also taken keen interest in learners' perspectives towards the influence of AI and related tools such as ChatGPT on motivation and engagement. Research conducted by Anjum et al. (2024), show the potential for interactive tools to increase learners motivation and engagement in second language acquisition. The study highlights ChatGPT's benefits including prompt feedback for learners, personalized learning and its ability to offer a safe space where one can learn and practice a new language without being judged.

Talan and Kalinkara (2023) compared the performance of ChatGPT with that of learners in an anatomy course. In the study, 40 multiple-choice questions were administered to both students and ChatGPT. Interestingly, of the 40 questions, ChatGPT answered 27 correctly and 13 wrongly, achieving a 67% success rate, while the average for the students was 21.1 correct responses and 18.9 wrong responses, a success rate of 52.8%. This research shows ChatGPT's potential to help learners with their assessments. The chatbot will help with prompt responses and personalized feedback. On the flip side, the study raises two critical questions: 1) on ethics, since learners can use ChatGPT to cheat in exams and thus compromise the integrity of their academic work, and 2) on the reliability of ChatGPT since the chatbot can give misleading answers. The ethical dilemma of using ChatGPT is exacerbated by findings such as the ones reported by Ventayen (2023). The study explored students' viewpoints on cheating using ChatGPT. Of the 71 students who were interviewed, the majority reported being tempted to use ChatGPT to complete their assignments. Some researchers, such as Oravec (2023), argue that other than trapping students who cheat using AI, students should be taught how to attribute AI-empowered work correctly. The research notes that HEIs have been slow in developing policies on the use of AI in education. Regarding reliability, researchers have taken a keen interest in the accuracy of answers generated by ChatGPT. For example, in a recent study conducted by Kuşcu et al. (2023), 154 cancer-related questions were posed to ChatGPT. The responses were categorized by experts as either correct, partially correct, misleading, or irrelevant. ChatGPT produced correct responses for 133 of the 145, i.e., 86.5%. Impressively, there were no irrelevant responses.

Concerning faculty, researchers have taken an interest in the level of adoption and use of AI among faculty members. Chounta et al. (2022) conducted a study among 140 K-12 lecturers in Estonia. The study explored lecturers' understanding, concerns and challenges faced while using AI in education. The research reported that lecturers had limited knowledge of AI.

Among those who had familiarized themselves with AI, the study revealed that none of them considered themselves experts. This underscores the need for lecturers to be supported in the integration of AI into education.

Choi et al. (2023) conducted a study to identify factors that hinder or restrict the acceptance of AI among lecturers in South Korea. This study collected survey data from 215 lecturers, and a modified technology acceptance model was used. The research revealed that lecturers with constructivist beliefs were more likely to integrate AI into their courses than their counterparts. Other factors found to influence the integration of AI into education included perceived ease of use, usefulness, and trust in AI. Trust in AI systems has long been seen as a determinant in the adoption of AI systems in education. Qin et al. (2020) conducted an exploratory study in China to understand factors affecting trust in AI education systems. In the study, data was collected from two popular Chinese knowledge platforms and coded for analysis. This was followed by interviews, after which all user opinions were categorized based on themes. The research established that user factors that affect trust in IA in education could be categorized as either human, technological, or context-related factors.

### 3. Methodology

This study employed a mixed methods design to collect and analyze quantitative and qualitative data through online questionnaires developed on Windows Forms. Windows Forms was chosen since it is already integrated within the institution's systems. The research was conducted at a private university in Kenya, targeting 6,558 students and 146 faculty members across seven schools: the School of Applied Human Sciences (SAHS), School of Science, Engineering, and Health (SSEH), School of Law (SOL), School of Nursing (SON), School of Communication (SOC), School of Business and Economics (SBE), and School of Arts and Social Sciences (SASS).

Separate questionnaires—tailored to students and faculty were distributed via institutional email, incorporating Likert-scale items and open-ended questions. A census approach was used to distribute the survey via email to all students and faculty in the target population. However, due to non-response, the final sample constituted a self-selected subset of participants.

Following a pilot test with 10 students and 5 faculty to refine clarity of the questions in the survey tools, two email reminders were issued to increase the response rate for both students and lecturers. Quantitative data were analyzed using SPSS (Version 25) to generate descriptive and inferential statistics, while qualitative responses underwent thematic analysis to identify recurring themes, which were triangulated with quantitative findings. Ethical adherence included anonymized participation, informed consent, secure data storage.

### 4. Results and Discussion

The study relied on responses from 189 students, 121 (64%) female and 68 (36%) male, whose age and school distribution are shown in Table 1. Further, responses from 80 faculty members, 49 (61%) female and 31(39%) male, whose age and school distribution are shown in Table 2, were analyzed.

*Table 1. Students Respondents' Schools and Age*

			Schools							Total
			SAHS	SASS	SBE	SOC	SOL	SON	SSEH	
Age	18-24	Count	14	19	10	12	4	11	30	100
		% of Total	7.4%	10.1%	5.3%	6.3%	2.1%	5.8%	15.9%	52.9%
	25-34	Count	13	7	13	11	0	1	4	49
		% of Total	6.9%	3.7%	6.9%	5.8%	0.0%	0.5%	2.1%	25.9%
	35-44	Count	9	4	6	9	0	0	0	28
		% of Total	4.8%	2.1%	3.2%	4.8%	0.0%	0.0%	0.0%	14.8%
	45-54	Count	6	0	3	1	0	0	0	10
		% of Total	3.2%	0.0%	1.6%	0.5%	0.0%	0.0%	0.0%	5.3%
	55-64	Count	1	0	0	0	0	0	0	1
		% of Total	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.5%
65 and above	Count	0	0	0	0	1	0	0	1	
	% of Total	0.0%	0.0%	0.0%	0.0%	0.5%	0.0%	0.0%	0.5%	
Total		Count	43	30	32	33	5	12	34	189
		% of Total	22.8%	15.9%	16.9%	17.5%	2.6%	6.3%	18.0%	100.0%

Most of the student respondents, 52.9%, were in the age bracket of 18-24, followed by those in the age bracket of 25-34 at 25.9%, and the least were in the age bracket of 65 and above at 0.5%. Regarding schools, most respondents were from the School of Applied Human Science (SAHS), 22.8%, followed by the School of Science Engineering and Health (SSEH) at 18%. School of Law (SOL) had the least number of respondents at 2.6%. School of Nursing (SON), School of Communication (SOC), School of Business and Economics (SBE), and School of Arts and Social Sciences (SASS) had 6.3%, 17.5%, 16.9%, and 15.9%, respectively as illustrated in Table 1.

*Table 2. Lecturers Respondents' Schools and Age*

			Schools							Total
			SAHS	SASS	SBE	SOC	SOL	SON	SSE H	
Gender	25-34	Count	0	1	1	0	0	3	1	6
		% of Total	0.0%	1.3%	1.3%	0.0%	0.0%	3.8 %	1.3 %	7.5 %
	35-44	Count	3	3	5	1	2	1	0	15
		% of Total	3.8%	3.8%	6.3%	1.3%	2.5%	1.3 %	0.0 %	18.8 %
	45-54	Count	1	12	3	6	0	0	4	26
		% of Total	1.3%	15.0%	3.8%	7.5%	0.0%	0.0 %	5.0 %	32.5 %
	55-64	Count	6	6	2	8	0	1	3	26
		% of Total	7.5%	7.5%	2.5%	10.0 %	0.0%	1.3 %	3.8 %	32.5 %
	65 and above	Count	0	3	1	3	0	0	0	7
		% of Total	0.0%	3.8%	1.3%	3.8%	0.0%	0.0 %	0.0 %	8.8 %
Total		Count	10	25	12	18	2	5	8	80
		% of Total	12.5 %	31.3 %	15.0 %	22.5 %	2.5 %	6.3 %	10.0 %	100.0 %

As shown in Table 2, most lecturers who participated in the study were in the age brackets 45-54 and 55-64, respectively, at 32.5%. Most lecturers are from the School of Arts and Social Sciences (SASS) at 31.3%, while the least are from the School of Law, 2.5%.

#### 4.1 GenAI Usage amongst Lecturers and Student

24.9% of student respondents strongly agreed, and 32.3% agreed to actively use AI and related tools such as ChatGPT in their studies. Regarding regular usage, 19.0% strongly agreed, and 33.3% agreed to be regular users of GenAI and tools such as ChatGPT for learning, translating to 57.2% being active and 52.3% being regular users of GenAI and related tools for learning. An average of 12% strongly disagree with being active or even regular users of GenAI for learning. See Table 3 for details.

Table 3. Students' Usage of GenAI

Students AI usage		Count	% of aspect
I actively use AI and related tools such as ChatGPT as part of my learning.	Agree	61	32.3%
	Disagree	13	6.9%
	Neutral	44	23.3%
	Strongly agree	47	24.9%
	Strongly Disagree	24	12.7%
I regularly use AI and related tools such as ChatGPT as part of my learning.	Agree	63	33.3%
	Disagree	29	15.3%
	Neutral	36	19.0%
	Strongly agree	36	19.0%
	Strongly Disagree	25	13.2%

To better understand students' usage of GenAI for learning, the researchers further probed on the different ways students use GenAI. Learners were presented with up to nine possible uses of GenAI for learning, including 'none of the above' from where they could pick any number of options. The use of AI to explain concepts was found to be the most prevalent, followed using AI to suggest research ideas, as detailed in Table 4. These findings are consistent with those in the study conducted by Pers (2023), the study found that most students found ChatGPT very useful in breaking down complex concepts.

Table 4. How Students Use AI in Education

Learners have used AI for	N	% of total
To explain concepts	128	24.62
To suggest research ideas	119	22.88
To summarize a relevant article	89	17.12
To help you in assessments	60	11.54
To generate text for assessments but usually edit the content before submitting it	52	10.00
None of the above	23	4.42
Use in assessments after editing	20	3.85
Use in assessment after editing with generative AI	19	3.65
Use in assessment without editing	10	1.92
	<b>520</b>	<b>100</b>

Further, students reported finding the most need to use GenAI when doing class assignments, at 25.65%, and during group work, at 25.39%, as detailed in Table 5. Interestingly, GenAI is used less during continuous assessment tests at 3.37% and final examinations at 1.81%, possibly because these exams are supervised.



*Table 5. When Students Find the Need for AI Use*

When students find the most need to use GenAI	N	% of total
Class assignments	99	25.65
Group work	98	25.39
In term paper writing	78	20.21
Thesis writing	56	14.51
Other	35	9.07
Continuous assessment tests	13	3.37
Final examination	7	1.81
	<b>386</b>	<b>100.00</b>

On lecturers' usage of GenAI in education, only 4% of lecturers strongly agree, and 10% agree that they are proficient with GenAI in education. The rest are either neutral, disagree, or strongly disagree, as shown in Table 6. Regarding use experience, 7.5% strongly agree, while 43.8% have experience using ChatGPT or similar AI conversation tools. 30% have no experience at all with the use of GenAI in education. On the brighter side of lecturers' use of AI is that 30% are exploring and experimenting with GenAI on how the same can be used for teaching.

*Table 6. Lecturers' Usage off Genai and ChatGPT Tools*

Lecturers' experience with AI tools		Count	% of total
I consider myself proficient with GenAI technology	Agree	28	35.0%
	Disagree	19	23.8%
	Neutral	21	26.3%
	Strongly agree	4	5.0%
	Strongly Disagree	8	10.0%
I have experience using ChatGPT and similar AI conversational tools	Agree	35	43.8%
	Disagree	16	20.0%
	Neutral	15	18.8%
	Strongly agree	6	7.5%
	Strongly Disagree	8	10.0%
I actively explore and experiment with generative AI tools such as ChatGPT in my teaching	Agree	18	22.5%
	Disagree	21	26.3%
	Neutral	19	23.8%
	Strongly agree	6	7.5%
	Strongly Disagree	16	20.0%

This study also sought to understand how faculty members use GenAI. Table 7 details these findings. Most of the usage of ChatGPT among lecturers is for exploring new trends in their field of study, at 22.41%, followed by personal reading and research at 21.26%. Interestingly, aspects that touch on teaching, such as preparing materials and assessments, have the least use of AI among the faculty members.

*Table 7. Ways In Which Lecturers Use AI In Education*

How lecturers use AI for	N	% of total
Preparing teaching materials	14	8.05
Setting assessments	8	4.60
Grading assessments	4	2.30
Personal reading	37	21.26
Exploring new trends in my field	39	22.41
Preparing case studies	14	8.05
Research	37	21.26
Other	21	12.07
	174	100

## 4.2 Lecturers' and Students Views on Whether GenAI Hinders or Promotes Education

Lecturers expressed confidence that GenAI enhances the quality of education, with 26.3% and 32.5% strongly agreeing and agreeing, respectively, that ChatGPT and other related GenAI tools can significantly enhance the quality of education, as shown in Table 8.

*Table 8. Lecturers' views of AI in education*

Lecturers' perceptions		Count	Column N %
I believe that generative AI, including ChatGPT, can significantly enhance the quality of education.	Agree	26	32.5%
	Disagree	8	10.0%
	Neutral	18	22.5%
	Strongly agree	21	26.3%
	Strongly Disagree	7	8.8%
I actively seek opportunities to integrate generative AI into various aspects of my educational practices.	Agree	25	31.3%
	Disagree	19	23.8%
	Neutral	17	21.3%
	Strongly agree	11	13.8%
	Strongly disagree	8	10.0%

Concerning the use of AI in educational practices, only 45.1% of lecturers are actively seeking opportunities to integrate AI into educational practices. 45.0% of the lecturers strongly disagree with actively looking for ways to use AI in education.

*Table 9. Lecturers' Views on Learning Outcomes*

Lecturers' perceptions of learning outcomes		Count	Column N %
I am concerned that students may become overly reliant on generative AI, affecting their independent learning.	Agree	33	41.3%
	Disagree	3	3.8%
	Neutral	5	6.3%
	Strongly agree	36	45.0%
	Strongly Disagree	3	3.8%
The use of generative AI by students might hinder their critical thinking and problem-solving skills.	Agree	28	35.0%
	Disagree	4	5.0%
	Neutral	7	8.8%
	Strongly agree	38	47.5%
	Strongly Disagree	3	3.8%
Faculty should actively guide students in using generative AI tools to enhance rather than replace their learning.	Agree	30	37.5%
	Disagree	3	3.8%
	Neutral	9	11.3%
	Strongly agree	34	42.5%
	Strongly Disagree	4	5.0%



86.3 % of the lecturers expressed their fears that using AI could result in students being overly reliant on it and thus hinder their ability to learn independently of AI. Lecturers hold a similar view regarding problem-solving skills, with 82.6% of the lecturers concerned that the use of AI for education might hinder students' critical thinking and problem-solving skills (See details in Table 9). A SWOT analysis of ChatGPT use in education settings conducted by Rane et al. (2024) revealed ChatGPT weaknesses including erosion of students critical thinking abilities and promotion of plagiarism.

Table 10. Students' views on AI impact on learning

		Count	Column N %
Integration of GenAI in education positively impacts learning experiences	Agree	68	36.0%
	Disagree	9	4.8%
	Neutral	35	18.5%
	Strongly agree	64	33.9%
	Strongly Disagree	13	6.9%
GenAI tools such as ChatGPT enhance the overall quality of educational materials and resources	Agree	66	34.9%
	Disagree	16	8.5%
	Neutral	36	19.0%
	Strongly agree	53	28.0%
	Strongly Disagree	18	9.5%
The use of GenAI contributes to an innovative and effective learning environment	Agree	53	28.0%
	Disagree	14	7.4%
	Neutral	48	25.4%
	Strongly agree	58	30.7%
	Strongly Disagree	16	8.5%
GenAI tools improve understanding of complex concepts and topics	Agree	75	39.7%
	Disagree	8	4.2%
	Neutral	24	12.7%
	Strongly agree	68	36.0%
	Strongly Disagree	14	7.4%
Use of GenAI tools in education aids better comprehension and retention of information	Agree	81	42.9%
	Disagree	15	7.9%
	Neutral	30	15.9%
	Strongly agree	48	25.4%
	Strongly Disagree	15	7.9%
GenAI tools contribute to a deeper and more personalised learning experience	Agree	60	31.7%
	Disagree	14	7.4%
	Neutral	46	24.3%
	Strongly agree	54	28.6%
	Strongly Disagree	15	7.9%

Most students, 69.9%, believe that GenAI in education will positively impact learning experiences. However, 11.7% do not hold that view. Concerning the quality of educational materials, most learners, 62.9%, are positive that GenAI will improve their overall quality. In addition, 58.7% of students see GenAI as being able to contribute to innovative learning environments, while 30.7% are neutral on the same aspect. The strongest, 75.9%, concurrence in the role of AI in education among learners is its ability to improve understanding of complex ideas. Further, 68.3% of learners view GenAI as being able to aid better comprehension and retention of information. Regarding whether GenAI contributes to deeper and more

personalized learning, 60.3% of the learners agree that it does; however, 15.3% hold a contrary opinion, as shown in Table 10.

*Table 11.* Other Students' AI And Technology Concerns

Other students' AI and technology concerns		Count	% of each concern
Concerned that excessive use of GenAI might hinder ability to think critically	Agree	58	30.7%
	Disagree	35	18.5%
	Neutral	32	16.9%
	Strongly agree	39	20.6%
	Strongly Disagree	25	13.2%
Concerned that overdependence of GenAI might negatively impact problem-solving skills	Agree	68	36.0%
	Disagree	30	15.9%
	Neutral	31	16.4%
	Strongly agree	43	22.8%
	Strongly Disagree	17	9.0%
Concerned that increased use of AI in education can lead to the loss of human touch in education	Agree	55	29.1%
	Disagree	29	15.3%
	Neutral	43	22.8%
	Strongly agree	36	19.0%
	Strongly Disagree	26	13.8%

Like lecturers, most of the students, 51.3%, believe that excessive use of GenAI could hinder their critical thinking ability. Further, most students, 58.6%, express fears similar to those of lecturers that overdependence on GenAI might negatively impact problem-solving skills. That increased use of AI in education can lead to loss of human touch in education is an area that received a minority view, 48.1%, with the majority either holding a contrary view or remaining neutral as shown in Table 11.

### 4.3 Ethical Concerns of Lecturers and Students Regarding AI in Education

Lecturers have expressed significant concerns about the ethical and academic integrity issues associated with the use of AI in education. Specifically, 37.5% strongly agree, and 48.8% agree that they are concerned about potential ethical issues that may arise from students using generative AI tools like ChatGPT. The reliance on GenAI by students is a major worry, with 41.3% of lecturers strongly agreeing and 45.0% agreeing that it is a significant concern. Lecturers see the need to actively address ethical considerations related to the use of GenAI, with 47.5% strongly agreeing and 41.3% agreeing. Further, lecturers expressed concerns that students may use AI to compromise academic integrity; 41.3% strongly agree, and 45.0% agree. Lecturers expressed their concerns on the potential use of AI for plagiarism and cheating; 47.5% strongly agree, and 40.0% agree that this is a notable worry for them. Finally, lecturers strongly agree, 53.8% and 37.5% agree on the need to implement measures to detect and prevent AI-related misconduct, as shown in Table 12.

Table 12. Lecturers' Ethics and Integrity Concerns

Lecturers' ethics and integrity concerns		Count	Column N %
I am concerned about potential ethical issues arising from students using generative AI tools like ChatGPT	Agree	39	48.8%
	Disagree	2	2.5%
	Neutral	6	7.5%
	Strongly agree	30	37.5%
	Strongly Disagree	3	3.8%
The ethical implications of students relying on generative AI for academic work are a significant concern for me.	Agree	36	45.0%
	Disagree	2	2.5%
	Neutral	6	7.5%
	Strongly agree	33	41.3%
	Strongly Disagree	3	3.8%
Faculty members should actively address ethical considerations related to student use of generative AI.	Agree	33	41.3%
	Neutral	6	7.5%
	Strongly agree	38	47.5%
	Strongly Disagree	3	3.8%
I am concerned that students may use generative AI tools to compromise the academic integrity of their work.	Agree	36	45.0%
	Disagree	1	1.3%
	Neutral	8	10.0%
	Strongly agree	33	41.3%
	Strongly Disagree	2	2.5%
The potential for plagiarism or cheating using AI-generated content is a notable worry for me.	Agree	32	40.0%
	Disagree	2	2.5%
	Neutral	5	6.3%
	Strongly agree	38	47.5%
	Strongly Disagree	3	3.8%
It is important to implement measures to detect and prevent AI-related academic misconduct.	Agree	30	37.5%
	Disagree	3	3.8%
	Neutral	2	2.5%
	Strongly agree	43	53.8%
	Strongly Disagree	2	2.5%

On the other hand, students have expressed similar concerns relating to ethics and academic integrity. Students strongly agree, 25.9%, and agree, 37.6%, that using GenAI may lead to plagiarism and academic misconduct. Interestingly, most students have concerns over the inappropriate use of AI, with 21.7% strongly agreeing and 40.2% agreeing that students might use AI-related tools inappropriately. Most students, 24.9% and 39.2%, strongly agree and agree, respectively, on the need to safeguard academic integrity. Students seem to disagree on whether GenAI might compromise the depth of learning experiences. The majority were neutral, 24.9%, while those strongly agreeing and those strongly disagreeing were almost similar in numbers. On the idea of automating learning tasks and their impact on personal development, most students - 32.3% - are neutral on whether that concerns them, as shown in Table 13.

Table 13. Lecturers' Ethics and Integrity Concerns

Students' ethics and integrity concerns		Count	%of
Concerned that the use of GenAI may lead to plagiarism and academic misconduct	Agree	71	37.6%
	Disagree	19	10.1%
	Neutral	34	18.0%
	Strongly agree	49	25.9%
	Strongly Disagree	16	8.5%
Concerned that students might use GenAI and related tools inappropriately	Agree	76	40.2%
	Disagree	17	9.0%
	Neutral	38	20.1%
	Strongly agree	41	21.7%
	Strongly Disagree	17	9.0%
Safeguarding academic integrity is a genuine concern for me in the era of GenAI	Agree	74	39.2%
	Disagree	14	7.4%
	Neutral	40	21.2%
	Strongly agree	47	24.9%
	Strongly Disagree	14	7.4%
Concerned that GenAI might compromise the depth of the learning experience	Agree	42	22.2%
	Disagree	38	20.1%
	Neutral	47	24.9%
	Strongly Agree	32	16.9%
	Strongly Disagree	30	15.9%
The potential of automation of learning tasks concerns me in terms of personal development	Agree	46	24.3%
	Disagree	30	15.9%
	Neutral	61	32.3%
	Strongly agree	29	15.3%
	Strongly disagree	23	12.2%

#### 4.4 Lecturers' and Students' Views on the Role of HEI Regarding AI in Education

Regarding lecturers, the majority believe that institutions should provide support by training faculty members on navigating and managing the challenges arising from students' use of GenAI, with 67.5% strongly agreeing and 26.3% agreeing. However, as shown in Table 14, most lecturers report not receiving the much-needed support and professional training on using GenAI in education, with 60.0% strongly disagreeing and 27.5% agreeing that they have received any formal support or training.

Table 14. Lecturers' Views on Institutional Roles

Lecturers' view of Institutional roles		Count	Column N %
There should be institutional support and training to help faculty navigate and manage challenges arising from students' use of generative AI.	Agree	21	26.3%
	Neutral	1	1.3%
	Strongly agree	54	67.5%
	Strongly disagree	4	5.0%
I have received formal training on the use of generative AI technologies in education	Agree	1	1.3%
	Disagree	22	27.5%
	Neutral	5	6.3%
	Strongly agree	4	5.0%
	Strongly Disagree	48	60.0%

Most students believe institutions should provide clear guidelines for using AI, with 49.2% strongly agreeing and 39.7% agreeing, while only 3.7% disagree. Additionally, a significant majority support educational programs on the proper use of AI for learning, with 37.5% strongly agreeing and 32.3% agreeing. As shown in the Table, most students also support institutions actively promoting AI's ethical and responsible use, with 58.2% agreeing and 31.7% strongly agreeing. Interestingly, most students reported that their lecturers neither allow nor promote the use of AI tools in the learning process, with 40.2% strongly disagreeing and 25.9% disagreeing that their lecturers allow or encourage the use of AI for learning, as shown in Table 15.

*Table 15. Lecturers' Ethics and Integrity Concerns*

Students' view of Institutional roles		Count	Column N %
I believe there should be clear guidelines on the use of AI from institutions	Agree	75	39.7%
	Disagree	1	0.5%
	Neutral	14	7.4%
	Strongly agree	93	49.2%
	Strongly Disagree	6	3.2%
Educational programs should train on the effective utilization of AI	Agree	61	32.3%
	Disagree	2	1.1%
	Neutral	12	6.3%
	Strongly agree	107	56.6%
	Strongly Disagree	7	3.7%
Institutions should actively promote the ethical and responsible use of AI in academic settings	Agree	60	31.7%
	Disagree	3	1.6%
	Neutral	10	5.3%
	Strongly agree	110	58.2%
	Strongly Disagree	6	3.2%
My lecturers allow or promote the use of AI tools in the learning process	Agree	18	9.5%
	Disagree	49	25.9%
	Neutral	37	19.6%
	Strongly agree	9	4.8%
	Strongly Disagree	76	40.2%

## 5. Conclusion

The study examined the perceptions of students and faculty on the role of GenAI in education on hindering or enhancing learning in eLearning context. The results revealed a nuanced landscape of opportunities and challenges. Key findings indicate that a significant portion of learners are using GenAI mainly for seeking explanation of concepts, sourcing research ideas and completion of assignment. Faculty members have lower engagement with GenAI, most of them using only for personal research, exploration of trends in their areas of interest but few using it for direct educational applications. Consequently, a proper integration of AI into education can offer benefits. But the features and reservation can be noted by both students and learners. Institutions are to step in and provide guidance of the proper integration of AI into education.

Faculty members agree that responsible use of AI can increase educational experiences. There is a consensus in both students and faculty that overdependence on GenAI can undermine critical thinking, problem solving and independent learning skills. There is a clear call for institutional guidelines and training on the ethical use of AI.

While GenAI offers immense promise in enhancing learning through personalized learning and accessible solutions, it also presents the challenges of unethical use. To harness the benefits of

AI, institutions must offer guidance, formulate policies, and train on the ethical and responsible use of GenAI in academic settings. The present study provides insights into how key stakeholders perceive GenAI and offers actionable recommendations for how educational institutions can navigate the use of GenAI in education. Future studies will explore the long-term use of GenAI in education as well as develop a framework for the responsible use of GenAI in different eLearning contexts.

## References

- Anjum, F., Raheem, B. R., & Ghafar, Z. N. (2024). The Impact of ChatGPT on Enhancing Students' Motivation and Learning Engagement in Second Language Acquisition: Insights from Students. *Journal of e-learning Research*, 3(2), 1-11. <https://doi.org/10.33422/jelr.v3i2.679>
- Beck, J., Stern, M., & Haugsjaa, E. (1996). Applications of AI in Education. *XRDS: Crossroads, The ACM Magazine for Students*, 3(1), 11-15. <https://doi.org/10.1145/332148.332153>
- Bernal, M. E. (2024). Revolutionizing eLearning Assessments: The Role of GPT in Crafting Dynamic Content and Feedback. *Journal of Artificial Intelligence and Technology*.
- Carr, B. (2023). Revolutionizing Education: Unleashing the Power of Chat GPT/AI to Empower Educators. *Technology and the Curriculum: Summer 2023*.
- Choi, S., Jang, Y., & Kim, H. (2023). Influence of pedagogical beliefs and perceived trust on teachers' acceptance of educational artificial intelligence tools. *International Journal of Human-Computer Interaction*, 39(4), 910-922. <https://doi.org/10.1080/10447318.2022.2049145>
- Chounta, I.-A., Bardone, E., Raudsep, A., & Pedaste, M. (2022). Exploring teachers' perceptions of Artificial Intelligence as a tool to support their practice in Estonian K-12 education. *International Journal of Artificial Intelligence in Education*, 32(3), 725-755. <https://doi.org/10.1007/s40593-021-00243-5>
- De Angelis, L., Baglivo, F., Arzilli, G., Privitera, G. P., Ferragina, P., Tozzi, A. E., & Rizzo, C. (2023). ChatGPT and the rise of large language models: the new AI-driven infodemic threat in public health. *Frontiers in Public Health*, 11, 1166120. <https://doi.org/10.3389/fpubh.2023.1166120>
- Famaye, T., Bailey, C. S., Adisa, I., & Irgens, G. A. (2024). What makes ChatGPT dangerous is also what makes it special": High-school student perspectives on the integration or ban of artificial intelligence in educational contexts. *International Journal of Technology in Education (IJTE)*, 7(2), 174-199. <https://doi.org/10.46328/ijte.651>
- Fernández-Gutiérrez, M., Gimenez, G., & Calero, J. (2020). Is the use of ICT in education leading to higher student outcomes? Analysis from the Spanish Autonomous Communities. *Computers & Education*, 157, 103969. <https://doi.org/10.1016/j.compedu.2020.103969>
- Firat, M. (2023). Integrating AI applications into learning management systems to enhance e-learning. *Instructional Technology and Lifelong Learning*, 4(1), 1-14. <https://doi.org/10.52911/ital.1244453>
- Kanbach, D. K., Heiduk, L., Blueher, G., Schreiter, M., & Lahmann, A. (2024). The GenAI is out of the bottle: generative artificial intelligence from a business model innovation perspective. *Review of Managerial Science*, 18(4), 1189-1220. <https://doi.org/10.1007/s11846-023-00696-z>



- Kibuku, R. N., Ochieng, D. O., & Wausi, A. N. (2020). e-Learning Challenges Faced by Universities in Kenya: A Literature Review. *Electronic Journal of e-Learning*, 18(2), pp150-161-pp150-161. <https://doi.org/10.34190/EJEL.20.18.2.004>
- Kuşcu, O., Pamuk, A. E., Sütay Süslü, N., & Hosal, S. (2023). Is ChatGPT accurate and reliable in answering questions regarding head and neck cancer? *Frontiers in Oncology*, 13, 1256459. <https://doi.org/10.3389/fonc.2023.1256459>
- Mosaiyebzadeh, F., Pouriyeh, S., Parizi, R., Dehbozorgi, N., Dorodchi, M., & Macêdo Batista, D. (2023). Exploring the Role of ChatGPT in Education: Applications and Challenges. Proceedings of the 24th Annual Conference on Information Technology Education. <https://doi.org/10.1145/3585059.3611445>
- Oranga, J. (2023). BENEFITS OF ARTIFICIAL INTELLIGENCE (CHATGPT) IN EDUCATION AND LEARNING: IS CHAT GPT HELPFUL? *International Review of Practical Innovation, Technology and Green Energy (IRPITAGE)*, 3(3), 46-50.
- Oravec, J. A. (2023). Artificial intelligence implications for academic cheating: Expanding the dimensions of responsible human-AI collaboration with ChatGPT. *Journal of Interactive Learning Research*, 34(2), 213-237.
- Pers, T. H. (2023). Can large language models improve student learning? *Improving University Science Teaching and Learning*, 20(1).
- Qin, F., Li, K., & Yan, J. (2020). Understanding user trust in artificial intelligence-based educational systems: Evidence from China. *British Journal of Educational Technology*, 51(5), 1693-1710. <https://doi.org/10.1111/bjet.12994>
- Rane, N., Shirke, S., Choudhary, S. P., & Rane, J. (2024). Artificial Intelligence in Education: A SWOT Analysis of ChatGPT and Its Impact on Academic Integrity and Research. *Journal of ELT Studies*, 1(1), 16-35. <https://doi.org/10.48185/jes.v1i1.1315>
- Shidiq, M. (2023). The use of artificial intelligence-based chat-gpt and its challenges for the world of education; from the viewpoint of the development of creative writing skills. Proceeding of international conference on education, society and humanity,
- Talan, T., & Kalınkara, Y. (2023). The role of artificial intelligence in higher education: ChatGPT assessment for anatomy course. *Uluslararası Yönetim Bilişim Sistemleri ve Bilgisayar Bilimleri Dergisi*, 7(1), 33-40. <https://doi.org/10.33461/uybisbbd.1244777>
- Ventayen, R. J. M. (2023). ChatGPT by OpenAI: Students' viewpoint on cheating using artificial intelligence-based application. Available at SSRN 4361548. <https://doi.org/10.2139/ssrn.4361548>
- Zhai, X. (2022). ChatGPT: Artificial Intelligence for Education. *Supporting Instructional Decision Making: The Potential of An Automatically Scored Three-Dimensional Assessment System*.