Integrating Generative AI in University Teaching and Learning: A Model for Balanced Guidelines

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Abstract

The study proposes a balanced approach and flexible guidelines for incorporating generative artificial intelligence (AI) into university-level teaching and learning processes at both the university-departmental level and within individual academic autonomy. Building on the AI Ecological Education Policy Framework, the guidelines offer a suggestive frame of reference for faculty and students to integrate generative AI into their coursework. Furthermore, feedback from 118 students and 14 academics at a teacher education institution in the Philippines underscores the guidelines' potential benefits, concerns, usefulness, and necessity in their academic undertakings. While the policy may not cover every detail exhaustively, it seeks to provide practical and context-sensitive recommendations for ethical, honest, responsible, and fair use of AI in course development, implementation, and student engagement. Consequently, other higher education institutions in general, and academics in particular, may adopt and/or modify the guidelines to suit their positions, goals, needs, and directions.

Keywords: generative artificial intelligence, AI guidelines, ChatGPT, teaching, learning, university

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Recently, there has been a significant increase in scholarly works on artificial intelligence (AI) within the educational sector, emphasizing the rapid advancement and implementation of generative AI tools. These generative AI technologies not only act as catalysts for innovation, necessitating adaptation within dynamic environments for both individuals and institutions to thrive (Bozkurt & Sharma, 2022) but also underscore the importance of managing knowledge flows in higher education institutions to respond to the challenges of novel disruptions (Cacho & Ribiere, 2018). Environmental uncertainties, including technological disruptions, may increase the complexity of strategic decision-making in knowledge-intensive organizations (Cacho et al., 2023), necessitating reflective decision-making and training to enhance human capabilities in addressing the disruption caused by artificial intelligence tools (Trunk et al., 2020). Acknowledging that higher education students benefit from diverse support, flexible schedules, and adaptive teaching methods (Bajar et al., 2024), knowledge-intensive education institutions have to be more cognizant, sensitive, and ethical in their approach to integrating emerging generative AI into their programs and services for further innovation and improvement.

UNESCO (2023a) defines generative AI as "technology that automatically generates content in response to prompts written in natural language conversational… where content can appear in formats that comprise all symbolic representations of human thinking: texts written in natural language, images (including photographs to digital paintings and cartoons), videos, music, and software code" (p. 8). Some AI tools available online include but are not limited to conversational models like ChatGPT, Microsoft Copilot, Google Gemini, and others. The use of these text-generative AI tools, however, poses some concerns that academics in higher education should not overlook. One concern Sohail et al. (2023) noted is the potential use of generative AI applications by students to engage in academic dishonesty, specifically through cheating or plagiarizing their written assignments and tests. Another issue is the decline in students' academic performance. With increased dependence on automated tools for task completion among students (Chan, 2023), this may contribute to procrastination and memory loss, ultimately diminishing their learning competence (Abbas et al., 2024).

These concerns have led some universities to rethink their academic programs and processes. Although there are acknowledged risks or concerns at the onset, the use of generative AI tools, however, could potentially enhance writing evaluation and feedback by providing valuable assistance to human assessments of written outputs (Mizumoto & Eguchi, 2023; Punar Özçelik & Yangın Ekşi, 2024; Wolf & Wolf, 2023). Moreover, AI has the potential to improve student learning outcomes by offering customized, instant feedback and adjusting to each learner's unique style (Chan & Hu, 2023; Delcker et al., 2024; Lin et al., 2023; Schroeder et al., 2022). Recently, Younis (2024) found that integrating ChatGPT in online classes within peer groups can significantly enhance students' satisfaction and content delivery and increase engagement. These are on top of other benefits and uses of AI tools that most students take advantage of, including but not limited to grammar and spelling checkers, understanding concepts, planning, and summarizing. Thus, instead of outright banning these tools for students who will enter an AI-driven industry after university life (Johnston et al., 2024), it is more beneficial to prepare them for a future dominated by AI. This approach aligns with the understanding that generative AI technologies can significantly transform teaching and learning

methodologies, requiring novel approaches to thinking (Bozkurt, 2023a; Tlili et al., 2023; Walter, 2024).

Still, some academics express lingering apprehensions that the use of generative AI in educational settings may degrade the quality of education and adversely affect students' academic performance (Adeshola & Adepoju, 2023; Chan & Lee, 2023; Nam & Bai, 2023; Popenici & Kerr, 2017). Consequently, these concerns have prompted some universities to prohibit the deployment of generative AI technologies within their academic program. However, instead of imposing prohibitions or stringent directives on the use of generative AI technologies such as ChatGPT (Kostka & Toncelli, 2023), UNESCO (2023b) advises the adoption of explicit guidelines for both teachers and students on the appropriate application of generative AI, like ChatGPT. As Casal-Otero et al. (2023) also support, this approach advocates for a collaborative process in establishing these guidelines, involving both students and instructors, rather than just dictating terms for them to follow. This strategy aims to improve the technological knowledge of both students and teachers (Cacho, 2014), equipping them to effectively manage the "promises" and "perils" presented by emerging and disruptive technologies, such as generative AI tools (Mollick & Mollick, 2023). Essentially, Chan (2023) underscores the critical need for universities to craft policies on AI education that ensure teachers and students are both proficient in this technology. This urgent call requires universities to act decisively, laying the groundwork with specific guidelines that facilitate AI-related educational initiatives.

On a critical note, Nam and Bai (2023) and Salhab (2024) express grave concerns about the lack of clear ethical guidelines, ground rules, and policies in education, amidst the rapid advancement of AI and the opportunities it presents for learners. Consequently, the current paper aims to propose balanced approach guidelines articulating Chan's (2023) AI Ecological Education Policy Framework into definitive AI integration guideposts in curricular design, implementation, and student engagement both for academics and students within the higher education environment. In doing so, involving the inputs of the stakeholders in the formulation of the guidelines is critical (Delcker et al., 2024; Salas-Pilco et al., 2022). Consequently, feedback was obtained from both academics and students to ensure that the policy document accurately represents the needs and values of the parties involved. The combination of this strategy and data collection allowed for a design thinking approach in formulating a policy that captures the essentials of relevant literature and feedback from the implementers and end-users. By doing so, the ensuing balanced approach guidelines (see Appendix A) in the integration of AI tools in the higher education context are useful, inclusive, context-sensitive, and flexible.

Literature Review and the Model Guidelines

AI Ecological Education Policy Framework

Chan (2023) crafted a policy framework for the integration of AI in higher education, guided by an examination of stakeholder attitudes towards text-generative AI and informed by UNESCO's (2021) humanistic AI in education guidelines. This policy framework is rooted in collaborative expert engagement and emphasizes ethical, inclusive AI use to benefit all learners. It outlines a comprehensive strategy for AI application in educational management, instruction,

and assessment, and includes stages for pilot testing, continuous monitoring, evaluation, and the promotion of evidence-based practices. Additionally, it encourages the cultivation of local innovations tailored to meet community-specific needs.

Chan's empirical research gathered insights from 457 students and 180 faculty and staff members from various fields within Hong Kong's higher education industry, aiming to understand their views on AI's role in academia. The study's quantitative analysis revealed both acknowledgment of AI's potential upsides—such as enhanced personalized learning, digital literacy, academic achievement, and the anonymity of support services—and concerns over possible downsides like excessive dependency on AI, reduced human interaction, and obstacles to acquiring universal skills. The findings highlight a general willingness among the higher education community to embrace generative AI technologies, coupled with an awareness of their potential impacts. The study concludes that thoughtful policymaking and institutional support are essential to leverage AI's benefits in enhancing teaching and learning experiences in universities.

Drawing on these insights, recommendations, and concerns of stakeholders, Chan (2023) formulated the AI Ecological Education Policy Framework to foster the ethical and efficient incorporation of AI technologies in higher education contexts. This framework facilitates a comprehensive appreciation of the complex ramifications of AI integration within universities, guiding stakeholders—including senior management, faculty, and staff—to assess AI adoption's extensive impacts on the teaching and learning environment. While UNESCO (2021) targets a wider audience of policymakers with its baseline recommendations, Chan's framework translates these policy recommendations into actionable strategies across three critical dimensions: Pedagogical, Ethical, and Operational.

The *Pedagogical* dimension delves into the educational implications of AI integration, highlighting areas such as revising assessment methods, enhancing students' holistic competencies, preparing them for AI-influenced workplaces, and promoting a balanced adoption of AI technologies. Meanwhile, the *Governance* dimension focuses on the administrative aspects of AI use, covering ethical dilemmas and academic integrity, governance issues like data privacy and accountability, technology attribution, and ensuring equitable access to AI resources. The *Operational* dimension, on the other hand, addresses the tangible aspects of deploying AI in academic environments, emphasizing the monitoring and evaluation of AI applications, alongside offering necessary training and support in AI literacy for all university stakeholders. These dimensions lay the groundwork for the development of balanced approach guidelines, elaborated in subsequent sections. This advances a strategic, more specific yet flexible pathway for integrating AI into higher education practices.

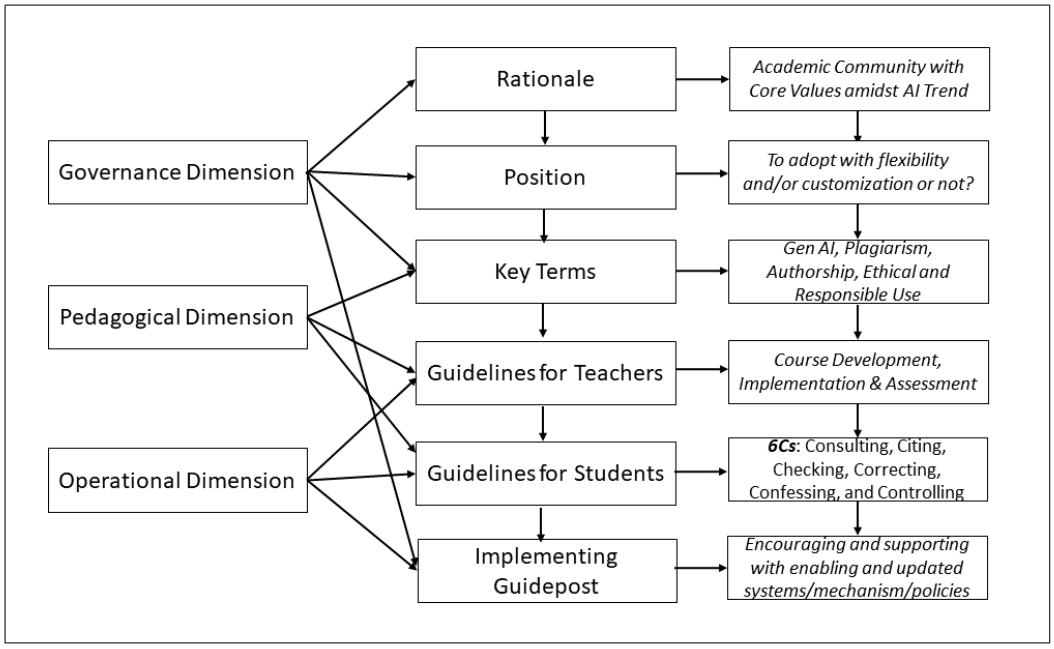
The Balanced-Approach Guidelines

Building upon the foundation of the AI Ecological Education Policy Framework previously discussed, a model of balanced approach guidelines designed for the integration of AI into higher education's teaching and learning processes is hereby crafted and endorsed. These generic and flexible guidelines are deliberately crafted to be adaptable, allowing any educational institution to customize them based on their specific context, needs, strategy, and overarching direction. This flexibility ensures that institutions and/or academics can effectively align the integration of AI technologies with their distinct educational philosophies and operational frameworks, promoting an individualized and strategic adoption of AI in academia. Appendix A

showcases the policy document that contains six sections: *rationale, position, key terms, guidelines for teachers, guidelines for students*, and *guidepost.* Figure 1 delineates the framework dimensions and guidelines sections where the policy framework and balanced approach guidelines converge.

Figure 1

AI Ecological Framework and Balanced Approach Guidelines Convergence



The Rationale**.** The rationale section articulates the need for a specific academic institution/department/faculty to embrace generative AI within its educational framework, aligning this technological advancement with the organization's core values and commitment to academic excellence. It stresses the importance of adapting to the rapidly evolving technological landscape to sustain relevance in education. Moreover, by advocating for the exploration of generative AI's potential to enrich teaching and learning experiences, the section underscores a proactive strategy toward innovative teaching, rigorous research, and dedicated service. Furthermore, it reaffirms the institution's dedication to transparency and accountability, ensuring that the integration of AI technologies reflects the institution's mission and philosophical commitments. This proactive stance towards generative AI is presented as essential to upholding the institution's values and enhancing its educational program. In connection to the earlier policy framework and this rationale section, Chan's (2023) *governance* dimension resonates with the university's underpinning of its academic integrity, transparency, proactiveness, and accountability as the primary motivation and justification to respond to the critical stance of adopting innovations vis-à-vis the organization core values. With management support,

organizations and/or academics willing to borrow such rationale section content are encouraged to customize it according to one's organizational values and philosophy.

The Organization's Position**.** The position statement delineates the approach of the university/college towards integrating AI in its academic ecosystem, aligning with the standards of a premier international institution (Hong Kong Polytechnic University, 2023). It emphasizes a balanced and inclusive strategy for adopting AI tools to innovate and enhance learning, teaching, and assessment methods. Thus, it explicitly drives the organization's position that not only capitalizes on the transformative potential of AI for educational advancement but also safeguards the principles of academic integrity, critical thinking, and skill development. It commits to blending traditional values with technological innovation, aiming to rationalize the ethical and responsible use of generative AI across academic practices for both faculty and students starting from a mutually agreed specific academic term/semester. This approach underscores the institution's vision to remain inclusive, adaptive, and ethical in the evolving educational landscape. In connection to the ecological framework and this position, Chan's governance dimension highlights how educational institutions can integrate AI technologies harmoniously, ensuring that these advancements align with core educational values, which other organizations of higher learning can also adopt or enhance.

Key Terms. This section offers conceptual insights including the operational definitions of critical terms as they relate to the use and ethical considerations of generative AI. Generative AI, as defined by UNESCO (2023a), encompasses technologies that create diverse content types, including texts, images, and videos in response to natural language prompts. Addressing the critical issues of plagiarism and authorship, it emphasizes the necessity of attributing AI-generated content and recognizing the creators of AI systems, aligning with copyright principles that reserve authorship for humans as per the U.S. Copyright Office (2023). Furthermore, Mhlanga (2023) outlines the ethical guidelines for AI's use, stressing transparency, privacy, accuracy, fairness, and the indispensable role of human oversight in educational applications. This section collectively underlines the importance of a responsible and informed approach to incorporating AI technologies in educational settings, ensuring that such integration honors academic integrity and the evolving landscape of copyright and ethical standards. In this section, both Chan's (2023) governance and pedagogical dimensions come into play. The *governance* dimension underscores how transparency, accountability, and human authorship are briefly discussed primarily focusing on human authors and proper attribution of AI-generated content. On one hand, the *pedagogical* dimension highlights the instructional benefits offered by AI tools, while simultaneously acknowledging the indispensable role of human oversight in their integration.

Guidelines for Teachers. This section begins by addressing the use of generative AI in the course development process, emphasizing its role in enhancing educational programs across all levels. It advocates for the strategic integration of AI to achieve learning outcomes, streamline content creation, curate relevant and context-sensitive learning materials, and support various learning preferences through technology augmentation. Moreover, its *course development* subsection underscores the potential of AI to enrich the educational experience by promoting the

enhancement of essential soft and hard skills among learners, thereby fostering a more dynamic and inclusive learning environment. Concurrently, AI literacy across curriculum design (Salhab, 2024) can be integrated.

In the *course implementation* subsection, the guidelines focus on practical aspects of employing AI tools in teaching and learning contexts. Faculty members are advised on the importance of setting clear boundaries for AI use, particularly about assessments and learning assistance, and communicating these to students to maintain academic integrity. The guidelines detail the necessity of outlining the acceptable use of AI, managing authorship claims, and establishing criteria for the evaluation of AI-assisted student works. Additionally, the emphasis is placed on ethical and responsible AI usage, highlighting the procedures for validating the integrity of student submissions through multiple assessment strategies and tools. This approach ensures that AI technologies serve as a complement to traditional teaching methods, supporting educators in navigating the integration of AI into their pedagogical practices while upholding academic standards.

Within the AI Ecological Framework, the *pedagogical* and *operational* dimensions are at work in this section. The *pedagogical* dimension in this section emphasizes the strategic integration of AI in education to enhance learning experiences by promoting skill development and creating an inclusive environment while ensuring ethical use and academic integrity through clear policies and assessment strategies. On one hand, its *operational* dimension focuses on the practical implementation of AI tools in teaching and learning, including setting clear usage boundaries, managing authorship and evaluation criteria, and employing ethical practices to complement traditional teaching methods and maintain academic quality mechanisms

Guidelines for Students. This section is crafted to assist students in navigating the ethical and responsible use of AI tools in their academic work, aiming to prevent academic dishonesty. It introduces the easy-to-remember overarching ***6Cs*** approach:

1. Consulting: Students are advised to adhere to their teachers' instructions or seek clarification in the absence of explicit guidance, ensuring they are aligned with the provided guidelines and expectations.
2. Citing: Following McAdoo's (2024) recommendations, students must appropriately cite any AI-generated content in their work, following the American Psychological Association publication manual's seventh edition.
3. Checking: This encourages students to verify the reliability and credibility of AI-generated materials by consulting primary sources, mindful of potential restrictions on AI authorship in their work.
4. Correcting: Guided by practices from the London School of Economics and Political Science (2022), students should limit AI's use to tasks like spelling, punctuation, grammar, and structure improvements, ensuring the work adheres to the conventions of academic writing.
5. Confessing: This involves openly acknowledging any AI assistance in content generation, including a detailed acknowledgment statement and an AI use declaration

with their submissions, specifying how AI tools were employed in the creation of their work.

6. Controlling: This advises students to regulate their use of AI within ethical and honest boundaries, avoiding any actions that could be deemed unacceptable or unethical.

Additionally, students are required to include an acknowledgment of any permissible assistance received and a declaration regarding their use of generative AI tools, stating which tools were used and describing their application. This section serves to instill a sense of responsibility and integrity among students in the use of AI tools, ensuring that their academic pursuits remain within the bounds of ethical standards and are aligned with the principles of academic honesty. It aims to prepare students to use AI in a manner that enhances their learning and research while maintaining the integrity of their scholarly work.

Aligned with the AI Ecological Framework, the *pedagogical* and *operational* dimensions are still manifested in this section. The pedagogical and operational dimensions are built in by promoting ethical AI use through the 6Cs approach—consulting, citing, checking, correcting, confessing, controlling—to uphold academic integrity and enrich learning while recommending a structured strategy for engaging responsibly with AI tools.

Guideposts. This section outlines strategic initiatives for integrating generative AI within the academic environments of higher education institutions (HEIs). This comprehensive approach encourages the adaptation of curricula to include AI use across a continuum from minimal to optimal opportunities, emphasizing the need to update curricular programs, syllabi, and educational materials to reflect these new guidelines. It also advocates for the formation of a multidisciplinary body, led by designated academic leaders, tasked with promoting AI integration through upskilling programs and enhancing AI literacy among internal stakeholders. This body is then responsible for revising and recommending additional guidelines and frameworks for AI integration in teaching and learning, ensuring that these initiatives are inclusive and involve consultations with both internal and external stakeholders.

Furthermore, the section underscores the importance of making AI and other digital infrastructures accessible to the entire academic community, highlighting the institution's commitment to digital inclusivity and preparedness. It points out the inevitable need for investment in soft digital AI tools and infrastructure to future-proof the university, necessitating policy updates on AI tool selection, deployment, and the establishment of preventive and corrective measures for guideline infringements. Despite the acknowledged risks associated with AI use, the institution views the integration of AI as an opportunity to model a balanced approach to leveraging generative AI tools responsibly and ethically. This forward-thinking strategy aims to innovate and safeguard the teaching and learning experience. In line with the AI Ecological Framework, this section, however, encapsulates the *governance* and *operational* dimensions. The *governance* dimension is captured through the establishment of a multidisciplinary body led by academic leaders to oversee AI integration and policy updates, ensuring inclusivity and stakeholder consultation, while the *operational* dimension is reflected in the strategic updating of curricular programs, investment in digital infrastructure, and the implementation of upskilling programs to enhance AI literacy, thereby innovatively and

responsibly future-proofing the teaching and learning experience within higher education institutions.

Methodology

Primarily drawing from Chan's (2023) AI Ecological Education Policy Framework, the author formulated generic guidelines for the integration of AI into educational practices. The methodology employed design thinking principles to iterate the proposed guideline, which was subsequently shared with both students and faculty colleagues for their critical comments. Feedback was gathered through online question-and-answer sessions, seamlessly integrated into asynchronous classes conducted via Google Classroom for undergraduates, and through the university's Learning Management System (LMS) for graduate students. An online forum facilitated an open discussion among student participants, encouraging them to provide critical feedback on the policy document as a component of their coursework. Concurrently, faculty feedback was solicited through an in-person focus group discussion, specifically organized as part of a professional development workshop aimed at enhancing faculty proficiency in using the online LMS. This dual-faceted approach to feedback gathering—engaging both student and faculty perspectives—ensured an inclusive capturing of stakeholders' awareness of AI and the guidelines' potential pedagogical and management bearing on the status quo and areas for policy refinement.

The study engaged a total of 104 undergraduate students from three different classes and 14 graduate students from a single class. All participants were supervised by the researcher. The undergraduate education students ranged in age from 18 to 22 years, while the graduate students' ages spanned from 25 to 45 years. Additionally, a focus group discussion (FGD) was conducted with 14 teachers who were colleagues of the researcher. The faculty participants, aged 26 to 55 years, specialized in various fields, including social studies, elementary education, science, mathematics, management, technology and livelihood, agriculture, and industrial education. All participants were affiliated with a small campus/college that is part of a larger system of public or state-run teacher education institutions in the Philippines. The study employed a thematic analysis approach to analyze responses to open-ended questions. These questions were designed to elicit participants' thoughts on the proposed generic guidelines and their perceptions of the impact of generative artificial intelligence on their practices. Specifically, participants were asked for their opinions on the proposed guidelines and to share their experiences with generative AI, particularly in relation to their academic work. This method facilitated a deep exploration of the participants' perceptions, enabling the identification and reflection of key themes and insights related to the guideline's refinement, its adoption or implementation, and the potential effects of AI in educational settings.

Qualitative data and thematic analysis

Participants from both the online forum and FGD were invited to share their insights on the proposed generic guidelines for integrating AI into the teaching and learning processes. They were encouraged to provide critical feedback and be open to diverse opinions, enabling the collection of a wide range of perspectives on AI, its impact on their work, and their experiences with various AI tools. The data from the online forum were analyzed through inductive thematic

analysis. Generally, the inductive approach allows themes to naturally emerge from the participants' responses instead of being predetermined by the researcher.

On the other hand, the focus group discussion data were analyzed through a deductive thematic approach. Within qualitative research, deductive category application involves using predefined, theoretically derived analytical aspects and relating them to the text. The qualitative phase of analysis is characterized by systematically assigning a category to a specific text segment in a methodologically controlled manner (Mayring, 2000). By comparing the proposed guidelines with the primary stakeholders' feedback (both inductively and deductively analyzed), the researcher refined the final draft, making necessary clarifications and adjustments to address identified gaps and areas needing improvement. This process enhanced the quality and applicability of the guidelines that may contribute valuable insights to university programs and policies relevant to the selection, use, and evaluation of generative AI tools.

Results

Students' Feedback

The qualitative data collected from both undergraduate and graduate students yielded valuable suggestions and/or comments. There are three main themes and eight subthemes that emerged from the qualitative data as presented in Table 1**.** From the data, the main themes serve as the key areas that are directly relevant to the refinement of the guidelines for AI use in university-level teaching and learning. These also connect with the feedback from their teachers.

Table 1

Main Themes and Subthemes of Inductively Analyzed Data

Main Themes	Subthemes
1. AI utilization and efficiency	Task simplification and assistance
	Personal and professional advancement
2. Cognitive and ethical implications	Intellectual laziness and dependence
	Threat to authentic learning
	Ethical considerations and integrity
3. Navigational strategies for AI use	Implementing and following guidelines
	Balancing AI with human effort
	Responsible and mindful application

AI Utilization and Efficiency. The research findings underscore the pivotal role of AI in both streamlining academic tasks and paving the way for professional opportunities, as observed in the overarching theme of AI utilization and efficiency. The insights from participants—such as one undergraduate student (UG28) who pointed out the benefits of AI in academic contexts by stating, "*AI can be very helpful for students in various ways..."*—highlight the technology's capacity to enhance efficiency in educational settings. Similarly, the anticipation and eagerness

for technological engagement expressed by a graduate student (G4)—*"Looking forward to be immersed with this kind of technology..."*—reflect a broader enthusiasm among students for leveraging AI not just as a tool for immediate task assistance but also as a catalyst for professional growth. Together, these perspectives weave a narrative that not only appreciates AI's immediate benefits in educational tasks but also acknowledges its potential to influence professional advancement, illustrating the technology's dual role in students' academic journeys and future career trajectories.

Cognitive and Ethical Implications. The cognitive and ethical implications of AI use encompass focused concerns including laziness, authentic learning, and integrity, reflecting emerging challenges in intellectual engagement and ethical standards. A graduate student (G1) highlighted the potential negative cognitive impact, noting *"...it may induce mental dependence, impair critical thinking..."*, which points to concerns about the possibility of AI fostering a reliance that could diminish students' critical thinking and problem-solving skills. On a different note, the value of authentic learning was passionately articulated by a graduate student (G6), who expressed a desire for genuine emotional connection in writing, stating, *"I want my readers to feel what I have written and it will happen if I wrote it with feelings..."* This sentiment underscores the importance of maintaining personal touch and authenticity in AI-assisted educational contexts. Ethical considerations, particularly regarding academic integrity, were voiced by a graduate student (G13), who cautioned, *"...using AI... can lead to bad habits and produce output that is not entirely our idea..."* This reflects concerns about the ease with which AI can be misused, potentially undermining the originality and authenticity of academic work. Collectively, these insights bring to light the foreseen cognitive and ethical considerations that accompany the integration of AI in educational settings, indicating both the potential challenges and the intrinsic value of maintaining human elements in learning and creativity.

Navigational Strategies for AI Use. Navigational strategies for AI use are categorized into three subthemes that include following the guidelines, piloting human effort, and doing a mindful application. The clarity of the AI guidelines was affirmed by a graduate student (G12), who appreciated the non-prohibitive stance on AI, stating *"The guidelines...are clear that the utilization of AI is not prohibited..."* that underscores the openness of the educational policy towards embracing AI technologies while setting boundaries. Additionally, the importance of integrating human effort with AI tools was highlighted by another graduate student (G11), who posited that productive outcomes could be achieved if tasks are undertaken with sincerity and AI assistance: *"...if we do our task wholeheartedly with the aid of AI, I believe we will be able to turn out productive..."*. This suggests a synergy between human endeavor and technological aid as key to maximizing the benefits of AI in academic settings.

Furthermore, the significance of mindful AI application was articulated by one undergraduate student (UG23), who emphasized responsible use, guided by the established dos and don'ts, stating, *"We must use AI responsibly. We've read in these guidelines the dos and don'ts of using AI..."* This reflects a collective understanding among students about the necessity of adhering to guidelines for ethical and effective AI utilization. Together, these perspectives highlight a comprehensive approach toward navigating AI integration into academic practices.

Academic Insights

AI use extends beyond student applications, centering primarily on how teachers facilitate opportunities for AI integration within the educational realm. Therefore, it is also crucial to gather feedback directly from teachers on their perspectives regarding AI's role in education and their thoughts on the guidelines shaping their teaching and learning environment. The qualitative data collected from teachers also provided insightful and substantial suggestions enriching the study's findings. Analysis of this data revolves around 7 main themes and is expanded by 23 explanatory subthemes, as detailed in Table 2. These themes represent crucial categories pertinent to refining the generic guidelines for AI use in university teaching and learning contexts. Furthermore, the insights from teachers complement the feedback obtained from students, collectively informing the specificity and context-sensitivity of the balanced approach guidelines.

Exposure to AI. Teachers' exposure to AI encompasses information that details its introduction and application across educational and professional landscapes, illustrating diverse pathways to engagement with the technology. One Teacher (T4) shared their initial encounter with AI, stating *"I heard and experienced it when I attended a short course in Australia,"* highlighting the role of formal education abroad as a catalyst for exposure to AI technologies. This experience contrasts with the practical application of AI tools in everyday professional activities, as described by another teacher (T2), who utilizes AI-powered applications like Grammarly, ChatGPT, and QuillBot for crafting reports and instructions, showcasing the integration of AI into their workflow for enhanced productivity and efficiency. Furthermore, the significance of social networks in fostering AI adoption is underscored by one teacher (T3), who noted, *"it was introduced to me by a colleague,"* indicating the importance of peer influence in the discovery and adoption of new technologies. Together, these insights illustrate the diverse avenues through which educators are exposed to and engage with AI technologies, from formal educational experiences to professional tool usage and peer introductions. This contributes to a broader understanding and incorporation of AI in educational and professional contexts.

AI Tools in Academia. Another research finding reveals an emerging theme centered on the utilization of AI tools in academia, encompassing subthemes such as academic integrity, teaching aid, and learning enhancement. One teacher (T1) specifically mentioned the use of tools like *"Grammarly and Turnitin"* in the context of maintaining academic integrity, indicating the crucial role these technologies play in upholding standards of originality and proper citation. In terms of teaching assistance, another teacher (T6) listed *"ChatGPT, Grammarly, SIRI"* as integral tools, highlighting the diverse applications of AI in facilitating educational processes and teacher tasks. Furthermore, the enhancement of the learning experience through AI was exemplified by one more teacher (T2), who noted the benefits of AI in *"checking my grammar and sometimes serves as my consultant,"* showcasing the personal utility of AI in improving their academic work. These findings collectively resonate with the multifaceted impact of AI tools in academia, spanning from ensuring academic integrity to aiding in teaching and enriching the learning journey.

AI's Educational Impact. The exploration of AI's Educational Impact within the study presents a pivotal understanding of its role in a university setting, encapsulated through the

acknowledgment of benefits, concerns over limitations, and considerations of its influence on employment. One teacher (T10) briefly recognizes the positive aspects of AI by stating, *"it is beneficial,"* highlighting a general appreciation for AI's contributions to the educational field. This sentiment is expanded upon by another teacher (T1), who acknowledges AI's advantages but also stresses the importance of being cognizant of its limitations and disadvantages, articulating, *"I believe it is beneficial to education but as educators, we should also be aware of its limitations and disadvantages so that we can manage them."* This perspective underscores the critical need for a balanced approach to integrating AI in educational contexts. Furthermore, a seemingly technology-literate teacher (T5) delves into the broader implications of AI beyond the classroom, noting its growing dominance in the online world and its potential to automate tasks traditionally performed by humans, as observed in their remark, *"I think it dominates the online world already. Some companies are also already designing systems that will replace or lessen work performed by humans."* Together, these perspectives weave a complex picture of AI's educational impact. Balancing the recognition of its benefits with a mindful approach to its limitations and the evolving landscape of employment or relevant industry, however, remains critical.

Campus Readiness for AI. Campus readiness for AI was also a significant concern in the focus discussion. One teacher points out the lack of preparedness and the urgent need for relevant training. This teacher (T1) articulated *"I think as a campus, we are not yet ready. We need relevant pieces of training to be prepared,"* emphasizing the critical need for educational development to facilitate AI integration. Another teacher (T3) expanded on this by addressing the complexities surrounding infrastructure and budget constraints, indicating, *"Somehow, for challenges, I think the infrastructure, sustainability, security etc.,"* which brings to light the multifaceted challenges that extend beyond training to include the physical and financial readiness of the campus for AI adoption. These perspectives collectively illustrate an informed understanding among educators of the requirements for successfully implementing AI in educational settings that underscore the importance of both developing human capabilities and enhancing infrastructural and budgetary supports.

Teaching and AI. The focus group discussion also reveals a consensus among educators regarding AI's role and limitations in the educational sphere. One teacher (T1) clearly stated, *"AI can't replace a teacher but AI tools can support teachers in teaching,"* highlighting the belief that while AI can augment the teaching process, it cannot displace the unique contributions of human educators. Another teacher (T4) deepened this perspective by stressing the irreplaceable human elements that AI lacks, asserting, *"AI may copy how teachers teach knowledge but AI cannot copy how teachers infuse the values they need to learn. AI cannot copy the caring touch of the teachers."* This underscores the intrinsic human qualities, such as the ability to impart values and offer a caring presence, which AI cannot replicate. Furthermore, the ethical dimension of AI use in education was addressed by another teacher (T3), who remarked, *"Students can use AI provided that there is a solid Ethical Framework followed by a university."* This points to the necessity of guiding AI application within educational settings through well-defined ethical guidelines. Jointly, these insights from educators articulate a vision of AI as a

supportive tool in teaching. Thus, it underscores the indispensable nature of human interaction and ethical considerations in leveraging technology for educational purposes.

Policy on AI Use. Policy on AI use discussion revolves around the academic context, revealing a layered approach to governance that spans from university-wide mandates, and departmental autonomy to individual teacher discretion. One teacher (T2) advocates for system-based cohesive governance, noting *"The PNU System, however, must have a uniform policy on this since we have ONE-PNU policy,"* emphasizing the need for a standardized policy across the university to ensure consistency in AI integration. Contrasting this perspective, a teacher (T1) suggests a blend of overarching guidelines and localized control: *"Have a university-wide policy on when they are and or are not appropriate to use and let departments/faculties decide the policy on when they are or are not appropriate to use."* This approach allows for a foundational policy that accommodates department-specific nuances. Further individualizing policymaking, another teacher (T13) champions lecturer autonomy, proposing *"Let lecturers decide individual policies for individual assignments on when they are or are not appropriate to use."* This stance supports the idea that lecturers, being closest to the student learning experience, should tailor AI usage policies to fit specific academic objectives and tasks. Together, these viewpoints outline a multitiered approach to AI policy in education, balancing uniformity with the flexibility needed that address the diverse needs of university departments and individual teachers. Thus, this input characterizes the context-sensitivity of the balanced approach guidelines.

Guidelines Feedback. Finally, the proposed guidelines were presented to the teachers for their critical comments. The category under feedback reveals insightful perspectives on the development and reception of policies regarding AI use which are brought to light through the views of various academics coming from different disciplines in one campus. The craftsmanship of the AI usage policy received praise from a teacher (T7), who described it as *"Well-crafted,"* indicating a positive assessment of the policy's construction and clarity. Moreover, this sentiment is echoed by another teacher (T1), who considers the guidelines *"a good start."* This suggests an optimistic outlook on the initial steps toward strategically regulating AI use in educational settings. However, one more teacher (T2) emphasizes the urgency and necessity of these policies, stating *"It is not a matter of choice for the faculty. It is a must,"* highlighting the imperative nature of guidelines for academics to consider more seriously.

Furthermore, the teachers' perspectives encompass views on the broader implications and strategies for AI integration within the teaching profession. One teacher (T3) encourages a proactive stance towards AI, asserting, *"AI is something that we shouldn't be afraid of but rather, we need to embrace and adapt,"* which underscores the importance of adopting AI as a beneficial tool in education. This perspective of adaptation and acceptance is fortified by another teacher (T4), who points out that *"Students can use AI provided that there is a solid Ethical Framework followed by a university."* This draws attention to the ethical and practical considerations essential for responsible AI use. Additionally, one more teacher (T5) advocates for further guidance specifically tailored for future teachers, suggesting, "*AI can be utilized, but to build a strong foundation of knowledge as future teachers, additional guidelines must be provided."* This highlights the necessity for ongoing development of AI policies that cater not only to current

educational needs but also to the preparation of future educators in navigating and leveraging AI technologies efficiently and effectively.

Discussion

To construct a coherent narrative that discusses the key points of the findings and smoothly delineates the objectives of this paper for both student and teachers' feedback on the use of generative AI and the guidelines presented to them, three subtopics are put forward: (1) revealing the obvious, (2) refining the guidelines, and (3) responding to critical needs.

Revealing the Obvious

The enthusiasm among university students for the integration of generative AI into the educational landscape highlights a forward-looking perspective toward technology's role in the university. Students (like UG28 and G4) embody this optimism, seeing AI as a tool that not only simplifies academic tasks but also opens doors to professional development opportunities. This optimism is shared broadly among the student body, where AI is perceived as a catalyst for enhancing educational efficiency and personalizing the learning experience. There is widespread optimism among students who view AI as a key to enhancing educational efficiency and personalizing learning experiences. This positive outlook toward AI tools mirrors findings by Miyazaki et al. (2024) and Tlili et al. (2023) who observed a similar sentiment in social media among users across various industries. Seemingly, students are particularly enthusiastic about the benefits of future AI literacy training, ready to leverage AI's potential to innovate traditional educational frameworks. This is crucial for promoting their integration and improving learning outcomes. Consequently, the study's participants generally perceived the use of AI tools as beneficial to their learning environments.

Conversely, teachers' perspectives on AI integration are shaped by a rich experience that ranges from formal education settings, as one teacher's (T4) overseas experience exemplifies, to the pragmatic application of AI tools in day-to-day academic operations, as practiced by another teacher (T2). This diversity in exposure contributes to a more distinct understanding of AI's role in education among teachers, who recognize its benefits but also approach its integration with caution. Acknowledging AI's capacity to enrich teaching and learning experiences, educators underscore the critical importance of upholding academic integrity and retaining the authentic human touch. Bozkurt (2023b) contributes to this dialogue by categorizing content generation into two types: "organic (human-created)" and "synthetic (generative AI-created)" that introduces a nuanced approach to integrating AI in content co-creation. He then delves into the multifaceted roles of generative AI and promotes the necessity of open disclosure to ensure academic integrity (Bozkurt, 2024). Therefore, both educators and learners must engage with AI responsibly, in a manner that not only enhances educational success but also remains true to ethical guidelines and upholds the core principles of education.

Refining the Guidelines

The feedback from both students and teachers signals a consensus on the need for guidelines that are not only clear and comprehensive but also adaptable to the dynamic nature of AI technologies. Students, through voices like G12 and UG23, advocate for policies that outline the ethical use of AI, emphasizing its role as a supportive tool rather than a substitute for human interaction. This perspective highlights a desire for guidelines that facilitate responsible AI use,

ensuring that technology serves as an enhancement rather than a hindrance to the learning experience. Echoing this sentiment, Wang et al. (2023) maintain that students who perceive their learning contexts as more supportive are notably more eager to engage in AI-enhanced learning, illustrating the positive correlation between supportive educational environments and the willingness to adopt AI for learning.

Reflecting on their varied experiences with AI, teacher participants appeal for flexible policy frameworks capable of accommodating the diverse requirements of educational environments. The call for policy development, articulated by T1 and T13, underscores the importance of creating guidelines that are broad enough to cover general principles yet adaptable to address specific educational contexts. Notably, Delcker et al. (2024) stress the vital contribution of educators and stakeholders in higher education to illustrate the impactful applications of AI tools. Thus, guidelines adopting a balanced approach that receive positive reception and feedback from participants will significantly make the guidelines more relevant and inclusive.

Participants' feedback suggests the need for guidelines that not only cover a wide range of AI-related issues but also remain sensitive to the specific contexts in which AI is used. These guidelines should empower both educators and learners to engage with AI technologies in meaningful and effective ways. Moreover, the emphasis on comprehensive yet flexible guidelines suggests a pathway toward more effective and ethical AI integration in educational settings, catering to the evolving needs of the academic community. On this note, Besley et al. (2023) recommend formulating an integrity statement, establishing explicit course policies, and steering clear of academic power misuse, course instructors could enhance the reciprocity between learning and teaching dynamics. Considering the feedback and additional points, the proposed balanced approach guidelines articulate a wide breadth in scope and profound depth in adaptability, providing more inclusive opportunities for teachers and students to communicate meaningfully and purposively. This facilitates the achievement of the competencies that a particular coursework aims to accomplish, yielding significant results.

Responding to the critical needs

The critical need for AI literacy and adequate resources emerges as a central point in the discourse on AI integration. Both students and teachers highlight the importance of strategies that enhance understanding and familiarity with generative AI tools, indicating a gap between current educational practices and the potential offered by AI technologies. The concerns raised by teachers (T1 and T3) about the readiness of campuses for AI adoption, specifically in terms of infrastructural and human capital development, align with the findings of Lin et al. (2023) regarding sustainable education. These perspectives highlight the critical role of education in building a sustainable future while also pointing out significant challenges, including inadequate infrastructure, limited resources, and a lack of awareness and engagement. These issues underscore the necessity for a holistic approach to AI integration and sustainable education, which involves not only training programs and resource allocation but also significant investments in technology and infrastructure.

Furthermore, the call for additional guidelines tailored to the unique challenges and opportunities of AI integration emphasizes the ongoing need for support mechanisms that facilitate the ethical and effective use of generative AI in education. This encompasses a broader

requirement for policies that not only guide responsible AI use but also ensure educators and learners are equipped to navigate the complexities of generative AI integration. In this regard, Tlili et al. (2023) reveal that while the majority of early adopters in educational settings are optimistic about the role of ChatGPT in enhancing education, there remains a segment of the community that advises caution regarding its integration. It stresses the need for a methodical and deliberate approach to weaving AI into educational systems. This entails not only establishing explicit guidelines and examples to prevent unethical use of AI in academia but also balancing the curriculum to foster skills development. Such a curriculum should encourage critical thinking, creativity, and innovation, with or without AI support. Additionally, it should also call for an ongoing process of review and adjustment to stay aligned with the fast-paced advancements in the AI field.

At the core of the proposed guidelines is the crucial role of teachers in guiding and mentoring students toward ethical and responsible AI use. Barrett and Pack (2023) argue the importance of educators undergoing targeted professional development programs to effectively apply generative AI in educational settings, in addition to the creation of clear guidelines. Therefore, providing academics with the necessary toolkit and training is mission critical to render the balanced approach guidelines usefulness and relevance. By upskilling human resources and filling the gaps, educational institutions can foster an environment where AI is seamlessly integrated into teaching and learning processes, enhancing the educational experience while safeguarding against potential pitfalls. This approach aligns with the collective insights advocating for a comprehensive strategy that embraces the transformative potential of AI technologies while making sure that the integration of AI into education is informed, effective, and aligned with educational goals. Another consideration is to view the educational application of AI from what Swindell et al. (2024) suggest anchoring philosophical perspectives on technology, education, and society integration, with a focus on the enduring aim of creating an education that empowers individuals to act effectively in the world.

Conclusion

The study proposes a balanced, adaptable, and context-specific guidance for embedding generative AI within the teaching and learning processes at the university level and individual levels. Grounded in the AI Ecological Education Framework, it offers a wide-ranging set of guidelines across six key sections—rationale, position, key terms, guidelines for teachers, guidelines for students, and guidepost. These guidelines are designed with flexibility in mind, empowering educational institutions or individuals to tailor such to their unique contexts, needs, strategic goals, and overarching visions. Input from both educators and students has been crucial, providing significant contributions towards the formulation and enhancement of these policies. Nevertheless, the study acknowledges its limitations, notably its primary focus on a relatively small campus, which may not reflect the broader spectrum of higher education settings in the Philippines. Additionally, the research centered on text-based generative AI tools and involved participants from classes directly taught by the researcher, as well as the immediacy with teacher colleague focus group participants, introducing potential biases inherent to insider-led research projects.

Students' feedback on integrating AI into education highlights its benefits, such as simplifying tasks and fostering advancement. However, concerns about creating intellectual dependency and ethical challenges are also prevalent. Beyond the essential need for clear

guidelines on AI integration, with a focus on enhancing AI literacy, there is a consensus on the importance of balanced AI use. This calls for the establishment and/or adoption of proposed guidelines that not only ensure the responsible application of AI but also promote synergy between AI capabilities and human contributions in the learning process. Similarly, teachers' reflections on incorporating AI into the teaching and learning ecosystem reveal a nuanced understanding that spans its potential to revolutionize education and the intrinsic challenges it poses. Acknowledging AI's role as an augmentative tool rather than a replacement, teachers stress the importance of human elements in learning, the necessity for comprehensive yet context-specific guidelines, and targeted training to ensure ethical use and substantial investment in campus AI readiness. Thus, striking a balance between leveraging AI for educational benefits and mitigating concerns pivots on sustaining institutional values and promoting academic integrity, alongside establishing a sound university departmental framework that also recognizes individual teachers' autonomy.

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Declarations

The author has no competing interests to declare. The study is conducted solely by the author with the Institutional Review/Clearance to Proceed REC Code: 2024-111. The datasets used and/or analyzed in this project are available from the corresponding author upon reasonable request. The research project was completed without the benefit of internal or external financial support.

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Appendix A

A Model for a Balanced Approach to Guidelines in Integrating Generative AI in University-level Teaching and Learning

RATIONALE

The faculty members and students of _____ **[University/College/Department]** belong to a community of scholars, practitioners, and lifelong learners who embody the institution's core values of _____ **[University's/College's core values]** whether online or offline in the pursuit of academic excellence for _____**[Fitting the Organization's key philosophy/vision or mission]**. In an era redefined by rapid technology breakthroughs, generative artificial intelligence's (AI) relevance can no longer be discounted; generative artificial intelligence has emerged as a potent tool in the educational landscape. As the academic community strives for transparency and accountability through rigorous research, innovative teaching, and dedicated institutional and community service, it is critical to adapt to the changing educational landscape and explore how generative AI may enrich and transform the teaching and learning experience.

_____[University/College] POSITION

Similar to an international topnotch university[1], _____**[University/College]** adopts an **inclusive and forward-thinking position** regarding the utilization of AI tools as a constructive and game-changing force in education. This includes integrating such tools into the academic works fostering innovative approaches for learning, teaching, and assessment practices. Thus, these baseline guidelines aim to navigate the dynamic terrain of AI integration in our academic coursework, forging a critical balance between harnessing the potential of AI (for) as a tool in advancing educational transformation and the human capacity to ensure that the values of academic integrity and critical thinking are not disregarded and the development of essential skills are not compromised.

As a professional community of practitioners and lifelong learners, _____**[University/College]** shall nurture time-tested traditions while embracing innovation and future readiness to create a policy compass for the ethical, honest, responsible, and fair use of generative AI encompassing a wide array of academic works for both teachers and students. It is aimed that the utilization of relevant and appropriate generative AI will become part of the routine work among academics and students beginning the _____**[Term/Semester Academic Year].**

KEY TERMS

Generative Artificial Intelligence. UNESCO[2] defines generative Artificial Intelligence (AI) as "technology that automatically generates content in response to prompts written in natural

language conversational… where content can appear in formats that comprise all symbolic representations of human thinking: texts written in natural language, images (including photographs to digital paintings and cartoons), videos, music, and software code." Some AI tools available online include but are not limited to conversational models like ChatGPT, Copilot, Gemini, and others.

[1] The Hong Kong Polytechnic University "Guidelines for Students on the Use of Generative Artificial Intelligence (GenAI)," Academic Registry, accessed [December 2023], https://www.polyu.edu.hk/ar/students-in-taught-programmes/use-of-genai/.
[2] UNESCO. "*Guidance for generative AI in education and research*" accessed [November 2023], UNESCO Publishing. https://unesdoc.unesco.org/ark:/48223/pf0000386693

Plagiarism. It is generally defined as when the words or ideas of others are evident in one's work (excluding common knowledge) without appropriate attribution, credit, or acknowledgment. Giving credit to the source of works of others is not limited to citing or attributing human authors. Using raw or unprocessed AI-generated content should be properly acknowledged also*;* failure to do so or attribute comprises plagiarism.

Authorship*[3]*. In the context of scholarly works classified as copyrightable and noncopyrightable, the term "author" is exclusive to "human-authored works". The author is the one "to whom anything owes its origin; originator; maker; one who completes a work of science or literature" or other creative published forms of expression. Nonetheless, if "raw" AI-generated content or output is borrowed or incorporated into one's work, it should be acknowledged properly by giving credit to the author of the algorithm or AI system.

Ethical and responsible use of AI*[4]*. Responsible and ethical use of AI tools revolves around the transparency of utilization (truthful disclosure about use of AI), respect for privacy (users' data protection), accuracy of information (users' responsibility for multiple verifications of content), fairness and non-discrimination of AI (inclusivity of training data), AI literacy (learning proper use) and irreplaceability of human teachers (human in the loop). Thus, teachers, and students will NOT solely rely on AI tools-generated content in doing role-and-task-specific assessments and decision-making.

GUIDELINES FOR TEACHERS

Course Development. The use of generative AI in the design or development of courses for all levels (short courses, undergraduate, graduate, etc.) aims to:

- Ensure the fulfillment of program/course, learning outcomes or objectives
- Improve efficiency in the content creation and refining of course materials
- Assist in curating relevant, current, credible, and context-sensitive learning resources
- Augment other technologies to cater to a variety of learning preferences and outcomes
- Enhance the learning experience for all diverse learners by fostering higher-level soft and hard life skills

Course Implementation. Faculty members are encouraged to **explicitly** communicate to their students the following:

- The permissible usage of AI, as well as specifying instances where and when its use is restricted, including its application or not in both formative and summative assessments.
- The acceptable usage of AI in assisting learning (i.e, as an online tutor, evaluator and/or content co-creator [the level/degree/amount in percentage of the total work]) which is highly dependent on the course objectives set to attain.
- The claim and implications of authorship with works created with generative AI assistance.
- The criteria, weight, and scope of assessment tasks or rubrics for submitted outputs, if applicable.

[3] U.S. Copyright Office, Library of Congress. "Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence (88 FR 16190)". accessed [November 2023] https://www.federalregister.gov/documents/2023/03/16/2023-05321/copyright-registration-guidance-works-containing-material-generated-by-artificial-intelligence

[4] Mhlanga, D. (2023). Open AI in education, the responsible and ethical use of ChatGPT towards lifelong learning. SSRN Electronic Journal. https://doi.org.2/10139/ssrn.4354422

- The ethical, honest, responsible, and fair use of generative AI thereby upholding academic integrity and/or honesty in all academic course works.
- The ramifications in the event of guideline infringement on their academic standing and scholarship prospects.

As stated earlier, **academics** will NOT solely rely on AI tools-generated content in doing role-and-task-specific assessments and decision-making. They will take all necessary options to validate and/or triangulate the integrity of students' submissions including the use of similarity detection tool(s) and multiple modes of assessments.

GUIDELINES FOR STUDENTS

To avoid committing academic dishonesty in the use of AI tool(s), students must do these **6Cs**:

- ***Consulting.*** Be mindful of the instructions provided by their teachers and in the lack thereof or absence of explicit directions, seek clarifications from their teachers.
- ***Citing.*** As responsible and ethical users of AI, authors need to cite in text with appropriate inclusion in the reference list any AI-generated content in their works. See McAdoo's recommendations[5] for updated and concise steps on how such content or output can be integrated in one's work following the 7th edition of the American Psychological Association publication manual. Apart from citing, academics may require you to include in your submission 'prompts' used in generating content. Always keep a record of the *prompts* used.

- ***Checking.*** Not all materials or content generated by AI are trustworthy. It is prudent to check for other reliable or credible primary sources and cite such information rather than solely rely upon AI-generated materials. Remember, academics may limit to a certain extent AI authorship on students' work.
- ***Correcting.*** Adapted from the London School of Economics and Political Science[6], the use of AI for general language editing or proofreading work should be limited to:
    - spelling and punctuation;
    - ensuring the work follows the conventions of grammar and syntax in written English;
    - shortening long sentences and editing long paragraphs;
    - changing passives and impersonal usages into actives; and
    - improving grammar, spelling, and punctuation of any text
- ***Confessing***. Students should explicitly acknowledge any support received including how AI is used to generate content. The succeeding ***Acknowledgement Statement and AI Disclosure inclusion*** should be properly and truthfully accomplished and appended to the student's major coursework or requirements submitted.

> **Acknowledgment:** Specify here the person or organization (if applicable) if you received allowable/acceptable support or assistance like minor language editing and technical support for the videos including **IF** part or entirety of work(s) is/are submitted to other courses among others. _____

[5] McAdoo, T. (2023, April 7). How to cite ChatGPT. https://apastyle.apa.org/blog/how-to-cite-chatgpt

[6] London School of Economics and Political Science. (2022). Statement on editorial help for students' written work. https://info.lse.ac.uk/Staff/Divisions/Academic-Registrars-Division/Teaching-Quality-Assurance-and-Review-Office/Assets/Documents/Calendar/StatementOnEditorialHelp.pdf

> **AI Utilization Declaration.**
> ❑ I/We declare that Generative AI tools have **not** been used to produce the submitted work. State your reason(s) for **not** using Generative AI tools. _____
>
> ❑ I/We declare that Generative AI tools have been used to prepare the submitted work. The ***Generative AI tools*** **used** and ***the way they were used*** are as follows:
> _____

- ***Controlling.*** Regulate but not limit oneself in using AI within the acceptable, honest, and ethical bounds thereby not committing any unacceptable or unethical act.

GUIDEPOSTS

Academics are **encouraged** to design and implement coursework with minimal to optimal opportunities to accommodate the use of Generative AI. Thus, updating curricular programs, syllabi, course documents, and other relevant materials with the consideration of these guidelines is necessary.

Building on the AI Ecological Education Policy Framework[7], the **_____[Head of the HEI/Campus/Department]** shall constitute a multidiscipline body to advocate AI integration in teaching and learning in the **_____[university/college/unit]**. With the leadership of the**_____ [VP of Academics/Head/Dean],** this body shall campaign on upskilling drives, programs, and activities toward furthering internal stakeholders' competence on "AI for education readiness" or "AI literacy". Moreover, they shall update and recommend additional guidelines, code of conduct, and other implementing frameworks or mechanisms for AI integration in higher education with consultation with internal and external stakeholders. Consequently, AI and other digital infrastructure should be accessible to all members of the academic community.

The need to invest more in the soft digital AI tools and/or infrastructure for the university's future readiness or "AI readiness" becomes inevitable too. In doing so, additional policy formulation and/or updates on the selection and deployment of AI tools including preventive and corrective and/or disciplinary measures for any future infringement of this initial guide warrants to be looked forward to and acted upon.

Finally, while the risks of using AI persist, the **_____[University/College/Department]** sees this challenge as an opportunity to model how the AI tools can be incorporated into a balanced approach thereby using appropriate generative AI responsibly and ethically in innovating and future-proofing the teaching and learning experience.

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[7]Chan, C.K.Y. A comprehensive AI policy education framework for university teaching and learning. *Int J Educ Technol High Educ* **20**, 38 (2023). https://doi.org/10.1186/s41239-023-00408-3