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**Exploring the Instructional Practices of Select Private Higher Education
Institutions in the Use of Artificial Intelligence: Towards
an Artificial Intelligence Policy Recommendation**

A THESIS

Presented to The College of Advanced Studies

Philippine Normal University

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In Partial Fulfillment

of the Requirements for the Degree

MASTER OF ARTS IN EDUCATION IN CURRICULUM AND INSTRUCTION

Leah P. Mata

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Chapter 1

The Problem and Literature Review

This chapter provides a comprehensive overview of the study. It begins by presenting the background and rationale, establishing the significance of the topic, and identifying the gap or issue the research aims to address. It also outlines the specific objectives, research questions, scope and limitations, and the conceptual framework guiding the investigation.

Background of the Study

Artificial intelligence (AI) is one of the biggest technological advancements that mankind has yet developed. The rise of AI has opened limitless possibilities in today's world, so much that it has become an important and inevitable aspect of our daily lives. Many industries including healthcare, marketing, finance, agriculture, and education have transformed due to the advantages of AI.

In recent years, AI has become instrumental in revolutionizing education, offering more efficient ways to enhance personalized learning which consequently improves students' learning outcomes and engagement, reduces teachers' workload, and produces valuable data on students' performance (Ayala-Pazmiño, 2023). Despite these, the use of AI in education is not without risks. Among these risks include sustaining human connections and interactions, maintaining data privacy and safeguarding academic integrity (Karan & Angadi, 2023). The study of Crompton and Burke (2023) revealed that 72% of

AI users in academic institutions were students who use it as an aid to complete assessment and access learning resources. In the Philippines, over 83% of students leveraged AI tools to support their academic works (Instructure, 2023). A statistic released by Copyleaks (2024) revealed that there is a significant increase in AI-generated content and instances of plagiarism among Filipino students with over 30% of academic outputs uploaded in plagiarism detection tools being flagged. An incident of plagiarism involving AI, committed by undergraduate students in a higher education institution in the Philippines that was publicly reported in 2023 served as another wake-up call to the academic community to review policies on academic integrity to include the use or misuse of AI in completing academic requirements.

These events not only raised urgent questions about academic integrity and the ethical implications of leveraging AI technologies in teaching and learning but it also highlighted the growing challenges education faces in maintaining rigorous standards of academic integrity in an increasingly digital age. Teachers emphasized the urgent need for institutions to review the curriculum as well as establish clear instructions, policies and guidelines on AI relative to its ethical use (Del Mundo et al., 2024).

Higher education institutions (HEIs) play a vital role in shaping the responsible use of AI technology and it is essential to incorporate guidance on AI in education to address various concerns such as academic integrity, ethics, and the broader use of such technologies (Crompton & Burke, 2023). The potential for plagiarism and over-reliance on AI-generated content necessitates stricter guidelines to promote a culture of responsible AI use. The role of HEIs in promoting responsible and ethical use of AI encompasses

setting standards, designing curricula, conducting research, engaging in policy discussions, and demonstrating ethical leadership (Kuleto et al., 2021). The urgency of developing and implementing a robust policy cannot be overstated, as it is essential for harnessing AI's potential while safeguarding academic integrity. While there are general recommended guidelines provided by international organizations such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), higher education institutions are still responsible for promulgating its own policies and guidance for responsible use of AI. Unfortunately, this is still not the case for several HEIs. According to a UNESCO survey in 2023, out of over 450 education institutions surveyed around the world, approximately 13% only of universities have some kind of guidance on AI while 20% of respondents were not able to say whether their HEI had issued policies, guidelines, or framework which are critical to address unplanned implications of AI use in teaching and learning.

There are more than 2,000 higher education institutions in the Philippines (Commission on Higher Education, 2025) yet only a small fraction of this number only has clear guidelines on the use of AI. At present, there are only a few higher education institutions with established policies and guidelines in the use of artificial intelligence, responding institutionally to the challenges posed by AI in the academe. These institutions include University of the Philippines through its "Principles for Responsible and Trustworthy Artificial Intelligence", Far Eastern University's "Faculty and Student Guidelines on the Use of Generative Artificial Intelligence", Silliman University's "Gen-AI Integration Framework in Teaching, Learning, and Operations", Mindanao State Uni-

versity "Policy on the Fair and Ethical Use of Artificial Intelligence and its Applications", and Xavier University "Policy on the Ethical and Responsible Use of Generative Artificial Intelligence (GenAI)."

In the case of Zamboanga City, there is a notable absence of comprehensive AI policies specifically tailored for academic use within the city's universities and colleges. This gap creates a fertile ground for confusion, inconsistency, and potential misuse of AI tools among students. According to a study of Valerio (2024), over 500 university students surveyed in the city revealed high AI awareness (75%) but significant ethical concerns (55%) highlighted urgent need for clear policy and ethical guidelines for without these, students might unwittingly violate academic integrity by over relying on AI for academic tasks leading to a decline in critical thinking and original work. On the other hand, teachers may struggle with how to appropriately integrate AI into their pedagogy or how to detect and address AI-generated submissions.

Developing and implementing robust AI policies in Zamboanga City's higher education institutions would provide a much-needed clarity, establish ethical boundaries, and create an environment where AI can be leveraged as valuable tool for learning and research, rather than a threat to academic integrity. This proactive approach would not only safeguard academic integrity but also equip the next generation of professionals with the responsible AI literacy essential for navigating an increasingly AI-driven world.

Literature Review

This section offers a thorough review of existing works, examining the historical and foundational development of artificial intelligence and its impact in various human activities. It also analyzes the crucial role of AI in the evolving landscape of higher education teaching and learning. The review also highlights the efforts of UNESCO in providing recommendations for the ethical use of artificial intelligence.

Understanding Artificial Intelligence

The Fourth Industrial Revolution has paved the way for advancements in technology such as the development of artificial intelligence which brought many changes to human activities. Artificial intelligence emerged around the 1950's with Alan Turing, a British polymath, as the pioneer of this concept (Haenlein & Kaplan, 2019). He coined the "Turing Test" which gauged a machine's ability to exhibit intelligent behavior like that of a human. Modern manifestations of this concept can be compared to Apple's Siri. Our interaction with this AI mirrors a human-like conversational ability which shows how much technology has evolved and advanced over the years.

Artificial intelligence, as a field, is designed to perform and complete tasks that would need human intelligence like problem solving, logical reasoning, language understanding, perception, output production, including prediction, diagnosis, recommendation, or classification (Sheikh, Prins, & Schrijvers, 2023). As a theory, AI directs the development and application of digital systems that perform functions as humans do that call for intelligence including speech recognition, translation of language, and visual per-

ception (Chassignol et al., 2018). Most systems that make human-like decisions can be considered as artificial intelligence. These systems consist of technical manifestation of human-like capabilities such as natural language processing (NLP), machine learning, knowledge representation, and automated reasoning (Russell & Norvig, 2003). Natural language processing (NLP) is a subfield of AI which focuses on enabling computers to understand and interpret human language (Russell & Norvig, 2003). Examples of NLP include voice assistants like Siri or Alexa, translation apps, and chatbots that can hold conversations with users. Machine learning (ML) is another subfield of AI which directs the development of algorithms and statistical models that enable computers to learn from and make predictions or decisions based on data (Chan, 2023). For instance, it can be used to predict a student's likelihood of dropping out of a course or being accepted into a program, as well as to identify themes in written assignments (Zawacki-Richter et al., 2019).

Artificial intelligence can also be categorized by its predictive and generative functions. The former is a type of machine learning algorithm that analyzes data and forecasts future events or results (Božić, 2023) while the latter generates new content based on existing datasets (Lv, 2023). Generative AI models use advanced algorithms to learn patterns and generate new content ranging from text, imagery, audio, and video (Lv, 2023). Examples of generative AI that are commonly used in education include ChatGPT, Gemini, Perplexity, Claude, DALL-E, Bard, among others. Many generative AI models use NLP techniques to understand and generate text. These generative AI models are trained on large text datasets to produce a new content or generate coherent

and compelling human-like output in response to a question or a prompt (Okonkwo & Ade-Ibijola, 2021).

Curriculum and Instruction in Higher Education in the Era of Artificial Intelligence

The integration of artificial intelligence is transforming the landscape of higher education curriculum and instruction in various ways possible. AI technologies promise a variety of utilizations in higher education that can enhance instructional practices (Al-Zahrani & Alasmari, 2024; Chan, 2023; Chu et al., 2022). As these technologies continue to grow more in popularity because of their accessibility and convenience (Del Mundo et al., 2024), the role of teachers have also become more crucial in guiding students in developing critical thinking, creativity, and digital literacy skills essential for thriving in an AI-driven world (Al-Zahrani & Alasmari, 2024). This necessitates a curriculum that not only incorporates AI tools but also addresses ethical implications, data literacy, and the impact of technology on society.

Understanding the implications of AI technologies in curriculum and instruction is essential to maximize its potential. More specifically, incorporating AI systems and applications into the curriculum requires comprehensive analysis of the educational objectives, student needs, and available digital resources (Chassignol et al., 2018; Chu et al., 2022; Kamalov et al., 2023). Teachers have the larger responsibility to assess how AI can align with learning goals and enhance learning experiences. This involves identifying the specific skills and competencies that AI tools can help develop, such as critical thinking, problem-solving, and digital literacy. AI technologies can also help in providing innova-

tive teaching methods including personalized learning pathways, adaptive assessments, engaging learning experiences, and in creating accessible learning materials.

Artificial intelligence has the potential to transform higher education by enhancing the teaching and learning process. Studies have shown that AI tools such as intelligent tutoring systems and personalized learning systems, can enhance overall learning experience, foster student engagement, and improve learning outcomes. Intelligent tutoring systems, for example, provide students with different learning materials which are especially arranged based on their learning needs (Guan et al., 2020). Murphy (2019) and Kochmar et al. (2022) claimed that this system significantly helped undergraduate students achieve higher test scores as compared to traditional approach to instruction. Additionally, AI can enhance the learning process by providing access to personalized learning paths to students that cater to their unique strengths and weaknesses (Jian, 2023; Walkington & Bernacki, 2020). Teachers can maximize AI software such as Knewton and Carnegie Learning, a mathematics tutoring system, and use data analysis to create personalized learning plans for students based on their strengths, weaknesses and learning styles.

The use of artificial intelligence in higher education improves support to students through learning analytics. Learning analytic tools use machine learning and algorithms to examine student learning, engagement and performance which can offer valuable insights for teachers, thereby improving student outcomes (Ouyang et al., 2023; Owan et al., 2023). AI-driven analytics can help teachers track student performance in real time, enabling timely interventions and individualized support (Khan et al., 2021; Ouyang et

al., 2023). More sophisticated AI technologies enable analysis of vast data of students' cognitive and affective domains which helps students especially those who need immediate personalized intervention (Liu et al., 2023). In a study conducted by Dong and Hu (2019), the use of machine learning analytics helped in identifying contextual factors differentiating high and low-achieving students in literacy.

Another key area of opportunity for utilizing AI in higher education is automating assessment and grading processes. AI in assessment, such as the use of Natural Language Processing (NLP) and plagiarism detection, can streamline grading, lessen workload, and facilitate data-driven decision-making (Chen et al., 2020; Kaouni et al., 2023). Researchers examined the reliability and validity of AI-driven grading systems by comparing them to traditional human grading methods, while also exploring the potential advantages and drawbacks of automated grading (Lockwood, 2014; Naseer et al., 2024; Swiecki et al., 2022). AI assessment tools can help in reviewing outputs of students for coherence, competence, and quality (Rudolph et al., 2024) which can provide teachers with reports that can highlight gaps in students' knowledge (Naseer et al., 2024; Owan et al., 2023) through automation and personalization (González-Calatayud et al., 2021; Swiecki et al., 2022) offering efficient and cost-effective solutions for evaluating student data (Gustilo et al., 2024).

Artificial intelligence can also automate educational processes in higher education such as content creation by means of generating ideas or questions using prompts (Kamalov et al., 2023), student grading and recordkeeping, creating performance summaries of students, crafting out evaluation reports, and maintaining student enrolment and

attendance (Ahmad et al., 2022; Meyer et al., 2023). More specifically, AI can be trained to evaluate various subjects and types of assessments, such as essays, multiple choice items, and problem-solving questions (González-Calatayud et al., 2021). This shift towards automation not only streamlines operations but also enhances overall productivity within educational institutions (Iqbal et al., 2024). By reducing the time spent on routine tasks, teachers can dedicate more attention to teaching, mentoring, and engaging with students.

The use of artificial intelligence tools such as adaptive learning systems has greatly influenced higher education teaching and learning practices. This is especially evident during the pandemic as it helped institutions recalibrate and their learning environments to provide more meaningful learning experiences for the students (Akram et al., 2021; Dayagbil et al., 2021; Gopika & Rekha, 2023; Siegle, 2023). Adaptive learning systems utilize technology-based learning and teaching methods, which enable students to gain knowledge and skills with support from AI-based tutors, and other various technological resources (Kabudi et al., 2021). Moodle is one of the most commonly adopted adaptive learning systems by higher education institutions in the Philippines (Roa et al., 2023). This system supports online discussions, virtual classrooms, and interactive platforms, enabling flexible and seamless interaction and engagement regardless of physical location, for both teachers and students.

From the perspective of university teachers in the studies of Dela Rosa et al. (2024), Giray et al. (2024), and McGrath et al. (2023), they remained positive towards integration of AI tools and systems in higher education curricula and instructional prac-

tices to achieve equitable outcomes. However, some still remained skeptical because of concerns regarding lack of knowledge and resources to utilize AI (McGrath et al., 2023; Tomczyk, 2020). Potential ethical and societal risks on privacy, surveillance, bias and discrimination, and autonomy are also growing (Moya et al., 2024; Sullivan et al., 2023). Moreover, the surge of AI technologies posed a greater challenge as cases on its unethical use continue to grow in number (Instructure, 2023). World Bank (2024) revealed that the Philippines rank 4th globally in the use of ChatGPT. Recent studies have highlighted significant concern regarding students' misuse of AI tools such as ChatGPT to fulfill academic requirements (Angeles et al., 2024; Bezjak, 2024; Gustilo et al., 2024; McGrath et al., 2023). In fact, there is a significant increase in AI-generated content and instances of plagiarism among Filipino university students, with the percentage of academic submissions flagged by plagiarism detection tools increasing from 18% in 2023 to 30% in 2024 (Copyleaks, 2024).

One of the main concerns in the academe in this age of artificial intelligence is maintaining academic integrity. Academic integrity is particularly critical as AI tools can sometimes facilitate academic dishonesty, such as plagiarism or unauthorized collaboration (Alajami, 2021). Academic integrity encompasses the value of honesty, truth, trust, fairness, and respect. Even before the popularization of ChatGPT in 2023, the spread of the internet and rapid development of technology had created new challenges for maintaining academic integrity. Recent studies have highlighted significant concern regarding students' misuse of AI tools to fulfill academic requirements (Angeles et al., 2024). Plagiarism rooted from the use of AI tools such as ChatGPT violates the sanctity of academ-

ic integrity and is considered the most severe academic misconduct because it devalues assessment (Crawford et al., 2023; King & ChatGPT, 2023; Perkins, 2023). While ChatGPT offers benefits for assisting students with essay writing and other academic tasks, concerns have been raised about the authenticity and appropriateness of the content it produces for educational use (Cotton et al., 2023; Meyer et al., 2023; Sullivan et al., 2023). In a survey conducted by Instructure (2023), 75% of Filipino teachers were concerned about cheating and plagiarism and decrease in creativity and critical thinking with use of AI tools such as ChatGPT. Recent advancements of AI-detection tools for distinguishing between human writing and AI-generated content including OpenAI classifier, Copyleaks, and GPTZero, have become instrumental in identifying potential instances of plagiarism and ensure that students are submitting original work (Elkhatat et al., 2023). However, it is essential for teachers not to rely solely on AI detection tools but also to exercise careful judgment and critical thinking. While these tools provide valuable insights, they should be used in conjunction with traditional evaluation methods and personal assessments of student work. This balanced approach will help enforce academic integrity while adapting to technological advancements.

Implementing artificial intelligence in education involves collecting and processing large amounts of student data such as personal data, academic records and behavioral preferences, raising concerns about data privacy and protection (Reiss, 2021; Taeihagh, 2021). Students become uneasy about the loss of privacy caused by AI's intrusive data collecting (Seo et al., 2021). These can, however, be regulated through legal privacy protection frameworks in data collection, processing and application to protect

sensitive personal data (Huang, 2023). Strategies for protecting data privacy should include optimizing regulation of personal data usage, enhancing students awareness on data protection, providing legal remedies against infringement of data privacy, and improving information technology industry self-regulatory mechanisms (Cheng, 2022; Hoel & Chen, 2018; Huang, 2023).

The use of artificial intelligence in education requires a robust technological infrastructure, high speed internet, and adequate equipment and other resources. In the Philippines, technological infrastructure and resources were one of the common challenges in the implementation of technology-assisted learning modalities (Barrot et al., 2021; Cabual & Cabual, 2022; Gocotano et al., 2021). Addressing these issues is essential for maximizing the benefits of AI and ensuring that all students can fully engage with modern educational technologies.

The rapid advancement of technology also has a significant impact on the social relationships among students and between teachers and students. According to Puteri et al. (2024), students may face the risk of social isolation due to excessive use of technology. The overreliance of AI technologies will also inevitably affect the social dynamics of teachers and students (Kamalov et al., 2023). It is crucial to ensure that the integration of AI does not compromise the human connections, social interactions, and emotional support that educators provide, as these elements are vital for the holistic development of students.

The role of teachers in this day where artificial intelligence plays an increasingly prominent role in education is more crucial than ever. While teachers recognized the po-

tential of AI to assist them in their work, there were still apprehensions on its use which stems from concerns on knowledge and skills and ease of adoption for new technologies (Bezjak, 2024; Celik et al., 2022). This corroborates with the study presented by Gustilo et al. (2024) that a significant majority of higher education teachers did not undergo training regarding effective and ethical use of AI tools. According to UNESCO (2022), only seven countries have so far developed frameworks and programs to support teachers on learning how to navigate education with AI. Teachers must be trained holistically by endowing them with AI-related knowledge, skills, and attitudes to effectively integrate AI tools in the teaching and learning process. As educational frontliners, they should be well-equipped to integrate AI into their teaching methods which requires ongoing professional development, training, and support (Celik et al., 2022; Seufert et al., 2021).

The integration of artificial intelligence technologies into higher education curriculum and instruction requires reforms in the ways teachers and learners carry out their responsibilities to meet educational objectives in this AI-driven era. Kuleto et al., (2021) argued that higher education institutions need to keep pace with the ever-evolving trends in AI by regularly updating their curricula. Another key reform is to redesign assessment practices by enhancing its rigor (Naseer et al., 2024; Owan et al., 2023) and by developing programs that emphasize critical thinking, reflective thinking, emotional intelligence and practical experience (Cotton et al., 2023) showcasing that human abilities can surpass machine intelligence.

Reforming curriculum and instruction in higher education in this AI-driven era also requires teachers who possess AI literacy. AI literacy is described as the knowledge

and skills that empower individuals to critically understand, evaluate, and use AI technologies to effectively and ethically participate in an increasingly digital age (Mills et al., 2024). The availability of various AI technologies offers individuals an avenue to understand and use AI. Teachers can take advantage of these AI tools to hone their AI literacy as well as foster such literacy to their learners (Ng et al., 2021). They can do so by consciously integrating these technologies into their curricula, teaching methods, and assessment strategies.

Ultimately, a plethora of research studies suggested that educational institutions should take a proactive approach in establishing policies and guidelines to guide both teachers and students in the ethical use of AI technologies (Baidoo-Anu & Owusu Ansah, 2023; Celik et al., 2022; Chu et al., 2022; Giray et al., 2024; Kuleto et al., 2021; McGrath et al., 2023; Zawacki-Richter et al., 2019). Discussions on the ethical use of AI technologies have yet to be held in private higher educational institutions from which the study was conducted. The potential misuse of these technologies highlights the necessity of regulating their use to protect the sanctity of academic integrity (Gustilo et al., 2024). Additionally, institutions should provide training and equitable access to help both teachers and students understand the implications of AI in curriculum and instruction (Gustilo et al., 2024; Rudolph et al., 2024).

Recommendations on the Ethical Use of Artificial Intelligence in Education

The United Nations Educational, Scientific and Cultural Organization (UNESCO) has acknowledged the potential of AI to improve and innovate teaching and learning practices when rightfully utilized. This acknowledgment has led to the development of

universal guidelines of values, principles, and actions to guide member states in the formulation of their legislation, policies, or other instruments regarding AI through their document entitled "Recommendation on the Ethics of Artificial Intelligence". This recommendation focused specifically on the wider ethical implications of AI systems concerning UNESCO's key areas including education. UNESCO affirmed that the use of AI in education should be guided by the principles of inclusion, equity, and human-centricity; efforts should be directed to enhance human capacities, safeguard human rights for a balanced and effective human-technology collaboration (UNESCO, 2021)

Building on the preceding recommendation, UNESCO released another guidance for the use of AI specific in education and research (UNESCO, 2023). It stressed the need for educational institutions to assess the ethical and pedagogical suitability of AI systems for education and to consider the long-term effects of these technologies on curriculum, instruction, and assessment, understanding its opportunities and implications, with recommendations for regulation and policymaking (UNESCO, 2023). Recognizing the role of teachers in an AI-driven era, UNESCO also provided a framework for developing teachers competence through "AI Competency Framework for Teachers". The framework addressed the gaps on technical, ethical, and pedagogical dimensions of AI. More specifically, it offered strategies for teachers, recognized as the primary users, designers, and facilitators of learning with AI, to acquire and deepen their knowledge on AI, redesign assessment strategies, and apply ethical principles (UNESCO, 2023).

The Association of Southeast Asian Nations (ASEAN) has underscored the impact and opportunities of AI in education in the region. This led to an effort in releasing

an intergovernmental common standard for AI that defines the principles of AI governance and provides guidance for policymakers in the region to utilize AI systems in a responsible and ethical manner. It highlighted the importance of cross-border collaboration and ensuring that best practices and safeguards are shared within ASEAN and across different regions. Such collaboration can help facilitate the exchange of knowledge, expertise, and resources among different countries and regions.

The Philippines, as a member of the United Nations and the Association of Southeast Asian Nations, has also recognized the many potentials of AI in many industries including education. In July 2024, the Department of Trade and Industry launched the National Artificial Intelligence Strategy Roadmap 2.0 (NAISR 2.0) which aims to guide the government and private sectors in employing AI technologies and opportunities while being mindful of the potential risks. The roadmap also described the implementation, infrastructure, and investments intended to accelerate the use of AI in the industries. Some of the initiatives of the government to leverage AI include partnerships with academic institutions and incentivizing higher education institutions to accelerate research and development of AI in education.

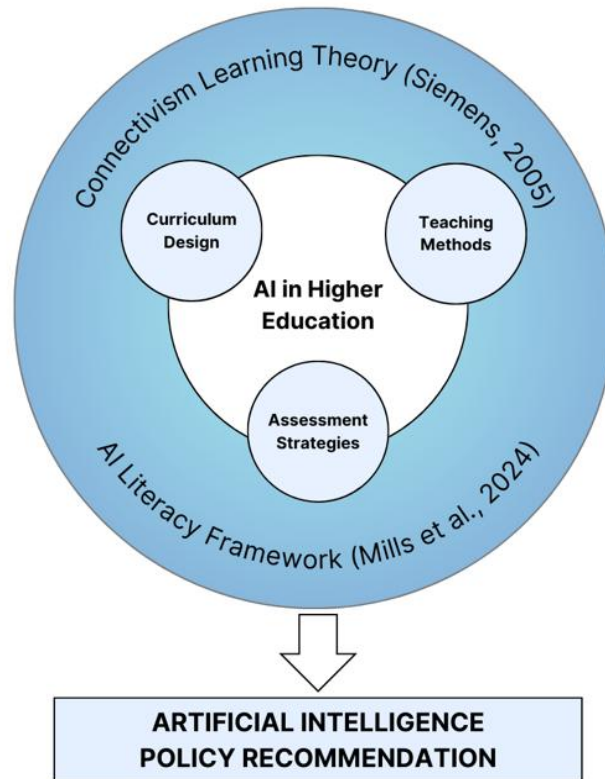
These documents serve as concrete and practical benchmarks for institutions as they develop their AI policies and guidelines. Although comprehensive, it is important to recognize the varying contexts of institutions. Factors such as cultural values, institutional objectives, pedagogical values, and available resources will influence how policies will be formulated and implemented (Taeihagh, 2021). As such, it is the responsibility of each institution to tailor these guidelines to their specific needs and circumstances. This in-

volves engaging stakeholders in discussions to gather diverse perspectives and ensure that the policies reflect the institution's unique identity and goals (Giray et al., 2024; Popenici & Kerr, 2017). A context-sensitive approach to policy making will be crucial for successfully leveraging AI technologies to improve educational outcomes.

Conceptual Framework

This study was guided by a conceptual framework, as presented in Figure 1, which examined the instructional practices of teachers in the use of artificial intelligence in higher education and the integration of AI technologies in curriculum design, teaching methods, and assessment strategies. These variables are significant in analyzing how AI tools influence teaching and learning.

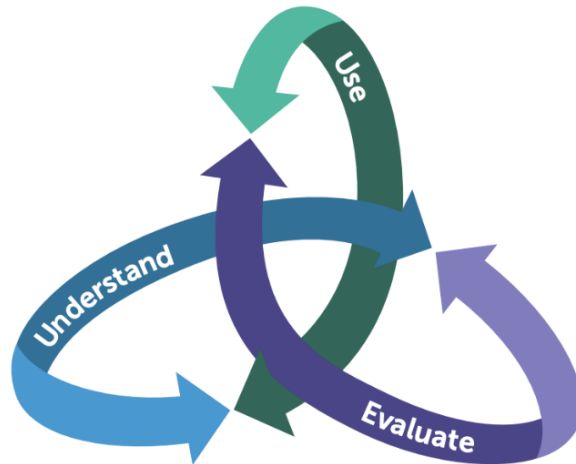
More specifically, the study sought to analyze the integration of AI into curriculum design such as but not limited to lesson planning, development of AI-enhanced learning materials and alignment of learning outcomes. Moreover, it also examined how AI influences teaching methods to assist learning activities. Lastly, it explored the implications of AI in facilitating formative and summative assessments. Additionally, it investigated the opportunities and challenges teachers face in their instructional practices in the utilization of AI.

Figure 1*Conceptual Framework of the Study*

To help understand these elements, this study was guided by Connectivism Learning Theory (Siemens, 2005) and Artificial Intelligence Literacy Framework (Mills et al., 2024). Connectivism explains the complexities of learning in a digital age, where technology and social interaction shape how knowledge is created and shared (Siemens, 2005; Downes, 2022). It asserts that knowledge is distributed across a network of connections, and learning occurs through the ability to navigate and make sense of these networks. Therefore, the role of teachers is to leverage technology as a tool for connections

and collaboration (Siemens, 2005) and introduce opportunities to learners to critically evaluate the information learned from digital technologies (i.e. artificial intelligence tools).

For higher education institutions to maximize the potential of AI in the teaching and learning process, it is also important to look at the literacy level of teachers in terms of utilizing AI technologies because it ultimately affects how they use these tools in the classroom. The Artificial Intelligence Literacy Framework (Mills et al., 2024), as presented in Figure 2, aided in identifying the specific skills and knowledge teachers need to possess to effectively understand, evaluate and use AI systems and tools into their instructional practices. To "understand" AI means an individual must know what it is and how it works (Druga et al., 2019). For teachers, this means familiarity with what and how AI tools can support teaching and learning. To "evaluate" AI means an individual must critically assess an AI tool itself and its impact on one's life (UNESCO, 2023). For teachers, it entails careful consideration of its effect on teaching, learning, and assessment while prioritizing human judgment and justice (Mills et al., 2024). Human judgment is ultimately responsible for determining if and how it is appropriate to integrate AI so that privacy, bias, and misinformation cannot be perpetuated. To "use" AI means the ability to interact, create, and solve problems with AI (Mills et al., 2024). For teachers, this involves generating lessons or activities, and engaging in inquiry or analyzing data for improving experiences of students (Ng et al., 2021).

Figure 2*AI Literacy Framework*

Note. Adapted from "AI Literacy: A Framework to Understand, Evaluate, and Use Emerging Technology" by K. Mills et al., 2024, Digital Promise.

The findings will contribute to the development of recommendations for AI policy in curriculum and instruction to integrate AI technologies effectively and ethically into the instructional practices of higher education institutions, ultimately enhancing the learning experience for students.

Research Problems

The study sought to explore the instructional practices of select private higher education institutions in Zamboanga City through the lens of teachers. It also aimed to investigate the challenges and opportunities in the use of artificial intelligence to develop a

recommendation on AI policy. Specifically, the study sought to answer the following questions:

1. What are the instructional practices of teachers in select private higher education institutions in the use of AI in terms of:
 - a. Curriculum Design
 - b. Teaching Methods
 - c. Assessment Strategies
2. What are the challenges and opportunities of teachers in their instructional practices in the use of AI?
3. Based on the findings of the study, what AI policy and guidelines can be developed?

Scope and Limitations

The scope of this study explored the instructional practices of teachers in select private higher education institutions as well as the challenges and opportunities in the use of artificial intelligence in higher education. The teachers involved in the study were only those from four private higher education institutions in Zamboanga City, specifically those who have a background knowledge and who integrate AI in their teaching and learning processes.

The study has limitations that should be considered. Firstly, the study only covered four private higher education institutions in Zamboanga City. Thus, the findings may not be generalizable to other contexts or populations. Secondly, the use of focus groups,

while providing rich qualitative data, might have been subject to group dynamics and the potential for dominant voices to influence the discussion. Lastly, the recommendations for AI policy are only limited to curriculum and instruction. The administrative and governance aspects of integrating AI in higher education institutions were not directly explored. Thus, the recommendations do not directly address the unique experiences associated with AI in areas such as student admissions, data management, institutional efficiency, and strategic planning.

Despite these limitations, the study has the potential to contribute valuable foundational insights into the initial integration and impact of AI on teaching practices within a specific context. The findings can serve as a benchmark for broader discussions and future research endeavors aimed at developing more comprehensive AI policies that encompass both pedagogical and administrative dimensions within the landscape of Philippine higher education.

Definition of Terms

To facilitate understanding of the study, the following terms were operationally and conceptually defined:

Academic Integrity. Refers to values and standards that uphold honesty, trust, fairness, respect, and responsibility in the academic environment.

AI Hallucinations. A situation where AI technologies generate information that is false, misleading, or fabricated, but presents it as if it were accurate or factual (Sun et al., 2024).

AI Literacy. The knowledge and skills that empower individuals to critically understand, evaluate, and use AI technologies to effectively and ethically participate in an increasingly digital age (Mills et al., 2024).

Artificial Intelligence. Machines capable of imitating certain functionalities of human intelligence, including features such as perception, learning, reasoning, problem-solving, language interaction, and producing creative work (Russell & Norvig, 2003).

Assessment Strategies. Involve the methods and AI tools used to evaluate student learning and skills, as well as the adaptation of traditional assessment practices to account for and leverage the presence of AI tools in student work.

Curriculum Design. The process of integration of AI tools into the design process itself (e.g., for content generation or personalization).

Generative Artificial Intelligence. A type of artificial intelligence that uses machine learning techniques to learn patterns and generate new content ranging from text, imagery, audio, and video (Lv, 2023).

Instructional Practices. The methods and strategies that teachers use with AI to facilitate teaching and learning which encompasses curriculum design, teaching methods, and assessment strategies.

Teaching Methods. The pedagogical approaches and instructional techniques employed by teachers to facilitate learning about and through AI to enhance teaching practices.

Prompt Engineering. The process of writing effective instructions for an AI model so that it consistently produces desired outputs (Lee & Palmer, 2025).

Chapter 3

Findings and Discussion

This chapter presents the findings and discussion derived from the qualitative analysis of instructional practices and experiences of teachers in the use of artificial intelligence (AI) in four private higher education institutions (HEIs) in Zamboanga City. The participant pool comprised 24 faculty members (6 from each institution), with deliberate variation across key demographics.

Using Braun and Clarke's (2019) thematic analysis, 11 themes emerged from the data. Table 4 presents the systematic alignment of the research questions with the corresponding emergent themes.

Table 4

Emergent Themes and Research Questions

Research Question	Theme
RQ1: What are the instructional practices of teachers in select private higher education institutions in the use of AI in terms of:	Theme 1: AI as a Co-designer of Curriculum
a. Curriculum Design	Theme 2: Strategies for Effective and Responsible AI Integration in Curriculum Design
b. Teaching Methods	Theme 3: AI as a Collaborative Agent in Teaching Methods
c. Assessment Strategies	Theme 4: AI as a Collaborative Agent in Assessment Strategies

Research Question	Theme
	Theme 5: Authentic Assessments to Ensure Fair and Valid Assessment
RQ2: What are the challenges and opportunities of teachers in their instructional practices in the use of AI?	Theme 6: Challenges in Ensuring Ethical AI Use
	Theme 7: Limited Technological Infrastructure and Resources
	Theme 8: Opportunities for Teachers in the Use of AI
	Theme 9: Opportunities for Students in the Use of AI
	Theme 10: AI Skills Training and Resource Provision
RQ3: Based on the findings of the study, what AI policy and guidelines can be developed?	Theme 11: Policy Recommendation for Ethical Use of AI in Curriculum and Instruction

The analysis followed an iterative process, beginning with open coding, refining initial themes, and finalizing emergent themes. These themes were then examined in relation to existing literatures on AI in education such as but not limited to AI integration processes and challenges and ethical considerations. Likewise, the discussion was informed by Connectivism Learning Theory (Siemens, 2005) to explore the complexities of teaching and learning in the digital age, and AI Literacy Framework (Mills et al., 2024) to analyze the extent to which participants use, understand, and evaluate AI into their instructional practices.

Findings and Discussion

This section presents the key findings of the study, which are organized into distinct themes. Each theme provides a detailed account of the data collected and is followed by a discussion that contextualizes the results within the existing literature. The final theme synthesizes these findings to present a set of policy recommendations for higher education teaching and learning in the era of artificial intelligence. This thematic approach allows for a nuanced understanding of the challenges and opportunities in the field, bridging empirical evidence with practical and actionable policy suggestions.

Theme 1: AI as a Co-designer of Curriculum

The findings revealed a growing trend among teachers to conceptualize AI not merely as a passive tool but as a co-designer of curriculum, a cognitive partner, that enhances and extends human capacities in instructional planning.

Curriculum design, as defined by Ornstein and Hunkins (2018), involves more than content structuring, it also demands strategic alignment with learner needs, institutional missions, and evolving technologies. Within this framework, AI tools especially ChatGPT, which emerged as the most cited tool, are leveraged to streamline, and enrich this complex process. This prevalence suggests its dominant role in the current AI landscape due to its accessibility and versatility which appeals to various user demographics. Generative AI tools such as Gemini, Deepseek, Perplexity, and Gamma AI also emerged in the focus groups, though with lower frequency. Participants primarily employed these tools for generating insights, ideas, sources, and references, creating lesson plans and les-

son outlines, and automating course materials such as PowerPoint presentations for lectures.

Other AI tools utilized by the participants include Quillbot and Grammarly for paraphrasing and grammar checking, and Photomath for cross-checking and understanding mathematical processes. In this context, the participants predominantly viewed AI as a co-designer to support various tasks in designing learning experiences and in enhancing their capabilities. As Participant 2 explained, “*Pag may mga concepts sa [lesson] na di ko masyadong maintindihan, I’ll ask AI for clarity or give examples para mas maintindihan ko yung concept*” [If there are concepts in the lesson that I do not understand well, I’ll ask AI for clarity or to give me examples so I can better understand the concept]. Similarly, Participant 9 noted, “Sometimes our offered subjects don’t have CG or curriculum guide. And so we generate ideas from AI to give us the flow of topics like suggested assessments, the learning outcomes, and some other parts of the curriculum.”

These observations aligned with the studies of Umali (2024), Espartinez (2024), Dela Rosa et al. (2024), Giray et al. (2024), and McGrath et al. (2023) which posited that higher education teachers are positive towards integration of AI tools in curriculum design processes to enhance the quality of learning experiences stressing the importance of keeping up with the technological advancements. Their studies highlighted that AI driven tools can streamline curriculum development and augment instructional efficiency.

Similarly, the participants' perception of AI as a collaborative tool rather than a replacement corresponded with the studies of Bezjak (2024) and McGrath et al. (2023) where teachers viewed AI as a partner in teaching and learning. This perspective empha-

sized the role of AI in enhancing human capabilities such as brainstorming, scaffolding lessons, and automating instructional materials while keeping teachers in control of instructional decisions.

Theme 2: Strategies for Effective and Responsible AI Integration in Curriculum Design

The participants articulated strategies for effective and responsible integration of AI in curriculum design ensuring that the use of AI aligns with pedagogical goals. Several participants highlighted prompt engineering as a particular strategy for enhancing AI-generated outputs to meet learning objectives. Prompt engineering is the process of writing effective instructions for an AI model so that it consistently produces desired outputs (Lee & Palmer, 2025). Participants noted that refining prompts helped generate more accurate, relevant, and aligned outputs to specific learning goals.

P3: *"Yung prompt ko that time, ang nilagay ko lang is 'skills of a nursing informatics specialist' tapos hindi ko talaga inispecify to a specific technology so very general lang din yung story na binigay ni ChatGPT. So tama yung pinapaalala sa training na you really have to be specific on your prompts para tugma sya sa gusto mong mangyari sa klase. So yung sunod na nagprompt ako kay ChatGPT ay very careful na ako and specific na rin."* [My prompt at that time only included 'skills of a nursing informatics specialist' and I did not really specify it to a specific technology, so ChatGPT also gave a very general story. The reminder on the training is correct that you really need to be very specific on your prompts so that

it aligns with what you want to happen in the classroom. The next time I prompted on ChatGPT was also very careful and specific.]"

This corresponded with the study of Park & Choo (2024) which found that teachers who structured prompts with clear instructional criteria such as the learning objectives and cognitive level received higher quality of AI-generated content. Similarly, Kasneci et al. (2023) observed that teachers using structured prompting techniques reported greater satisfaction with AI tools in curriculum planning.

Participants also stressed the need to explicitly link learning objectives to AI-generated content to produce meaningful outcomes. AI-generated content should complement and reinforce learning objectives rather than deviate from them. This explicit alignment helps to avoid generation of irrelevant content and allows teachers to better assess the appropriateness of AI-generated materials within the curriculum. This approach mirrors Backwards Design principles (Wiggins & McTighe, 2005) which emphasizes beginning with desired learning outcomes and then designing curriculum to align with the goals. Just as it prioritizes the result, participants highlighted that AI-generated content should be intentionally designed to contribute to the achievement of pre-defined learning objectives to guarantee that technology serves as a tool to enhance, rather than distract from, core educational aims.

Another suggested strategy to integrate AI effectively and responsibly in curriculum design is validating AI-generated contents with trusted sources especially for complex topics. Given that AI models may sometimes generate inaccurate information, teachers should verify facts based on authoritative textbooks, peer-reviewed research, or

databases curated by experts. This practice not only ensures accuracy but also cultivates critical thinking by questioning information rather than passively accepting AI outputs.

P21: What I do is, which is also my advice to my students, you really have to read and validate the content that AI gives. You also have to ask the APA or the reference and then validate with different sites like for example in Google Scholar.

Generative AI tools such as ChatGPT still cannot consistently or reliably generate content without substantial inaccuracies, racial and gendered biases, or distorted information (Farhat et al., 2023; Cano et al., 2023; Cirillo & Rementeria, 2022). 'AI hallucination' manifested as fabricated news stories or, within academic writing, as nonexistent citations (Sun et al., 2024) happens due to the statistical nature of how AI tools operate (Ferrara, 2023), as such it is crucial to maintain a critical stance and independently verify any information obtained from AI by cross-referencing with trustworthy references.

Participants also emphasized the need for contextualization of AI-generated contents. This was heavily expressed by participants who teach Social Sciences. They observed that AI outputs are limited to certain cultural perspectives and lack the nuanced understanding of diverse social, historical, and geographical contexts relevant to their curriculum. While they acknowledged that this could become frustrating at times, they also viewed it as a safeguard for academic integrity, discouraging students to rely on AI tools in their courses.

AI-generated outputs are not neutral. Its algorithms tend to reflect the categorizations, underlying beliefs, and prejudices that exist within their training dataset (Ferrara, 2023). Large language models such as ChatGPT are primarily trained on English texts

inherently exhibiting favoring Western cultural values (Johnson et al., 2022), especially when prompted in English. This suggests that minority groups and perspectives are likely to be underrepresented in AI outputs, which obscure diversity.

These strategies highlight the importance of human judgement in the AI integration process, ensuring that technology enhances rather than replaces pedagogical judgement. This AI-integrated innovation also challenges traditional curriculum design paradigms suggesting the need for new models that account for 'symbiotic design intelligence' (McGrath et al., 2023) where human expertise and artificial intelligence interact iteratively throughout the instructional process.

Bridging these perspectives, the integration of AI tools as highlighted by the participants' experiences reflects the principle of Connectivism by expanding learning networks and recognizing the role of technology in the curriculum design process. Connectivism, as proposed by George Siemens (2005) emphasizes that learning is a process of forming connections and recognizing patterns within a network. When AI acts as a co-designer, teachers are engaging in a networked learning process with the AI, evaluating its suggestions, refining prompts, and integrating AI-generated content. The ability to critically assess, synthesize, and contextualize information from this AI node within their learning network is crucial. Teachers are learning to navigate the complexities of integrating AI into the curriculum design process, forming new connections between technological capabilities and sound education practices.

Converging the AI Literacy Framework (Mills et al., 2024), the findings in the theme suggested that teachers not only 'use' and 'understand' AI in the curriculum design

process but most importantly, they critically 'evaluate' AI tools through a multi-layered critical lens that encompasses both technical and pedagogical dimensions. Participants demonstrated evaluation practices that go beyond surface-level fact-checking to including evaluation of cultural relevance, appropriateness, and alignment with the learning goals. For instance, when generating lesson materials with the use of AI, participants in the study consistently validated whether the content would resonate the learning objectives and how the materials could be adapted to tailor the needs of their learners. More importantly, the study revealed that evaluation often occurs iteratively throughout the curriculum design process, from prompting through output refinement. This approach helped lessen risks of bias while modeling critical digital literacy practices for students. The participants' experiences underscore that effective evaluation requires both technical knowledge of AI limitations and deep pedagogical content knowledge, supporting that AI literacy cannot be separated from broader teaching competencies.

Theme 3: AI as a Collaborative Agent in Teaching Methods

Teaching methods refer to the general principles, pedagogy, and management strategies to facilitate instruction (Hoque, 2016). These encompass a wide range of approaches, from direct instruction to more student-centered strategies. In the advent of artificial intelligence, teaching methods can be driven and supported by various AI tools, allowing participants to innovate ways to enhance instruction.

As observed, participants employed fewer AI tools in teaching methods than curriculum design. This disparity stemmed from several factors including steeper learning curve associated with integrating AI directly into classroom activities, concerns about the

reliability and accuracy of AI-generated content for immediate instructional use, and limited technological capacity particularly expressed by a few participants from HEI C. Furthermore, participants perceived curriculum design as a more controlled environment where AI can assist with tasks such as idea generation and course materials preparation, whereas direct instruction requires more nuanced and real-time interaction that their pedagogical and technological capacity may not fully support.

Several participants employed a few AI tools to facilitate better learning experience for the students. These tools were strategically selected based on their ability to address specific learning needs. They employed generative AI tools including ChatGPT to encourage students to learn independently and enhance their critical thinking skills through guided exploration activities. Similarly, AI tools served as partners in designing collaborative learning activities, facilitating peer interaction and knowledge co-construction. Participants reported using AI to generate discussion prompts, simulate debate scenarios, among others, to promote dynamic lecture-discussion methods.

P5: I'm actually letting them explore the use of AI inside the classroom for data analysis. So I'm teaching statistics and AI could actually interpret your table if you have results coming from Jamovi and other statistical tool. So you just have to snip the table that you want to interpret and you just have to copy then paste to the ChatGPT and just prompt ChatGPT to interpret that. So what I'm asking from my students is in order for them to know how the interpretation goes, they could actually explore AI but of course I guide them throughout the process.

For participants teaching Mathematics, Photomath is employed in the teaching and learning process to allow students to visualize and deconstruct complex problem-solving processes to foster deeper conceptual understanding. Meanwhile, some participants also expressed the use of Quizizz AI to create an interactive learning environment and boost motivation by means of gamification. In particular, they used this tool to create adaptive quizzes and leaderboard competitions tailored to students' needs and progress. The use of gamification and immersive learning experiences can create engaging environments that motivate students, encourage active participation and sustainable learning practices, aligning with contemporary educational needs and learner preferences (Kherazi & Bourray, 2024).

P12: Given that our students are a new breed, we really have to find new ways to engage them in our class. So, if I want the test to be administered in a fun way then I will turn to Quizizz AI because it has gamification features. And it actually makes the class more fun and interactive.

These AI tools served as collaborative agents of the participants to facilitate instruction and innovative teaching methods, promoting a more conducive and adaptive learning environment. This finding agreed with the studies of Al-Zahrani (2024a) and Giray et al. (2024) where university teachers leveraged AI tools to enhance the learning experiences of students by means of cautiously integrating these tools into classroom activities and allowing students to explore its potential into their own learning. Allowing students to use AI in structured, inquiry-based tasks promotes self-directed learning while maintaining academic rigor (Marquardson, 2024). For instance, teachers design an AI-

assisted research activity where students must verify, analyze, and synthesize information from AI outputs with primary sources. Recent studies confirmed that structured integration improves learners' academic achievement and metacognitive skills as they demonstrate better capacity to evaluate credibility of information and its sources and identify algorithmic biases (Vieriu & Petrea, 2025; Dong et al., 2025). AI tools can support a shift in teaching approaches, moving away from students simply memorizing answers and instead empowering them to formulate insightful questions, manage uncertain and conflicting information, and learn to differentiate between objective facts and subjective opinions. Learning institutions can further support this by integrating fact-checking measures that teach students how to evaluate AI-generated content effectively (UNESCO, 2023). This approach can help address concerns about overreliance while cultivating responsible use of AI. However, studies of Al-Zahrani & Alasmari (2024), Dela Rosa et al. (2024), and Sullivan et al. (2023) cautioned that the use of AI to facilitate instruction and learning in the classroom must be carefully implemented to avoid potential drawbacks. For one, overreliance on AI tools may reduce critical thinking and problem-solving skills among students if they depend too heavily on automated solutions. Therefore, teachers must strike a balance between leveraging AI's efficiency and maintaining the "human touch" essential for cultivating meaningful teacher-students' interactions.

From a connectivist's standpoint (Siemens, 2005), AI plays a critical role in emphasizing learning as a networked process shaped by technology, collaboration, and critical engagement with dynamic information sources. According to connectivism, learning occurs across digital networks where learners must navigate, filter, and synthesize infor-

mation from multiple nodes, a skill that is directly reinforced by structured AI interactions. When students cross-reference AI-generated contents with primary sources, they practice connectivist principles by evaluating connections between diverse information streams. By engaging with AI as a node in their learning network, learners develop the ability to discern patterns, weigh conflicting data, and make informed decisions which are core competencies of AI literacy (Gottipati et al., 2019). Moreover, AI tools can amplify what Siemens and Tittenberger (2009) coined as 'network learning ecologies', where learners, teachers, and AI tools and technologies form an interconnected ecosystem for knowledge construction and sharing (Baskara, 2024).

In relation to the AI Literacy Framework (Mills et al., 2024), the findings address three modes of engagement in AI tools: understand, evaluate, and use. Specifically, participants did not only use but also understood how AI can facilitate different pedagogical approaches as well as its capabilities and limitations, while they also critically evaluated how AI influences the dynamics of collaboration among learners and promotes quality of learning experiences.

Theme 4: AI as a Collaborative Agent in Assessment Strategies

Assessment strategies refer to the coordinated set of practices and processes involving assessments. A well-designed assessment involves a whole-course level rationale that is integrative and proactive (Ornstein & Hunkins, 2018). This approach can be enhanced and even transformed by carefully integrating AI tools in one's assessment strategies.

The current landscape of higher education is undergoing significant transformation driven by rapid technological advancements. Assessment plays a critical role in this shift, measuring students' knowledge, skills and attitude through both formative and summative methods (Murphy, 2019). As the integration of AI in assessment strategies continues to evolve, participants have expressed their optimism towards the use of AI in enhancing and streamlining assessment practices.

The analysis found that participants actively engaged with AI tools such as ChatGPT, Gemini, Perplexity, Deepseek, and Quizizz AI in developing a wide range of assessment materials, particularly for formative and summative assessments. These tools have been proven instrumental in generating processing and reflective questions, creating test items, and automating rubrics aligned with learning objectives. One of the participant exemplified this dynamics stating that:

P1: *"I utilize the AI tools to come up with questions or possible activities for assessment or coming up with rubrics. But at the end of the day, usually ang practice ko after ko nakagenerate ng idea or test question sa AI tool, ako na yung parang nagfa-finalize ng information needed for the assessment. And then, of course, chinecheck ko kung yung rubrics ba ay in accordance or tugma sya dun sa intended learning outcome."* [I utilize the AI tools to come up with possible activities for assessment or coming up with rubrics. But at the end of the day, usually my practice is after I generate the idea or test question in the AI tool, I finalize the information needed for the assessment. And then of course, I check the rubrics if it's aligned with the intended learning outcome.]

This practice reflects what Owan et al. (2023) refer AI to as 'cognitive amplifier' where AI aids teachers but does not replace pedagogical expertise. Rather than surrendering instructional control, teachers act as evaluative gatekeepers who review and refine AI-generated materials to ensure alignment with the intended curriculum and learner needs.

This approach aligns with constructivist principles in assessment design, emphasizing the teacher's role mediating technology to support deep, contextualized learning (Allen, 2022). The generative capacity of AI empowers teachers to expand their repository of assessment tools while maintaining ownership of pedagogical decisions. In this sense, AI acts not only as a collaborative agent but also as an adaptive resource within a broader instructional ecology.

In addition to content generation, the findings also indicated that teachers incorporated NLP-based tools such as Turnitin, Quillbot, and Grammarly to uphold academic integrity of student work. As P4 noted "I also require them to use Turnitin before they submit the final manuscript."

The institutionalization of plagiarism detection software reflects an increased emphasis on ethical AI use, reinforcing formative feedback loops while deterring dishonest practices. These tools support both teachers and learners in ensuring that outputs reflect original thought, proper citation, and language precision.

This practice echoes the findings of Swiecki et al. (2022) who argued that AI should be embedded in assessment in a manner that safeguards authenticity, fairness, and learning agency. At the same time, González-Calatayud et al. (2021) and Owan et al.

(2023) cautioned against over-reliance on automation, urging teachers to maintain human oversight to contextualize AI outputs and account for the diverse needs of learners.

Theme 5: Authentic Assessments to Ensure Fair and Valid Assessment

While the potential of AI in innovating assessment strategies is acknowledged, its drawbacks particularly those threatening academic rigor and honesty were also highlighted by participants in this context. Generative AI tools can produce human-like text making detection difficult (Elkhatat et al., 2023).

Swiecki et al. (2022) postulated that even with plagiarism detectors, students may use AI to paraphrase or structure responses that evade detection. As such, promoting authentic assessments have become instrumental as countermeasures to uphold academic integrity. As Participant 3 stated, *"That's why for me hindi enough yung paper submission at the end of the course. Kung paper man ito or what. Meron silang defense, presentation. And then that's the avenue where I can ask questions."* [That's why for me, paper submission at the end of the course is not enough, if it's paper or what. They have defense, presentation. And then that's the avenue where I can ask questions.]

By shifting toward authentic assessments, teachers mitigate the risks posed by AI-generated content. Authentic assessment requires students to apply knowledge in real-world contexts, emphasizing critical thinking, collaboration, and problem-solving which are critical in preparing students for future careers (Vlachopoulos & Makri, 2024). Unlike standardized tests, these assessments are difficult to replicate using AI.

Some practices for authentic assessments employed by the participants in their strategies include developing portfolios, case study analysis, oral presentations, and the

likes. Authentic tasks require personalized and context-specific responses that currently lie beyond the capabilities of AI (Kaouni et al., 2023). For instance, portfolio development involves a curated collection of a student's work over time, highlighting their progress, reflection and individuality to various tasks (Deeba et al., 2023). Swiecki et al. (2022) argued that this developmental and personalized aspect inherently resists AI which typically produces outputs based on immediate prompts rather than a demonstration of progress. Similarly, case study analysis demands critical decision-making skills which cannot be synthesized by AI's limited algorithm. While it can summarize case studies, it struggles to produce novel, context-specific recommendations that align with the capabilities of human judgement (Ferrara, 2023). Oral presentations emphasize the importance of communication skills, the ability to articulate and deliver ideas coherently and instantaneously. These personal and real-time elements are fundamentally human and present a significant limitation for AI tools to replicate nor replace (King & ChatGPT, 2023; Kovari, 2025).

The limitation of artificial intelligence to generate meaningful outputs without inconsistencies in these authentic tasks stems from its reliance on pattern recognition and statistical recognition (Ferrara, 2023) rather than critical understanding and contextual awareness. While AI can generate text that may superficially resemble a student's work, it often lacks the depth of analysis, integration of personal insights driven by reflection, and coherent narrative that characterizes engagement with authentic assessments (Celik et al., 2022). This limitation provides an advantage to teachers who strategically employ au-

thentic assessments as means to hone learning and ensure integrity of educational assessment.

From a Connectivist perspective, participants utilizing these AI tools are leveraging technology to expand their network of learning resources, potentially create new connections between information, assisting assessment design. They are also navigating a landscape where knowledge about assessment can be distributed across various AI tools. Ultimately, they learn to interact with and evaluate the output of this AI node.

The findings in this theme directly informed and illustrated the key components of AI Literacy Framework (Mills et al., 2024). The participants' experiences, concerns, and strategies in using AI for assessment provide real-world examples of the knowledge and skills that constitute AI literacy in this specific educational context. Their journey from initial adoption to a more critical and strategic integration of AI coupled with an emphasis on authentic assessment highlights the practical application of the framework's components. Therefore, the AI Literacy framework in this context is not just a theoretical construct but is grounded in the observed experiences, and reflections of the participants actively engaging with AI in their assessment practices.

Theme 6: Challenges in Ensuring Ethical AI Use

The integration of artificial intelligence in education presents transformative potentials but also brings significant challenges that must be addressed. While AI tools offers efficiencies in curriculum design, teaching strategies, and assessment, their misuse raise concerns around academic dishonesty, over-reliance, and ethical boundaries. Participants in the study expressed apprehension about how students and even teachers might

exploit AI tools, particularly generative language models, in ways that undermine academic integrity.

One recurring concern centered on plagiarism and unoriginal outputs. Participants reported that students were increasingly submitting AI-generated content without meaningful engagement with course materials. Moreover, there have been a lot of instances of students violating ethical use of AI in the classroom by discreetly using AI tools when explicitly instructed not to, especially in scholarly or reflective tasks. Even in situations where AI use is permitted or encouraged for certain tasks or specific aspects of a task, students choose not to declare or acknowledge use of AI tools which undermines the principle of ethical and responsible use of such tools. This lack of transparency is problematic for several reasons. For one, it can contribute to a culture of dishonesty where students feel comfortable misrepresenting their work. The frustration is echoed by one participant who shared:

P3: *"Nahihirapan ako actually pag gumagamit ang students ng AI sa research subject especially if hindi nag under sa akin ang students sa previous courses kasi hindi ko sila kilala. So kailangan magbasa, basahin yung output nila and then assessment pa rin after. So what I do especially pagdating sa RRL na part bumabalik ako sa traditional way of doing it - magpapacollect ako ng mga article sa kanila, isusummarize nila sa classroom, handwritten kasi yun lang yung way ko para ma assess before ko sila ma judge."* [I find it difficult when students use AI in research subject especially if they were not my students in previous courses because I do not know them. So, I need to read their outputs and then do assessment

after. So, what I do especially in the RRL part, I go back to the traditional way of doing it - I will ask them to collect articles, they summarize it in the classroom handwritten because that's the only way for me to assess before I judge them.]

While artificial intelligence offers transformative potential for learning, its misuse threatens the foundation principles of academic integrity. The participant's solution to address misuse of AI in the classroom as reverting to handwritten in-class summarization of articles indicates that some teachers perceive AI as undermining academic integrity that hinders learning of specific skills. While this approach may temporarily mitigate cheating, it also limits the opportunities for students to engage with AI responsibly under guided conditions. It also reflects a lack of confidence in existing AI-detection tools, as such it adds another layer of labor for teachers who now function as AI-content detectors rather than facilitators of learning.

Moreover, this experience reflected a broader dilemma amid AI advancements. A study mentioned that while AI can enhance learning, its misuse threatens critical thinking (Alajami, 2021). When students use AI to, for example, generate course requirements without engaging deeply with the material, they bypass cognitive effort required for comprehension and metacognition which are essential for true learning.

This encapsulates a growing concern in education in the advent of AI technologies. Institutions worldwide face common challenges in integrating AI into teaching and learning with one of the most pressing issues being students' unethical and irresponsible use of AI tools. For instance, Cotton et al. (2023) highlighted how generative AI tools like ChatGPT complicate academic integrity as students submit AI-generated works

without proper attribution. Similarly, Perkins (2023) found that educators struggle to detect and address AI misuse leading to a loss of trust in student submissions.

The challenge, therefore, is not just technological but also pedagogical: how can higher education institutions promote ethical AI use while maintaining academic standards? As studies indicated, clear policies, AI literacy programs, and alternative assessment designs are crucial steps in addressing this issue (Chan, 2023; Taeihagh, 2021; Vlachopoulos & Makri, 2024). There is a need for standardized guidelines on the use of AI that clearly differentiate permitted and prohibited applications. Teachers should also emphasize and teach students metacognitive strategies to examine AI tools. Additionally, teachers should consider redesigning assessments that emphasize process-based evaluations rather than solely assessing final outputs that are vulnerable to AI misuse. Addressing this challenge requires a collaborative effort among institutions, teachers, and students to develop a culture of ethical AI use.

Theme 7: Limited Technological Infrastructure and Resources

While there is a commonality on the challenge of ethical use of AI in the classroom, it can also be noted that institutions face varying challenges in AI integration due to differences in capacity. One key concern is technological infrastructure and resources. While some higher education institutions are well-equipped, others such as HEIs C and D lack the necessary systems to effectively implement AI-driven teaching and learning tools. One of the participants expressed:

P13: *"For me, Ma'am, gusto ko sya gamitin, maggawa ng activities in the classroom gamit ang AI, ang problema internet connection does not cooperate well in*

the classroom lalo na sa mga classrooms sa 2nd and 3rd floor, hindi na talaga kaya ng internet. May internet connection sa school, hindi lang sya ganun kalakas." [For me, Ma'am, I want to use it, do activities in the classroom using AI, the problem is the internet connection does not cooperate well in the classroom especially in the classrooms on the 2nd and 3rd floors, the internet can't handle it.

There is internet connection in the school, it's just not that strong.]

This disparity created an uneven adoption landscape where resource-constrained institutions struggled with issues like insufficient technological support, unreliable internet connectivity, and limited training opportunities. This is not an isolated experience among the two HEIs. Many universities and colleges across the country face similar technological and resource constraints (GEM Report UNESCO, 2023; Gocotano et al., 2021; McGrath et al., 2023; Ouyang et al., 2022). According to a study by Acabal and Casingal (2018), one of the challenges in integrating emerging technologies in Philippine education is the lack of technological and digital infrastructure and resources. Inadequate internet connectivity and limited access to devices, software and applications are among the highlighted challenges as specifically expressed by numerous studies (Barrot et al., 2021; Giray et al., 2024; Kuleto et al., 2021) which can create disparities in the ability of students to benefits from AI tools and resources. This digital divide can exacerbate existing inequalities in educational opportunities and outcomes (Ayala-Pazmiño, 2023).

Moreover, the rapid evolution of AI technologies demands continuous upskilling for teachers. Studies suggested that teacher training programs in the Philippines often lack depth in emerging technologies (Kunjiapu et al., 2025; Mangarin & Climaco, 2024).

This gap leaves teachers unprepared to leverage AI tools pedagogically. Taguinod et al., (2020) argued that teachers who received appropriate training on the use of emerging technologies showed a significant improvement in their teaching practices which translated to achieving educational outcomes for students. Teachers should receive relevant training programs and support to integrate AI into their instruction effectively.

Without addressing these gaps, the potential benefits of AI in higher education will remain underutilized and disproportionately disadvantaging students in under-resourced institutions. To bridge these disparities, a multi-stakeholder approach is critical: strengthening partnerships with industries, private organizations, government agencies, and other stakeholders to subsidize digital infrastructure costs. Moreover, HEIs should prioritize contextualized training programs that align with institutional realities. Without such coordinated efforts, the promise of AI to democratize education risks becoming another marker privilege in an already stratified system.

Theme 8: Opportunities for Teachers in the Use of AI

The use of AI in education holds a significant promise, offering a wealth of opportunities to optimize instructional practices of teachers and enrich the learning experiences of students.

In view of opportunities for teachers, artificial intelligence served as a complementary tool offering additional resources and adaptive learning platforms that enhance student engagement. The integration of AI into their instructional practices also opened avenues for strengthening creativity, assisting in the development of adaptive and interactive pedagogical methods. It allowed the participants to embrace a growth mindset and

adaptability in modern teaching environments which are core to navigating the evolving landscape of education and cultivating lifelong learning.

Moreover, their familiarity with various AI tools also honed their ability to discern on AI-generated contents which equipped them in identifying instances of potential plagiarism or superficial engagement with the material, developing a more rigorous assessment process. Ultimately, participants concurred that AI enhances efficiency and productivity by automating routinary and time-intensive tasks such as creating test questions for low stakes test and preparing visual aids such as presentation materials, thereby allowing teachers to dedicate more time to direct student engagement, pedagogical engagement, and as what one participant emphasized, allowing "work-life balance". P12 emphasized "I never thought that I could be this creative. It [AI] has a lot of inputs, it's like you can do so much beyond what is already predetermined." One of them also mentioned:

P1: *"Yung mga things na ginagawa na natin good for three hours or one week, it went down to less than one minute kasi kaya mo na mag generate di ba with the help of AI. It's just a matter of validating na lang, kung tama ba yung output, and then enhancing it further. At the same time, it also allows you to be more creative kasi parang you can think of ideas and then pwede mong ipa-enhance pa sa AI tools and then the AI will generate ideas and then from there you can further improve it."* [The things that we use to do for three hours or one week, it went to less than one minute because you can generate it with the help of AI. It's just a matter of validating if the output is correct and then enhancing it further. At the same

time, it also allows you to more creative because you can think of ideas and then you can ask AI tools to enhance it and then AI will generate ideas and then from there you can improve it.]

Relevant studies supported the notion that AI can help significantly in automating educational processes such as content creation by means of generating ideas or questions using prompts, student grading and recordkeeping, creating performance summaries of students, crafting out evaluation reports, and maintaining student enrolment and attendance, delegating administrative tasks freeing up teachers' time for instructional design and activities (Ahmad et al., 2022; Kamalov et al., 2023; Meyer et al., 2023; Tan et al., 2025) thereby enhancing efficiency and productivity. By alleviating these logistical burdens, AI tools have the potential to significantly optimize teachers' workflows allowing them to focus on higher-level activities such as curriculum refinement and instructional innovation (Al-Zahrani, 2024a; Celik et al., 2022).

Similarly, AI can serve as a catalyst for teachers' pedagogical creative thinking. Pedagogical creativity is defined as the 'capacity to think imaginatively and find novel solutions to pedagogical problems' (Liu et al., 2023). Crompton and Sykora (2021) asserted that technology can amplify creativity by enabling teachers to experiment, innovate, and reimagine teaching methodologies. AI tools can function as collaborative brainstorming assistants for divergent thinking by allowing AI to propose unconventional approaches to traditional topics, pushing teachers beyond standardized curricula. This advances the growth mindset among teachers by strengthening a culture of flexibility, adaptability, and lifelong learning (Collie & Martin, 2016; Dennis, 2016; Jacovidis et al.,

2020). When teachers engage with AI as a thought partner, they develop greater cognitive flexibility, the ability to adapt to teaching strategies based on AI-generated suggestions and student needs (Chauncey & McKenna, 2024). Such interactions cultivate creative confidence, the willingness to take pedagogical risks when supported by AI's scaffolding.

Theme 9: Opportunities for Students in the Use of AI

In view of opportunities for students, participants believed that AI could cultivate learners' engagement, self-efficacy, and creativity. Artificial intelligence platforms such as adaptive learning systems and intelligent tutoring systems can personalize learning experiences by tailoring content to individual learning styles and paces. This does not only sustain student interest but also encourages active participation.

Furthermore, gamified AI applications could enhance engagement by incorporating interactive elements in the learning experience of the students. Additionally, AI could hone independent learning by providing students with tools that promote self-directed study and critical thinking. Participants expressed that generative AI tools can offer instant clarification on complex topics, reducing reliance on teacher availability and empowering learners to seek knowledge autonomously. In the own words of Participant 7, "It's a win for me as well as the students because they have like a personal tutor, if they have questions they don't have to ask me anymore, they will just ask AI." Participant 3 also emphasized, *Sa students naman promoting ng creativity nila. Hindi mo sila nababox lang sa kung ano lang yung nakikita mong kaya nilang gawin. Makakaexplore sila beyond sa tulong ng AI.* [For students, promoting their creativity. You don't just box them into what you see they can do. They can explore beyond with the help of AI.]

One potential revolutionary role of AI is to serve as a personal tutor to the students. A study of (Hartley et al., 2024) suggested that AI, particularly ChatGPT, can act as personal tutors by way of facilitating self-regulated learning processes on learning computer programming. Participants who are teaching similar course have also expressed the same notion but cautioned that students should be guided in the proper use of such tools. Learners who were guided by teachers in the use of AI tools in the classroom have demonstrated a high responsibility towards their own learning (Wang et al., 2024). Similarly, in the study of Jin et al. (2023), learners perceived AI applications as helpful in supporting metacognitive regulation, an important element in successful self-regulated learning. They believe that the benefits brought about by AI tools, including reducing social pressure and receiving feedback real-time, encouraged growth in their skills and confidence.

However, other studies argued that overreliance on AI may stiffen learners' creativity and impede cognitive efforts (Al-Zahrani, 2024c; George et al., 2024; Zhai et al., 2024). As technology drives more thinking tasks for human, skills such as critical thinking and creativity may risk deterioration over time from lack of use (Zhai et al., 2024). This raises important questions about the appropriate integration of AI in education to maximize benefits while mitigating potential drawbacks.

Yet, despite these concerns, participants recognized the role of AI in honing adaptability and growth mindset in learners which are crucial attributes for navigating the evolving landscape of future workplaces, particularly in fields increasingly reliant on AI technologies. From the participants' perspective:

P15: *"Since in education man talaga yung magiging future ng students namin so parang in preparation din tinuturuan sila paano gumamit ng AI para at least meron silang knowledge. Iniincorporate namin sa loob ng classroom para paglabas nila yun na nga hindi sila ma culture shock na meron palang ganitong AI."* [Since our students' future is in education, it's like in preparation teaching them how to use AI so that at least they have the knowledge. We are incorporating it inside the classroom so that when they go out, they will not be culture shocked that there's such an AI.]

P20: *"Sa akin naman, sa mga IT students ko gamit na gamit talaga si AI. Tinuturuan ko talaga sila para if darating na sila sa industry, hindi sila behind sa skills kasi IT sila so dapat marunong silang gumamit ng mga ganitong tools."* [As for me, AI really useful for my IT students. I really teach them so that when they go to the industry, they will not be behind in skills because they are IT so they should know how to use these tools.]

In light of artificial intelligence and the evolving needs of employers, the focus of education is shifting towards cultivating adaptability, critical thinking, and the ability to collaborate effectively with AI systems and technologies (Walter, 2024). Data from World Economic Forum (2025) suggested that the core skills professionals need to succeed in their careers for the next few years include technological literacy highlighting AI at the top list of the fastest-growing skill demanded by employers. This is supported by the report of Philippine Business Education (2025) which emphasized the growing demand for professionals with AI and automation skills in the Philippine Labor Market

highlighting the need for reskilling and upskilling initiatives. A study of (Thelma et al., 2024) investigated the integration of AI literacy in higher education curriculum, finding a growing recognition of the need to equip students with both the technical and ethical understanding of AI. They argued that curriculum and instruction must evolve beyond mere usage to develop a deeper understanding of AI's underlying principles and its impact on various industries. Therefore, the integration of AI literacy in higher education is imperative to help students thrive in a technologically driven job market.

Theme 10: AI Skills Training and Resource Provision

The effective integration of artificial intelligence in higher education depends on having trained and qualified teachers who possess confidence and autonomy to use AI tools and understand how they can be applied in teaching and learning. This can be achieved by supporting teachers through comprehensive training programs and the provision of relevant resources.

Participants, specifically from HEIs A and B, were provided by their respective institutions with hands-on and in-depth trainings to leverage AI into their teaching practices. Specifically, these trainings encompassed a range of topics designed to develop the technical know-how, pedagogical understanding, and ethical implications necessary for effective AI integration. The structured approach ensured that participants not only gained familiarity with AI tools but also critically examined their applicability across different disciplines. Notably, the emphasis on hands-on practice allowed teachers to move beyond theoretical exposure which enhanced their confidence in deploying AI for tasks such as automating course materials and assessments.

To cater digital teaching delivery and enhance student engagement, HEIs A and B have built smart classrooms equipped with interactive whiteboards, internet connectivity, audio-visual systems, and digital learning tools. A smart classroom is a digitally equipped classroom with a variety of teaching and learning methods using technology (Kaur et al., 2022). The presence of smart classrooms, equipped with reliable internet connectivity, interactive displays, and collaborative software, lays the groundwork for teachers to experiment with AI-powered educational applications and for students to develop the AI literacy skills in a supported setting (Dimitriadou & Lanitis, 2023). Other supportive mechanisms that HEIs A and B provided their teachers to leverage AI tools efficiently include an office solely dedicated to providing technical support to digital learning, a stable internet connectivity, subscription to a few AI tools and platforms, and an avenue for professional collaboration through a community of practice. This serves as a vital mechanism to support teacher learning and growth (Darling-Hammond, 2017). When teachers are provided with opportunities to share their experiences, challenges, and successes in using AI, they can learn from each other, build collective expertise, and strengthen the culture of innovation.

On the other hand, while trainings have been provided to teachers in HEI C, participants described it as inadequate because it did not capture everything that they should understand about AI in teaching and learning. It is also important to note that this was not part of their in-service training, rather it was provided by an external source.

Meanwhile, participants from HEI D did not receive any support from their institution with regards to AI. They had to learn about AI through self-exploration and tap

colleagues from the academe and government agency, specifically the Department of Information and Communications Technology, to allow them to participate in AI-related trainings. Given these, it can be implied that there is a disparity of technological support among the four institutions as discussed in Theme 4. This also resonated with their ability to provide comprehensive training programs and relevant resources to equip teachers with skills to effectively integrate AI. According to Participant 13, *"Kanina nag seminar kami on AI in education, on opportunities and challenges. But we were not really taught how to manipulate AI."* [Earlier we had a seminar on AI in education, on opportunities and challenges. But we were not really taught how to manipulate AI.] Another participant added:

P19: *"What we are doing is outsourcing kami through colleagues in the academe or agencies like in DICT. May mga free trainings sila so makikisabay na lang kami kasi pag maghintay talaga sa school na magbigay sa amin ng trainings or other resources, wala pa talaga silang plans."* [What we are doing is we are outsourcing through colleagues in the academe or agencies like in DICT. They have free trainings, so we join them because if we wait for the school to give us trainings or other resources, they really don't have plans yet.]

A meta-synthesis study of (Funa & Gabay, 2025) revealed that there remains a significant gap in professional development, more specifically on teacher training, on the use of AI which impacts teachers efficacy in integrating these tools into their pedagogical practices. Other studies suggested that teacher training programs in the Philippines often lack depth in emerging technologies (Kunjiapu et al., 2025; Mangarin & Climaco, 2024).

The lack of comprehensive AI training for higher education teachers presents a considerable challenge to the effective adoption and implementation of AI tools in education.

Without this, teachers may lack the necessary knowledge and skills to leverage AI's potential to enhance their instruction. This can lead to underutilization, ineffective and misuse of AI tools, inconsistent application of AI-driven pedagogies, and ultimately, an oversight to fully prepare students for an increasingly AI-driven future workplaces.

The rapid evolution of AI technologies demands continuous upskilling for teachers. Studies suggested that teachers who received appropriate training on the use of emerging educational technologies showed a significant improvement in their instructional practices which translated to better achievement of educational outcomes (Roshan et al., 2024) When teachers understand the capabilities and limitations of various AI tools, it builds confidence and autonomy, which likely contributes to effective integration of such tools (Ayanwale et al., 2022) (Hazzan-Bishara et al., 2025). Teacher training equips teachers with the pedagogical knowledge necessary to leverage AI tools for improved learning outcomes. This pedagogical understanding ensures that AI acts as a strategic tool that deepens engagement and promotes better understanding (Roshan et al., 2024).

Likewise, teachers should be provided with appropriate resources to effectively integrate AI tools into the teaching and learning process. These resources should extend beyond mere access to AI software and platforms. They should encompass readily available technical support, repositories of AI-integrated course materials, and opportunities for collaboration and knowledge-sharing among teachers.

Theme 11: Policy Recommendation for Ethical Use of AI in Curriculum and Instruction

The ethical integration of artificial intelligence in higher education curriculum and instruction calls for a thoughtful and proactive approach that prioritizes the well-being and development of students, empowers teachers, upholds academic integrity, and cultivates a responsible relationship with emerging technologies (Al-Zahrani & Alasmari, 2024; Chan, 2023). This can be supported through a policy that provides clear guidelines and principles for the responsible adoption and use of AI tools in educational processes. An effective policy recognizes that solutions are not one-size-fits-all and that institutional conditions, capacities, cultures, and needs must be carefully considered (Funa & Gabay, 2025; Moya et al., 2024).

There are several reasons for the need of an AI policy as informed by the experiences of the teaching community in Zamboanga City. First, as the use and misuse of AI in higher education becomes prevalent, it is essential that students are provided with comprehensive guidelines that would help them understand the principles behind the technology and the potential consequences of using AI in academic contexts to uphold academic integrity, accountability, and responsibility. Second, as we recognize the transformative opportunities of AI in teaching and learning, it is vital that teachers are well-supported in developing the necessary skills and knowledge necessary to effectively leverage these technologies in their instructional practices. Finally, as higher education institutions are responsible for preparing students for future careers, this necessitates a com-

prehensive review and update of existing curricula to incorporate relevant AI concepts and applications.

Guided by the principles of human centricity, equity, integrity, and collaboration, this policy recommendation proposes a set of actionable guidelines for cultivating an AI-integrated learning environment that empowers and supports both teachers and students while upholding the highest standards of academic integrity and ethical conduct.

Proposed Policy on The Integration of Artificial Intelligence (AI) in Private Higher Education Institution Curriculum and Instruction

Purpose

Artificial intelligence (AI) continues to transform educational landscapes, reshaping the ways in which knowledge is delivered, acquired, and assessed. From personalized learning platforms to automated assessments, AI offers powerful tools that can enhance instructional efficiency and improve student outcomes. However, its integration into education also raises critical questions regarding ethics, data privacy, academic integrity, and equitable access. As such, institutions must adopt a balanced and well-regulated approach to harness the benefits of AI while mitigating its potential risks including the development of a policy.

This policy document offers a general framework in support of the responsible use of AI technologies in higher education, in a manner that is consistent with ethical standards and promotes academic integrity and instructional innovation. More specifically, this document aims to:

- A. Provide a foundational policy document that private HEIs can adapt and expand upon to develop their specific internal guidelines and strategies for AI integration, ensuring alignment with their educational goals, needs, and context.
- B. Establish clear guidelines and ethical standards for the use of AI in academic work. This address concerns related to plagiarism, academic dishonesty, critical thinking development, data privacy, and the potential for biased or inaccurate AI outputs. The policy emphasizes the importance of human oversight and accountability in AI-driven processes.
- C. Explore and promote the use of AI tools to personalize learning experiences, improve academic outcomes, streamline instructional processes, and inspire creativity among students and teachers. This includes recognizing AI's potential for adaptive learning platforms, automated assessment tools, and instructional assistance.
- D. Encourage dialogue and collaboration among HEIs, industry partners, and government agencies to share best practices and collectively advance the responsible integration of AI in education.

Policy Statement

[Name of institution] acknowledge the transformative role of artificial intelligence (AI) in enhancing teaching, learning, and assessment, but emphasize its responsible and ethical use. AI tools may support tasks such as brainstorming and language enhancement,

provided it does not exceed 20% of any academic output and is always under human oversight. To ensure transparency, teachers and students are required to submit an Artificial Intelligence Declaration Form detailing how AI was used in their work. Misuse of AI, such as but not limited to unauthorized use or failure to disclose AI's assistance, violates the principles of academic integrity and may result in sanctions including grade deductions, disciplinary action, or expulsion. This policy underscores commitment to academic integrity and ethical innovation within educational setting.

Scope

This policy specifically applies to all curriculum and instruction-related activities within the institution. It covers the use of artificial intelligence (AI) tools and technologies by members of the academic community within private higher education institutions, including faculty, students and academic staff in the design, delivery, and evaluation of teaching and learning processes. This includes, but is not limited to, lesson planning, instructional materials development, classroom activities, adaptive assessments, and student submissions. The policy applies to all levels of higher education instruction and across all modalities of learning - face-to-face, online, and hybrid. It also governs both institutional and personally sourced AI tools used within instructional contexts.

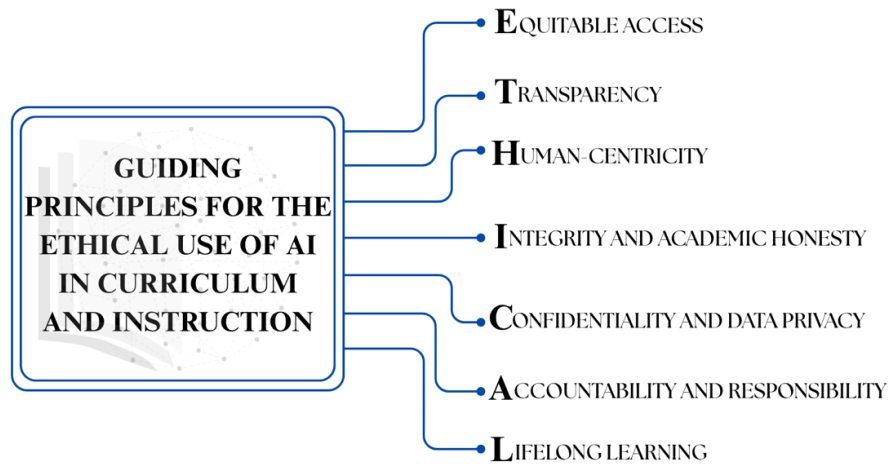
Guiding Principles

Recognizing AI's growing influence on teaching and learning practices, the proposed policy emphasizes equity, human centric-approaches, academic integrity, and life-long learning. Grounded in context, it aims to ensure that teachers and students are

equipped to engage with AI technologies in ways that uphold academic values, safeguard data privacy, and promote critical, informed, and ethical use. Through infrastructure support, teacher training, and curriculum reforms, this policy seeks to create an enabling environment that enhances educational quality and prepares learners for an AI-driven future. Figure 5 illustrates the guiding principles, highlighting its core themes and key implementation components.

Figure 5

Guiding Principles



Equitable Access. Ensuring equitable access to AI technologies is critical in promoting an inclusive learning environment (Chan, 2023). Notably, one of the significant findings in this study do not reflect such. There remains a disparity of support and resources among institutions. Resource-constrained institutions struggle with issues on

insufficient technological resources, unreliable internet connectivity, and limited AI training opportunities. As a result, teachers are often left on their own to address these challenges. Institutions should step up to ensure equitable access to AI tools and resources for all students and teachers. This includes providing necessary infrastructure such as implementing low-cost technology (Garcia Ramos & Wilson-Kennedy, 2024), teacher training (Padillo et al., 2021), and support to bridge the digital divide (Dimitriadou & Lanitis, 2023). Institutions should strengthen collaboration with industries, private organizations, government agencies, and other stakeholders to help maintain, manage, and support teacher training and operational services by providing expert advice, sharing best practices, and subsidizing digital infrastructure costs.

Transparency. Transparency is fundamental in maintaining trust, accountability, and informed engagement in AI-integrated educational environments (Huang, 2023; UNESCO, 2023). In the context of curriculum and instruction, transparency means clearly communicating when, how, and why AI tools are used by both teachers and students. Teachers must disclose the integration of AI in instructional design, materials, and assessments, while students are expected to declare any AI assistance used in completion of academic tasks. Transparent practices enable better understanding the role of AI in the learning process, foster open dialogue about its capabilities and limitations, and reduce the risk of misuse or misunderstanding.

Human-Centricity. At the core of AI integration should be the well-being and empowerment of individuals (UNESCO, 2023), and in the context of education, both stu-

dents and teachers. The policy should prioritize how AI can enhance human learning, teaching, and overall-experiences (Chan, 2023). This means focusing on tools that augment human capabilities and promote critical skills such as critical thinking and metacognition (Al-Zahrani & Alasmari, 2024). For teachers to effectively use AI in their instructional practices, they must be trained holistically to ensure that technology serves human needs and values (Roshan et al., 2024; Tan et al., 2025). A core tenet of human-centricity prioritizes the development of higher order thinking skills (UNESCO, 2021). Trained teachers can use AI tools in ways that encourage students to think critically about AI-generated content rather than passively consuming information. Likewise, trained teachers can create empowered and active learners who possess the critical thinking skills to evaluate AI outputs, the agency to strategically use AI tools for their learning, and the ethical awareness to use AI responsibly and with integrity.

Integrity and Academic Honesty. Academic integrity is defined as "the ethical use of information, thoughts, and ideas from which we build original thought to contribute to the academic conversation" (Bretag, 2016). As AI continuously transforms knowledge creation and production, institutions must both safeguard traditional principles of honesty and adapt to new technological realities (OECD-Education International, 2023). This includes clear attribution standards for AI use where students are required to explicitly cite AI's contributions to one's work using standard citing formats, distinguish between permitted (e.g., brainstorming, editing) and prohibited use of AI tools, and provide discipline-specific examples of appropriate versus inappropriate AI collaboration.

Simultaneously, assessments should be redesigned to prioritize authentic learning by incorporating process-based evaluations or oral examinations to minimize opportunities for AI misuse.

Confidentiality and Data Privacy. AI technologies rely on vast amounts of data, which raises concerns about data privacy and security if data is not adequately protected (Huang, 2023). Higher education institutions must take responsibility by implementing comprehensive measures that address data protection. Individually, institutions must uphold their existing laws and protocols on data privacy. Strict compliance when collecting, handling, or processing personal or identifiable information using AI technologies must be adhered (Stahl & Wright, 2018). Likewise, teachers should ensure that AI tools used in teaching and learning will anonymize student data to avoid bias in evaluation. Students must be informed when AI tools will be used in any educational process and to what purpose they serve.

Accountability and Responsibility. Teaching students accountability is crucial in cultivating responsible use of AI. This begins with establishing clear ethical guidelines that help them understand their role as responsible digital citizens in an AI-driven world. Rather than simply imposing restrictions, institutions should foster a culture of critical engagement by equipping students with skills to examine AI outputs, recognize potential biases, and understand the implications and consequences of AI misuse in academic settings.

Lifelong Learning. Lifelong learning is described as the integration of formal,

non-formal, and informal learning to create an ability for continuous learning development of quality of life (Laal, 2011). Emerging technologies such as AI can be seen as both as a motivator to promote lifelong learning and an avenue to enable learning to occur (Palenski et al., 2024). Higher education institutions play a critical role in broadening access to lifelong learning opportunities (Yang et al., 2015). Teachers and their professional development are grounded in a lifelong learning perspective to ensure quality of teaching. Likewise, they are entrusted to encourage a growth mindset and model this to their students. They can do so by empowering students to take ownership of their learning by teaching them metacognitive skills, goal-setting strategies, and the ability to identify their own learning needs and resources including AI tools. They must teach students to use, understand, and evaluate such tools that will contribute to their continuous growth and adaptability in an ever-evolving world.

Implementing Guidelines

- A. **Student Orientation:** All students must undergo an orientation during the first week of classes, which includes an introduction to AI tools commonly used in academic contexts, institutional policies on ethical AI use, and examples of permitted and prohibited AI applications.
- B. **Faculty Development:** Faculty members shall receive regular training on the technical know-how, pedagogical and ethical use of AI. Deans and/or department chairpersons shall conduct semestral engagement sessions, referred to as "kumustahan", to check in with faculty members, gather feed-

back on AI integration experiences, and identify areas for further support or professional development.

- C. **Ethical Use of AI in the Classroom:** The use of AI in the classroom must follow general classroom policies as outlined in the next section. Teachers should set clear guidelines for students regarding when and how AI tools may be used in their classes.
- D. **Transparency:** Teachers and students are required to disclose the use of AI tools in instructional materials and student submissions. Syllabi and class policies must include clear statements about permissible AI use.
- E. **Protection of Data Privacy:** All AI tools used in classrooms must comply with institutional data privacy protocols. Institutions must conduct regular audits of AI platforms to ensure that student information is not collected, stored, or shared without consent. Use of third-party AI tools must be carefully evaluated for data handling practices.
- F. **Monitoring and Evaluation:** An oversight committee or designated office shall be responsible for monitoring the implementation of AI policies. This includes reviewing classroom practices, student and faculty feedback, and evolving AI trends. Annual evaluations should inform policy updates and training content.

General Classroom Policies: For Teachers**A. Curriculum Design**

1. Leverage AI tools in conceptualizing course content and developing course materials such as but not limited to creating custom visual aids for classroom presentations or lectures or utilizing AI video summarization tools to create concise summaries of complex lecture content for students. Ensure that any AI-generated content is reviewed for accuracy, relevance, and bias before classroom use.
2. Explicitly connect the use of AI tools to the learning objectives. AI must be employed purposefully to reinforce and enrich learning. Map where and how AI tools will be utilized all throughout the curriculum; this should be communicated to the students.
3. Maintain an updated list of AI tools relevant to respective disciplines. Likewise, this should be supported with traditional learning resources such as peer-reviewed journals or textbooks to cultivate a balanced learning ecosystem.

B. Teaching Methods

1. Promote active learning with AI by designing guided exploration activities where students use AI tools for problem solving and critical thinking. For example, in education courses, students can use ChatGPT to generate a

lesson plan for a specific topic then critically evaluate the AI-generated lesson plan by cross-checking it with recommended principles of lesson designing, the Bloom's Taxonomy, and assessment principles. This develops curriculum design skills while teaching students AI literacy by asking them to evaluate AI-generated results. In the bigger picture, this will teach them to spot "AI hallucinations" and develop a healthy skepticism towards AI-generated information.

2. Teach students prompt engineering as a skill for better AI interactions. As part of the learning experience, allow them to experiment with various prompting techniques and observe the generated outputs to understand the nuances of AI tools. When AI provides unsatisfactory or inaccurate responses, guide them to analyze their prompts to identify potential ambiguities or areas for improvement.
3. Use AI tools to design an adaptive learning environment. Teachers can employ AI-based gamification platforms to create adaptive quizzes and leaderboard competitions tailored to learner needs and progress. The use of gamification and immersive learning experiences can create an engaging learning environment that motivates students and encourages active participation that aligns with contemporary educational needs and learner preferences.

C. Assessment Strategies

1. Collaborate with AI tools to design formative or summative assessments provided that they reflect the learning objectives, are contextualized according to their use in class, and are reviewed for accuracy, relevance, and bias.
2. Develop clear guidelines and rubrics that account for appropriate AI use for outputs where AI use is permitted. It must specify the permitted AI tools, delineate at which points in the activity AI can be employed (e.g., brainstorming, grammar checking), set expectations for original contribution, and outline the consequences of AI misuse.
3. Promote authentic and alternative assessments that emphasize critical thinking, collaboration, and problem solving. These may include portfolio development, case study analysis, and oral presentations. Alongside this, implement process-based evaluation that requires students to document their learning journey, including their decision-making process and reflections on their learning.

General Classroom Policies: For Students**A. General Guidelines**

1. Treat AI as a collaborative tool, not a replacement for your own analysis.
As such, verify all AI-generated content against credible sources such as

peer-reviewed literatures or textbooks.

2. For permitted AI use, the contribution of AI-generated content must not exceed 20% of the total work. This will be evaluated using available detection tools. Accordingly, you are required to document your process, including the prompts used and the outputs generated. Be prepared to defend orally any AI-assisted component of your work.
3. Do not submit AI-generated work as your own without attribution. Cite AI tools used by following the style guide as required by your teacher (APA/MLA/Chicago) for AI citations.
4. The verbatim lifting of AI-generated content into one's work and misrepresenting it as purely one's own is considered plagiarism. Plagiarism is an act classified as a major offense and is subject to appropriate disciplinary action as outlined in the Student Handbook.

B. Permitted Use of AI

1. Brainstorming ideas.
2. Checking grammar, style, and spelling.
3. Enhancing vocabulary and paraphrasing.
4. Translating text.
5. Improving draft clarity after writing your own content.
6. Summarizing content, lecture notes, and required readings.
7. Generating citation.

8. Generating visual contents (e.g., images, charts, infographics)

C. Prohibited Use of AI

1. Automatically generating entire essays/research.
2. Verbatim lifting of AI-generated content into one's own work.
3. Using AI during major closed-book examinations.
4. Using AI for speculative and introspective task.
5. Creating fake citations or data.
6. Generating requirements that otherwise bypass the intended learning outcome such as but not limited to:
 - a. traditional or digital drawing that test artistic skills
 - b. writing analytical essays
 - c. coding a functional program
 - d. solving a complex math problem
 - e. writing business strategy report
 - f. writing scientific laboratory report

Academic Integrity Violation

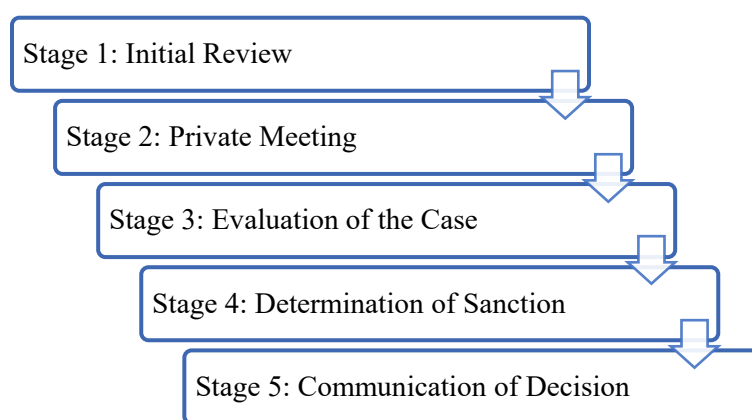
Upholding academic integrity is a core to quality education. While AI tools offer valuable support for learning and innovation, their misuse in academic work, particularly when guidelines are clearly outlines, undermines both individual learning and institutional credibility.

As such, when a student violates academic integrity by using AI tools in activities

where the use is explicitly prohibited, he/she will be subject to the following procedures as presented in Figure 6.

Figure 6

Academic Integrity Violation Protocol



Stage 1: Initial Review. The teacher will carefully examine the submitted work, comparing it to previous submissions, in-class works, and the student's demonstrated abilities. The teacher should document in writing the inconsistencies found in the student's work such as conflicting information or citations, similarities to known AI-generated text patterns, etc. Likewise, they may use AI detection tools but with extreme caution.

Stage 2: Private Meeting. The teacher will schedule a private meeting with the student and the Office of Student Affairs to discuss the concern. The conversation should be neutral and based on documented facts. The student should also be given an oppor-

tunity to explain their process.

Stage 3: Evaluation of the Case. The teacher and the Office of Student Affairs will carefully consider the case by objectively reflecting on the student's explanation and compare it to the evidence gathered. After which, they will make a rational and objective judgment based on a reasonable preponderance of evidence about whether academic misconduct has occurred.

Stage 4: Determination of Sanction. If violation is determined, they will decide on appropriate sanction based on the policy, guidelines, and the severity of the action.

This includes:

- a. A formal warning or reprimand.
- b. An in-class revision of the task without the use of AI.
- c. A reduced or zero score on the specific task to which the student committed misconduct.
- d. Loss of privileges related to technology use in the classroom.
- e. A failing grade for the course.
- f. For major and/or repeated offenses: referral to higher authorities in the institution (e.g. Board of Discipline). Procedures for handling major and/or repeated offenses are outlined in the Student Handbook.

Stage 5: Communication of Decision. The teacher and the Office of Student Affairs will communicate the decision in writing and the imposed sanction to the student. They should explain the reasoning behind the decision and the available options for ap-

peal.

Declaration on the Use of AI

The permitted use of AI in the classroom must be explicitly defined and clearly communicated by the teacher at the beginning of each course and reinforced in each assessment task. Teachers hold the responsibility of setting expectations regarding when and how students may utilize AI tools to ensure that such use aligns with the learning objectives and academic integrity standards of the institutions.

While teachers may employ AI detection tools to verify originality of student submissions, these should be used with caution and professional judgment, recognizing their limitations in accuracy and the possibility of misidentifying content as AI-generated when it is not.

For permitted use of AI in required written or performance tasks, the student should submit the Artificial Intelligence Declaration Form to the teacher of the course along with their output. The declaration form is designed to help students and teachers navigate the ethical and appropriate use of AI in coursework.

The form requires students to disclose what, when, and how AI tools have been used in preparing tasks. It encourages students to reflect critically on the assistance provided by AI, confirm their personal understanding of the content, and remain accountable for the final submission of an output. By declaring AI use honestly, students contribute to a culture of academic integrity and responsible learning innovation. By completing the declaration, the student affirms that AI tools were used thoughtfully and ethically and that

the work submitted remains a genuine reflection of their own knowledge, effort, and critical understanding.

Artificial Intelligence Declaration Form

Name		ID Number	
Course		Subject	
Title of Task			

1. Disclosure of AI Use

- I hereby declare that I have used the following AI tools in preparing the assigned task (check all that applies):
 - ☐ ChatGPT
 - ☐ Grammarly
 - ☐ QuillBot
 - ☐ Google Gemini (formerly Bard)
 - ☐ Canva AI / Magic Write
 - ☐ DALL·E
 - ☐ Copilot / GitHub Copilot
 - ☐ Perplexity
 - ☐ Others (please specify): _____
- To help me with the following:
 - ☐ Brainstorming ideas.
 - ☐ Checking grammar, style, and spelling.
 - ☐ Enhancing vocabulary and paraphrasing.
 - ☐ Translating text.
 - ☐ Improving draft clarity after writing your own content.
 - ☐ Summarizing content, lecture notes, and required readings.
 - ☐ Generating citation.
 - ☐ Generating visual contents (e.g., images, charts, infographics)
 - ☐ Others (please specify): _____
- I used the following prompt/s:

(State the prompt/s used)
- With the given prompt/s, the AI tools generated this output for me:

(State the AI-generated content)
- The contribution that the tool provided me includes:

(State how the AI-generated content was used in the task)

2. Originality and Understanding

- I confirm that the final submitted work represents my own understanding and learning.
- I have reviewed and validated any AI-generated content to ensure accuracy and relevance.

3. Accountability Clause

- I understand that I may be asked by my teacher or an authority to explain, discuss, or defend any part of the submitted work, including AI-generated content. This is to verify my understanding and to uphold academic integrity.

4. Academic Integrity

- I understand that inappropriate or undisclosed use of AI tools may be considered a violation to academic integrity and subject to disciplinary protocol.

Signature: _____

Date: _____

Chapter 4

Summary, Conclusion, and Recommendations

This chapter presents a summary of the study and its key findings. It also outlines the conclusions and recommendations based on the results, as well as the limitations of the study.

Summary of the Study

The study sought to explore the experiences of teachers in the use of artificial intelligence of four private higher education institutions in Zamboanga City to develop a recommendation on AI policy. Specifically, there were three highlighted areas in the inquiry: the integration of AI in curriculum design, teaching methods, and assessment strategies. Likewise, the challenges and opportunities were also examined to obtain a richer description of the current landscape of AI adoption in these institutions.

The study employed a descriptive design to obtain direct and rich description of experiences of AI use through focus groups discussion. There were four focus groups, each comprising six teachers from across disciplines and academic ranks. This was designed to capture diverse perspectives while maintaining consistency in participant selection criteria. To analyze the data in the study, the researcher used the thematic analysis approach by Braun and Clarke (2019). Likewise, the discussion was informed by Connectivism Learning Theory (Siemens, 2005) to explore the complexities of teaching and learning in the digital age, and AI Literacy Framework (Mills et al., 2024) to analyze the

extent to which the participants use, understand, and evaluate AI into their instructional practices. Emergent themes of the instructional practices, challenges, and opportunities that reflect it were generated from the data analysis in developing a recommendation for an AI policy.

Summary of Results

The analysis of data generated the following findings about the instructional practices, challenges, and opportunities in the use of AI in higher education.

1. Teachers predominantly viewed AI as a co-designer to support various tasks in curriculum designing and in enhancing their capabilities. They employed AI tools such as ChatGPT, Gemini, Quillbot, Photomath, etc. primarily for generating insights, ideas, sources, and references, creating lesson plans and lesson outlines, and automating course materials such as visual aids and presentations. There were strategies highlighted for effective and responsible integration of AI tools in curriculum design to ensure alignment with pedagogical goals. The strategies include prompt engineering, explicitly linking learning objectives, and validating and contextualizing AI-generated contents with trusted sources. The strategies emphasized the importance of human judgment in the AI integration process.
2. AI tools served as collaborative agents of the teachers to facilitate instruction and innovate teaching methods, promoting a more conducive and adaptive learning environment. AI tools were strategically selected based

on their ability to address specific learning needs and objectives. The tools encouraged students to learn independently and enhance their critical thinking skills through guided exploration activities. Moreover, AI tools were also used to generate discussion prompts, simulate debate with others, and simulate gamification to encourage active participation.

3. AI tools have assisted higher education teachers in facilitating dynamic assessments. Specifically, the tools were employed to generate processing and reflective questions used in formative assessments and question banks in diverse test types for summative assessments, automate rubrics for criterion-based assessments, and validate authenticity of students' outputs. While AI offers potential in innovating assessments, the teachers also recognize its drawbacks particularly on the threat to academic rigor and honesty. As such, they prioritize authentic and alternative assessments as countermeasures to this threat.
4. The integration of artificial intelligence in education presented significant ethical and technological challenges that must be addressed. One common challenge that institutions experience in the integration of AI is the unethical and irresponsible use of AI in the classroom which threatened academic integrity. On the other hand, there is also a disparity in technological infrastructure and resources. While some higher education institutions are well-equipped, others lack the necessary systems to effectively implement AI-driven teaching and learning tools. This disparity created an uneven

adoption landscape where resource-constrained institutions struggle with issues like insufficient technological support, unreliable internet connectivity, and limited training opportunities.

5. The use of AI in education holds a significant promise, offering a wealth of opportunities to optimize instructional practices of teachers and enrich the learning experiences of students. In view of opportunities for teachers, AI is a complementary tool that enhanced productivity and efficiency, strengthened creativity, assisted the development of adaptive and interactive pedagogical methods, cultivated a growth mindset and adaptability, and hones their ability to discern on AI-generated contents which equipped them in identifying instances of potential plagiarism. In view of opportunities for students, teachers believe that AI could cultivate learners' engagement, self-efficacy, and creativity. They also recognized the role of AI in honing adaptability and growth mindset in learners which are crucial attributes for navigating the evolving landscape of future workplaces.

Limitations of the Study

The study has limitations that should be considered. Firstly, the study only covered four private higher education institutions in Zamboanga City. Thus, the findings might not be fully representative of the experiences in other private or public higher education institutions within Zamboanga City or in other regions of the Philippines. Secondly, the use of focus group discussions, while providing rich qualitative data, might have

been subject to group dynamics and the potential for dominant voices to influence the discussion. Lastly, the recommendations for AI policy are only limited to curriculum and instruction. This is because the primary focus of the study was on the pedagogical applications of AI as experienced by the teachers in relation to curriculum design, teaching methods, and assessment strategies. The administrative and governance aspects of integrating AI in higher education institutions were not directly explored through the lens of teachers' instructional practices. Consequently, the recommendations stemming from this study might not directly address the unique experiences and challenges associated with AI in areas such as student admissions, data management, and strategic planning. Developing effective AI policies for these administrative and governance functions would likely require a separate investigation that specifically examines the perspectives and experiences of administrators, IT professionals, and other relevant stakeholders involved in these operational domains.

Conclusion

Based on the findings of the study, it can be inferred that the integration of AI in higher education answers the call to innovate teaching and learning in an ever-evolving world. Teachers viewed it as an opportunity to become efficient and effective in the digital age. The consistent use and integration of AI in their instructional practices have become a training ground for responding to a new educational landscape driven by emerging technologies. Likewise, the teachers were able to create meaningful, strategic, and adaptive teaching and learning experiences that contribute to the development of future-

ready graduates. By embracing AI, teachers did not only enhance their own professional capabilities, but they also equipped students with the essential literacy and skills necessary to thrive in an increasingly technologically advanced society and workforce.

On the other hand, the results also revealed that the teachers faced significant challenges in the integration of AI in their instructional practices. The common challenge is on the unethical and irresponsible use of AI in the classroom which heightened violation of academic integrity. On the other hand, there is also a disparity in technological infrastructure and resources which created an uneven adoption landscape where resource-constrained institutions struggle with issues like insufficient technological support, unreliable internet connectivity, and limited training opportunities.

Ultimately, an AI policy in higher education institutions is necessary to respond to ethical, pedagogical, and technological challenges. HEIs should take a proactive approach in establishing policies and guidelines to guide both teachers and students in the ethical use of AI.

Recommendations

In light of the findings of the study, the following recommendations are presented:

For Higher Education Institutions

Adopt or adapt, and contextualize the proposed policy based on their institutional mission, academic structure, available resources, and student population. Modifications should be informed by collaborative inputs from faculty, academic leaders, IT personnel,

and other concerned offices to ensure relevance and feasibility. Likewise, prioritize ethical considerations and implement safeguards to uphold ethical integration of AI in educational processes. On another hand, HEIs should provide robust and equitable access to necessary AI infrastructure, tools, and technical support to help both teachers and students use AI technologies effectively. Moreover, they should promote collaborations with industry partners, non-private organizations, government agencies, and other stakeholders to leverage their expertise and resources in AI development and implementation.

For Higher Education Teachers

Actively explore and experiment with AI-powered tools and platforms to enhance curriculum design, facilitate teaching methodologies, and innovate assessment strategies. They should promote lifelong learning by engaging in continuous professional development to deepen their understanding of AI technologies, their pedagogical considerations, and the ethical considerations surrounding their use. Likewise, model this mindset to their students to help them develop growth mindset and adaptability. Moreover, they should cultivate a culture of collaboration among colleagues and experts to share best practices and navigate the evolving landscape of AI in education. Ultimately, maintain a balanced approach that leverages AI's capabilities while preserving human elements of teaching.

For Higher Education Students

Develop a strong understanding of AI concepts, its ethical implications, and potential benefits within their fields of study. Similarly, they should explore and utilize AI-powered resources to enhance their learning experiences but also critically evaluate AI-generated information to develop critical skills and AI literacy. Furthermore, they should

cultivate adaptability and a growth mindset to continuously learn and evolve alongside advancements in artificial intelligence.

For Researchers

Expand the scope of inquiry to investigate the broader impact of AI in higher education, including its implications for administrative and governance functions. Additionally, researchers can conduct longitudinal studies to examine the long-term effects of AI integration on student learning outcomes, teacher professional growth, and institutional effectiveness. Finally, investigate the ethical, social, and cultural implications of AI adoption in the Philippine higher education context and explore stakeholder perspectives beyond teachers, including administrators, students, policymakers, and industry partners to develop a more holistic understanding of the potentials and associated challenges in the use of artificial intelligence.

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Appendices

Appendix A

Clearance to Proceed

 PHILIPPINE NORMAL UNIVERSITY The National Center for Teacher Education Taft Ave. Cor. Ayala Blvd., Ermita, Manila 1000 Philippines Trunkline: +63-2-317-1768 loc 750/751 eprc@pnu.edu.ph www.pnu.edu.ph	Index No.	PNU-MN-2016-EPR-FM-016
	Issue No.	01
	Rev. No.	01
	Date:	09-24-2018
	Page	1 of 1
EPR	CLEARANCE TO PROCEED	QAC No. CC-09242018-023

BASIC INFORMATION

REC Code:	2024-311
Research Proposal Title:	Exploring the Instructional Practices of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation
Researcher / Project Leader and Designation/Affiliation:	Leah P. Mata

The following items [✓] have been received and reviewed in connection with the above study to be conducted by the above researcher.

- [✓] Research Proposal in prescribed format
- [✓] Informed Consent Form/s /Assent Form
- [✓] Data Collection Tools

and hereby approved:

- [✓] To proceed to the validation of the data gathering tools
- [✓] To proceed to data collection, organization and write-up

Date of Issuance: **November 07, 2024**


Dr. EDNA LUZ R. ABULON
 Secretary
 Research Ethics Committee


Dr. RENE R. BELECINA
 Chair
 Research Ethics Committee

(All documents without the PNU QM Stamp or Control Identifier are uncontrolled)

Appendix B

Approved Permission Letters

January 9, 2025

FR. RENE C. TACASTACAS, SJ
Vice President for Higher Education
Ateneo de Zamboanga University

Dear Fr Rene,

I am Leah P. Mata, a faculty member of this institution under the School of Education - Physical Education Department. I am currently taking up Master of Arts in Education in Curriculum and Instruction at the Philippine Normal University - Manila. I am writing my thesis titled "Exploring the Instructional Practices of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation". The objective of this study is to explore the instructional practices of higher education teachers in the use of artificial intelligence technologies in the teaching and learning process. The insights gathered will contribute to the development of a recommendation for artificial intelligence policy to promote ethical and responsible use of such technologies.

To achieve the objective, the researcher will explore the integration of AI technologies in the curriculum design, teaching methods, and assessment strategies employed by the faculty members of higher education institutions.

In line with this, I would like to request your permission to conduct this study at this institution. Specifically, I would like to request six faculty members of the higher education unit to join the focus group discussion.

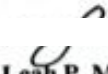
Attached are the research instrument and the Informed Consent Form for your reference.

Should you have any questions, please do not hesitate to email me at mata.lp@stud.pnu.edu.ph or call/message at 0945-398-1319.

This study has been cleared by the PNU Research Ethics Committee (REC). If you have any concerns about the conduct of this study, please contact the Secretariat of the PNU REC at 53171768 local 751 or rmo@pnu.edu.ph. Please quote the REC code 2024-311.

Thank you very much. I look forward for your favorable response regarding this matter.

Respectfully yours,


Leah P. Mata
Researcher

Approved 
FR. RENE C. TACASTACAS, SJ
Vice President for Higher Education
1-10-2024

January 9, 2025

DR. HELEN B. MADROÑAL
Vice President of Academic Affairs
Southern City Colleges

Dear Dr Madroñal,

I am Leah P. Mata, a faculty member of Ateneo de Zamboanga University - School of Education. I am currently taking up Master of Arts in Education in Curriculum and Instruction at the Philippine Normal University - Manila. I am writing my thesis titled "Exploring the Instructional Practices of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation". The objective of this study is to explore the instructional practices of higher education teachers in the use of artificial intelligence technologies in the teaching and learning process. The insights gathered will contribute to the development of a recommendation for artificial intelligence policy to promote ethical and responsible use of such technologies, which your institution can use as a benchmark for shaping its own policies and strategies in relation to AI.

To achieve the objective, the researcher will explore the integration of AI technologies in the curriculum design, teaching methods, and assessment strategies employed by the faculty members of higher education institutions.

In line with this, I would like to request your permission to conduct this study at your esteemed institution. Specifically, I would like to request six faculty members of the higher education unit to join the focus group discussion.

Attached are the research instrument and the Informed Consent Form for your reference.

Should you have any questions, please do not hesitate to email me at mata.lp@stud.pnu.edu.ph or call/message at 0945-398-1319.

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Thank you very much. I look forward for your favorable response regarding this matter.

Respectfully yours,

Leah P. Mata
Researcher

January 10, 2025

S. MA. PRECIOSA M. RUSIANA, RVM

President

Pilar College of Zamboanga City, Inc.

THRU: MR. EDMUND ENOPIA, MIT

Director, Research and Innovation

Dear S. Rusiana,

I am Leah P. Mata, a faculty member of Ateneo de Zamboanga University - School of Education. I am currently taking up Master of Arts in Education in Curriculum and Instruction at the Philippine Normal University - Manila. I am writing my thesis titled "Exploring the Instructional Practices of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation". The objective of this study is to explore the instructional practices of higher education teachers in the use of artificial intelligence technologies in the teaching and learning process. The insights gathered will contribute to the development of a recommendation for artificial intelligence policy to promote ethical and responsible use of such technologies, which your institution can use as a benchmark for shaping its own policies and strategies in relation to AI.

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Attached are the research instrument and the Informed Consent Form for your reference.

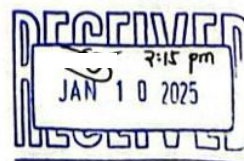
Should you have any questions, please do not hesitate to email me at mata.lp@stud.pnu.edu.ph or call/message at 0945-398-1319.

This study has been cleared by the PNU Research Ethics Committee (REC). If you have any concerns about the conduct of this study, please contact the Secretariat of the PNU REC at 53171768 local 751 or rmo@pnu.edu.ph. Please quote the REC code 2024-311.

Thank you very much. I look forward for your favorable response regarding this matter.

Respectfully yours,

Leah P. Mata
Researcher




PILAR COLLEGE OF ZAMBOANGA CITY, INC.

R. T. Lim Boulevard, Zamboanga City
Tel. No. (062) 991 5410


Research and Innovation Office

January 20, 2025

Dr. Elnora R. Perez
College Dean

Dear Dr. Perez:

Praised be Jesus and Mary!

I am writing to you to seek permission to conduct data gathering on Exploring the Instructional Practices of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation, to be conducted by Ms. Leah Mata, a faculty member of Ateneo De Zamboanga University and a student of MAED in Curriculum and Instruction at the Philippines Normal University—Manila.

For the study, the proponent would like to interview six (6) Higher Education Faculty. The following are the suggested participants for this study:

1. Ms. Elaisa Bernaldez
2. Ms. Lizel Pabilona
3. Mr. Alkhadz Lim Akil
4. Mr. Jeric Bucar
5. Ms. Grace Ahamad
6. Mr. Yram Morrok

Should you have concerns regarding the study, the researcher is willing to discuss them with you. Thank you very much.

Respectfully yours,

Mr. Edmund V. Enopia
Research Coordinator

Approved by:

Dr. Elnora Perez
College Dean

January

MR. ABRAM M. EUSTAQUIO, MBA
President
Universidad de Zamboanga

Thru: MICHAEL VINCENT P. CACERES
Director, Centre for University Research and Development

Dear Mr. Eustaquio,

I am Leah P. Mata, a faculty member of Ateneo de Zamboanga University - School of Education. I am currently taking up Master of Arts in Education in Curriculum and Instruction at the Philippine Normal University - Manila. I am writing my thesis titled "Exploring the Instructional Practices of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation". The objective of this study is to explore the instructional practices of higher education teachers in the use of artificial intelligence technologies in the teaching and learning process. The insights gathered will contribute to the development of a recommendation for artificial intelligence policy to promote ethical and responsible use of such technologies, which your institution can use as a benchmark for shaping its own policies and strategies in relation to AI.

To achieve the objective, the researcher will explore the integration of AI technologies in the curriculum design, teaching methods, and assessment strategies employed by the faculty members of higher education institutions.

In line with this, I would like to request your permission to conduct this study at your esteemed institution. Specifically, I would like to request six faculty members of the higher education unit to join the focus group discussion.

Attached are the research instrument and the Informed Consent Form for your reference.

Should you have any questions, please do not hesitate to email me at mata.lp@stud.pnu.edu.ph or call/message at 0945-398-1319.

This study has been cleared by the PNU Research Ethics Committee (REC). If you have any concerns about the conduct of this study, please contact the Secretariat of the PNU REC at 53171768 local 751 or rmo@pnu.edu.ph. Please quote the REC code 2024-311.

Thank you very much. I look forward for your favorable response regarding this matter.

Respectfully yours,


Leah P. Mata
Researcher

Received 1, 2024
991-1135

Appendix C

Informed Consent Form

INFORMED CONSENT FORM

TITLE OF RESEARCH:

Exploring the Experiences of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation

RESEARCHER:

Leah P. Mata

Master of Arts in Education in Curriculum and Instruction (*candidate*)

Philippine Normal University - Manila

Dear Participant,

You are being invited to participate in a research study entitled "*Exploring the Experiences of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation*." Before you decide whether to participate, it is important that you understand the purpose, procedures, potential risks, benefits, and your rights as a participant. Please take the time to read the following information carefully. If you have any questions or concerns, feel free to ask the researcher before making your decision. Your participation in this study is voluntary.

1. Purpose and Background

The objective of this study is to explore the instructional practices of higher education teachers in the use of artificial intelligence technologies in the teaching and learning process. The insights gathered will contribute to the development of a recommendation for artificial intelligence policy to promote ethical and responsible use of such technologies.

2. Procedures

The study will require you to make use of the narrative inquiry, wherein the researcher will conduct semi-structured focus group discussions. The FGD will take 30-45 minutes depending on your time and availability. In addition, the researcher will conduct an email correspondence in case, there is a time constraint.

3. Risks and Inconveniences

The researcher will explain the study's purpose and found no identifiable risks associated with participating in this research. There are no potential negative effects or harm (physical, psychological, social, or economic) from participating in this study.

4. Safeguards

The integrity and welfare of the participants shall be safeguarded by means of following the appropriate protocols and measures to ensure confidentiality, privacy, and the protection of rights throughout the study process. The researcher is committed to upholding the highest standards of ethical conduct in all aspects of the research.

5. Compensation

There will be no reimbursement for travel expenses, compensation for loss of income, or meal expenses associated with your participation in this study. This research does not involve any financial considerations.

6. Voluntariness/Withdrawal of Participation

Participation in this study is voluntary, and you are free to withdraw at any time without penalty or loss of benefits or treatment that you are entitled to. Your decision to participate or withdraw will not affect your relationship with the university/institution or any other organization associated with this study. If you choose to withdraw, any data collected up to that point will be de-identified and used in an aggregated manner.

7. Confidentiality

Your privacy and confidentiality will be strictly protected throughout this study. All information collected will be kept confidential and will be accessed only by the researcher. Your responses will be de-identified and reported in an aggregated form. Only the researcher will have access to the raw data. Any published results will not include any personally identifiable information. Data shall be stored in password secured data storage applications and will be discarded after six (6) months.

8. Anonymity

The identity of the participants shall be kept anonymous by assigning pseudonyms or codenames corresponding to their responses on the documents that display the data gathered. Rest assured that this procedure will be observed throughout the study.

9. Contact Details of the Researcher

For clarifications and queries as regards the study, the following details are presented to communicate with the corresponding researcher:

LEAH P. MATA

Contact Number: +639453981319

Email: mata.lp@stud.pnu.edu.ph

10. Consent

By signing this form, you indicate that you have read and understood the information provided, and you voluntarily agree to participate in the study. You also acknowledge that you are free to ask questions or seek clarification at any time during the study.



Participant's Signature:

Printed Name:

Email Address:

Contact Number:

Designation:

Affiliation:

Date Signed:



Appendix E

Request for Validation of Research Instrument

26 November 2024

ENGR. EUGENE S. KANINDOT

Director, Center for Blended and Digital Learning
Ateneo de Zamboanga University

Dear Engr. Kanindot,

I am Leah P. Mata, a faculty member of the School of Education - Ateneo de Zamboanga University at Zamboanga City, Philippines. I am currently pursuing the degree Master of Arts in Education in Curriculum and Instruction at the Philippine Normal University - Manila. Currently, I am writing my **thesis** titled **"Exploring the Instructional Practices of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation"**. The objective of this study is to **explore the instructional practices of higher education teachers in the use of artificial intelligence technologies in the teaching and learning process**. The insights gathered will contribute to the **development of a recommendation for artificial intelligence policy to promote ethical and responsible use of such technologies**.

Acknowledging your expertise in artificial intelligence, **may I request your assistance in improving and validating the attached focus group questions that I will use for my data collection?** For your reference, **I have attached the validation form along with the research questions and draft focus group questions**. In addition, **I humbly request that you fill out the Certificate of Validation** as an attestation of your professional assistance to my research instrument.

Should you decide to become one of the validators, kindly fill out the attached validation form and certification and send it back to me at your earliest convenience.

Should you have any questions, please email me at mata.lp@stud.pnu.edu.ph or call/message at +639453981319.

This study has been cleared by the PNU Research Ethics Committee (REC). If you have any concerns about the conduct of this study, please contact the Secretariat of the PNU REC at 53171768 local 751 or rmo@pnu.edu.ph. Please quote the REC code 2024-311.

Thank you very much. I look forward for your favorable response regarding this matter.

Respectfully yours,

—

Leah P. Mata

Candidate, MAEd in Curriculum and Instruction
Philippine Normal University

**Exploring the Experiences of Select Private Higher Education Institutions in the Use of
Artificial Intelligence: Towards AI Policy Recommendation**

Validation of the Focus Group Questions

Dear Validators,

This form contains questions related to experiences among private Higher Education Institutions (HEIs) in the use of Artificial Intelligence (AI). I would like to request your expert judgment to validate the questions below for each question by placing a check mark (/) in the *Accept* column if you accept and recommend retaining the interview question. Otherwise, place the check mark in the *Reject* column. Please also provide an elaboration of your recommendation in the *Remarks* column and provide comments and suggestions for further refinement of the interview questions in the yellow cells.

For your guidance, the interview questions are phrased based on the following research questions of the study:

1. What are the instructional practices of teachers in select private higher education institutions in the use of AI in terms of:
 - a. Curriculum Design
 - b. Teaching Methods
 - c. Assessment Strategies
2. What are the challenges and opportunities of teachers in the instructional practices in the use of AI?
3. Based on the findings of the study, what AI policy and guidelines can be developed?

Thank you.

Sincerely,



Leah P. Mata
Candidate, MAEd in Curriculum and Instruction
Philippine Normal University



Interview Questions	Accept	Reject	Remarks
<i>RQ#1: What are the instructional practices of teachers in select private higher education institutions in the use of AI in terms of:</i> <i>a. Curriculum Design</i> <i>b. Teaching Methods</i> <i>c. Assessment Strategies</i>			
1. What specific AI tools do you use when developing course content and course materials?			
2. In what ways do AI tools assist you in developing course materials and content?			
3. How do you ensure that the use of AI aligns with the learning objectives of your courses?			
4. What specific AI tools do you use to facilitate instruction?			
5. How do you use AI to facilitate learning in your classroom? Can you share examples of activities?			
6. How do you perceive the impact of AI on student engagement and learning outcomes?			
7. What specific AI tools do you use in your assessment strategies?			
8. How do you use AI to assess student performance and provide feedback? How did it affect student engagement and learning outcomes?			
9. How do you ensure that assessments remain fair and valid when incorporating AI technologies?			
10. What kind of training or resources have you received to help you use AI in your instruction?			

Interview Questions	Accept	Reject	Remarks
<i>RQ#2: What are the challenges and opportunities of teachers in the instructional practices in the use of AI?</i>			
1. What challenges have you encountered when using AI technologies in your teaching, and how have you addressed them?			
2. What concerns do you have regarding the use of AI in education, and how do these affect your teaching practices?			
3. What opportunities have you experienced from integrating AI into your teaching practices, and how do you believe these changes benefit you as a teacher?			
4. How do you think using AI in your teaching prepares students for future careers in an increasingly digital world?			
5. How do you envision the role of AI evolving in your instructional practices over the next few years?			

Appendix F

Proof of Validation

Interview Questions	Accept	Reject	Remarks
<i>RQ#1: What are the instructional practices of teachers in select private higher education institutions in the use of AI in terms of:</i> <i>a. Curriculum Design</i> <i>b. Teaching Methods</i> <i>c. Assessment Strategies</i>			
1. What specific AI tools do you use when developing course content and course materials?			- It is suggested to consistently make use of first-person pronoun in all the question constructs for it to be personalized in context. - It was suggested to make use of the word "conceptualize" for aspect of "course content" while "develop" for the aspect of "course materials". Suggestion: <i>"What AI tools do you use when conceptualizing your course content and developing your course materials?"</i>
2. In what ways do AI tools assist you in developing course materials and content?	✓		
3. How do you ensure that the use of AI aligns with the learning objectives of your courses?	✓		
4. What specific AI tools do you use to facilitate instruction?	✓		
5. How do you use AI to facilitate learning in your classroom? Can you share examples of activities?		✓	It is suggested that you consistently make use of "AI tools" unless you just really want it termed as "AI".

Interview Questions	Accept	Reject	Remarks
			Suggestion: <i>How do you use AI tools to facilitate learning in your classroom? Can you share examples of activities?</i> <i>*Consider doing the same of other items.</i> - Specify as well on the number of examples you intend the respondent to give to ensure that the respondent will be able to give detailed examples instead of just enumerating it since your intention is to later thematize their responses. Suggestion: <i>Can you share at least two (2) examples?</i>
6. How do you perceive the impact of AI on student engagement and learning outcomes?	✓		Alternative: <i>In what instances do you think AI may have an impact on students' engagement and learning outcomes?</i>
7. What specific AI tools do you use in your assessment strategies?	✓		
8. How do you use AI to assess student performance and provide feedback? How did it affect student engagement and learning outcomes?	✓		

Interview Questions	Accept	Reject	Remarks
9. How do you ensure that assessments remain fair and valid when incorporating AI technologies?	✓		
10. What kind of training or resources have you received to help you use AI in your instruction?		✓	You may consider separating “trainings” and “resources” for easier thematization and analysis of the responses. Suggestion: - <i>What trainings have you been provided to equip you with the necessary skills in using AI tools for instruction?</i> - <i>What resources have you received to help you use AI tools in your instruction?</i>
<i>RQ#2: What are the challenges and opportunities of teachers in the instructional practices in the use of AI?</i>			
1. What challenges have you encountered when using AI technologies in your teaching, and how have you addressed them?	✓		The statement is fine, however, just like in the previous items, please decide on whether to use “<i>AI</i>”, “<i>AI tools</i>”, or “<i>AI technologies</i>”. This is to ensure consistency and clarity also on the end of your respondents since it may entail varied interpretations.

Interview Questions	Accept	Reject	Remarks
2. What concerns do you have regarding the use of AI in education, and how do these affect your teaching practices?	✓		
3. What opportunities have you experienced from integrating AI into your teaching practices, and how do you believe these changes benefit you as a teacher?	✓		
4. How do you think using AI in your teaching prepares students for future careers in an increasingly digital world?	✓		
5. How do you envision the role of AI evolving in your instructional practices over the next few years?	✓		The context of the statement is fine. However, it is suggested to make it more precise. Suggestion: <i>How do you envision the role of AI in your instructional practices by next few years?</i>

CERTIFICATE OF VALIDATION

This is to certify that **Ms. Leah P. Mata**, a candidate for Master of Arts in Education in Curriculum and Instruction at the Philippine Normal University - Manila, sought my professional assistance in validating the interview instrument for her research. I have reviewed the questions, and I find them to be appropriate in her study entitled **“Exploring the Experiences of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation”**.

This certification is issued for her thesis writing requirements.

Validated by:

Name and Signature	 Eugene S Kanindot
Date Validated	December 10, 2024
Position/Designation	Director, Center for Digital and Blended Learning
Office/Affiliation	Ateneo de Zamboanga University

CERTIFICATE OF VALIDATION

This is to certify that **Ms. Leah P. Mata**, a candidate for Master of Arts in Education in Curriculum and Instruction at the Philippine Normal University - Manila, sought my professional assistance in validating the interview instrument for her research. I have reviewed the questions, and I find them to be appropriate for her study entitled **“Exploring the Experiences of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation”**.

This certification is issued for her thesis writing requirements.

Validated by:

Name and Signature	 RAISA P. AUSTERO
Date Validated	January 9, 2025
Position/Designation	Graduate Program Coordinator
Office/Affiliation	School of Education, Ateneo de Zamboanga University

CERTIFICATE OF VALIDATION

This is to certify that **Ms. Leah P. Mata**, a candidate for Master of Arts in Education in Curriculum and Instruction at the Philippine Normal University - Manila, sought my professional assistance in validating the interview instrument for her research. I have reviewed the questions, and I find them to be appropriate in her study entitled **“Exploring the Experiences of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation”**.

This certification is issued for her thesis writing requirements.

Validated by:

Name and Signature	Marjorie S. Emmanuel, PhD
Date Validated	December 03, 2024
Position/Designation	Assistant to the Vice President for Higher Education
Office/Affiliation	Office of the VPHE, Ateneo de Zamboanga University

Appendix G

Feedback Confirmation

FEEDBACK CONFIRMATION

This is to confirm that **Ms. Leah P. Mata**, a candidate for Master of Arts in Education in Curriculum and Instruction at the Philippine Normal University - Manila, sought my feedback in validating the data and result of her study entitled **"Exploring the Experiences of Select Private Higher Education Institutions in the Use of Artificial Intelligence: Towards AI Policy Recommendation"**. I have thoroughly reviewed the content of the study and provided my feedback accordingly.

Issued this 18th day of May, 2025.

Signed: 
Romeo A. Rabajante Jr.
Signature over Printed Name

Appendix H

Excerpt from the FGD

TRANSCRIPT: HEI A

February 4, 2025

00:07:32:23 - 00:12:18:06

Researcher: So, in what ways do AI assist you in developing course materials and contents?

A3: Yung sakin naman is more on the content, kung tama ba ang tinuturo ko sa mga students ko. And if ever man na pinapagamit ko sa mga students ang AI, nakadepende sya sa subject. Kasi for example, sa mga lower years namin nagtuturo kami ng programming, kumbaga yung by product ng subject na yun is more on logic, pano sila mag problem solving. And alam naman kasi natin na sa AI, magpaprompt ka lang di mo na kailangan mag-isip, may answer na kaagad. So sa mga ganung klaseng subjects, nililimit ko sila in a sense na parang sinasabihan ko sila na pwede nyong gamitin si ChatGPT, pwede nyong tingnan kung ano ang results nya pero kailangan nyong intindihin kung bakit ganun ang answers nya. So may processing din kaming ginagawa. Although kahit na parehas yung prompt, iba iba yung sagot almost similar lang din yung sagot. So yun yung pinaprocess namin. But for sa mga advanced subjects, kasi hindi naman talaga, yun yung focus namin na subject kumbaga ginagamit na lang ng mga students yung AI as a tool para mas mapabilis yung process. So medyo nag-pokay lang ako sa pag gamit nila ng AI kasi anyway may skills naman tayo to evaluate kung ano yung tamang answer sa maling answer.

A1: So, with the help of AI, we can or I can generate mga case studies at least fabricated case studies pero nandun yung mga intended learning outcome. And from there na-analyze ng mga estudyante, nadidiscuss namin sa class. So yung pagcreate ng learning materials mas maging mabilis. And then, of course, kapag, you know, sometimes, nagkakaran ka ng parang idea block. With the use of AI tools, it allows you to, it allows me, it allows me to come up with ideas. Ah okay maganda yung suggestion ni AI, but I can do something, pwede kong i-tweak pa parang ganun. So I can do something like that. And also in terms of yung mga assessment. Okay. I utilize AI to generate questions in terms of para sa mga quizzes nila mga ganun. But of course, double checking, klaro ba talaga yung answer, out of all the choices. And of course, if you've been part of my class before, right now kasi meron akong mga palast activity ko kasi meron akong mga learning anchors. So I also utilize AI pag wala akong masyadong maisip. I would usually ask AI to generate reflective questions based on the intended learning outcome, based on the activity ng klase. Nagsusuggest sya ng mga reflective questions na nagagamit ko sa learning anchor activities ko sa class. Also, pag may mga concepts sa kuan na di ko masyadong maintindihan, I'll ask the AI for clarity or give examples para mas maintidihan ko yung concept. And then of course, I would try to validate it with other sources, technically for additional information, for understanding.

Appendix I

Preview of Codebook (NVivo)

Initial Coding

Name	Description	Sources	References
THEME #1 View on AI in Teaching and Learning	This theme highlights the perspectives, beliefs, and attitudes of higher education teachers about the integration and impact of Artificial Intelligence (AI) within the context of teaching and learning.	5	14
Limitations of AI		2	4
THEME #2 AI Integration in Curriculum Designing	The integration of AI into the participants' curriculum designing processes such as but not limited to lesson planning, development of AI-enhanced learning materials and alignment of learning outcomes.	6	98
Specific AI tools used in curriculum designing		6	28
Strategies for aligning AI with learning objectives		3	20
Contextualizing outputs of AI		4	22
Proper prompting		5	14
Use of AI is subject or activity-specific		2	7
Validating outputs of AI		2	7
The role of AI in curriculum designing	How AI tools assist teachers in conceptualizing their course contents and developing their course materials.	6	66
Creating lesson plans		4	18
Creating powerpoint presentation		3	20
Generating processing questions		3	13

Appendix J

Artificial Intelligence Declaration Form

Name		ID Number	
Course		Subject	
Title of Task			

1. Disclosure of AI Use

- I hereby declare that I have used the following AI tools in preparing the assigned task (check all that applies):
 - ☐ ChatGPT
 - ☐ Grammarly
 - ☐ QuillBot
 - ☐ Google Gemini (formerly Bard)
 - ☐ Canva AI / Magic Write
 - ☐ DALL·E
 - ☐ Copilot / GitHub Copilot
 - ☐ Perplexity
 - ☐ Others (please specify): _____

- To help me with the following:
 - ☐ Brainstorming ideas.
 - ☐ Checking grammar, style, and spelling.
 - ☐ Enhancing vocabulary and paraphrasing.
 - ☐ Translating text.
 - ☐ Improving draft clarity after writing your own content.
 - ☐ Summarizing content, lecture notes, and required readings.
 - ☐ Generating citation.
 - ☐ Generating visual contents (e.g., images, charts, infographics)
 - ☐ Others (please specify): _____

- I used the following prompt/s:

(State the prompt/s used)

- With the given prompt/s, the AI tools generated this output for me:

(State the AI-generated content)

- The contribution that the tool provided me includes:
(State how the AI-generated content was used in the task)

2. Originality and Understanding

- I confirm that the final submitted work represents my own understanding and learning.
- I have reviewed and validated any AI-generated content to ensure accuracy and relevance.

3. Accountability Clause

- I understand that I may be asked by my teacher or an authority to explain, discuss, or defend any part of the submitted work, including AI-generated content. This is to verify my understanding and to uphold academic integrity.

4. Academic Integrity

- I understand that inappropriate or undisclosed use of AI tools may be considered a violation to academic integrity and subject to disciplinary protocol.

Signature: _____

Date: _____

Curriculum Vitae



LEAH P. MATA, LPT

Faculty, School of Education
Ateneo de Zamboanga University
La Purisima St., Zamboanga City, 7000
Contact Number: +639453981319

EDUCATION

- | | |
|---------------|---|
| Graduate | Master of Arts in Education
Major in Curriculum and Instruction (<i>candidate</i>)
Philippine Normal University |
| Undergraduate | Bachelor of Secondary Education
Major in Music, Arts, Physical Education and Health (MAPEH)
Ateneo de Zamboanga University, graduated March 2019
BSE Centennial Scholar, graduated Cum Laude
Research: <i>Oficina del Ciudad: A Study on the Historical and Architectural Concept of Zamboanga City Hall (unpublished)</i> |

ACADEMIC EXPERIENCE

- | | |
|---------|--|
| Faculty | Zamboanga Chong Hua High School
Elementary Department
S.Y. 2019 - 2020
Subjects taught: <i>Physical Education & Arts</i> |
| Faculty | Ateneo de Zamboanga University
Physical Education Department - School of Education
S.Y. 2020 - present
Subjects taught: <i>PATHFIT 1-4, BEED 11: Teaching Arts in the Elementary, PED 6: Assessment in Learning 1</i> |

III. ELIGIBILITY & PROFESSIONAL LICENSE

Licensure Examination for Teachers Passer, September 2019
Career Service Examination Passer (Professional Level), May 2019

IV. PUBLICATION

Mata, L. & Marasigan, A. (2024). Physical Education Curriculum Implementation Using Hyflex Learning Modality in the New Normal. *Journal of Interdisciplinary Studies in Education*, 13(2). <https://doi.org/10.32674/jtave768>

V. PROFESSIONAL ACTIVITIES

Participant	2025 National Conference on Curriculum Studies: Curriculum Studies in a VUCAD ² World April 24-25, 2025 Universidad de Zamboanga
Participant	Orientation for Teacher Education Institutions (TEIs) in Support of the MATATAG Curriculum Implementation November 19-20, 2024 Manila Palace Hotel, Makati City
Paper Presenter	2024 Tsinghua International Case Analysis Competition of Public Policy on Sustainable Development Goals (SDGs) Tsinghua University, Beijing, China August 17, 2024 Research Title: <i>“What a Journey It Has Been!” A Case Study of Rural Agri-Education Towards Climate Action and Environmental Justice</i>
Participant	Leadership Enhancement and Strategic Planning (LEAP) Workshop 2024 for Graduate Level and Capacity Building for Undergraduate Students July 26-28, 2024
Participant	CALOHEA Capacity Building: Implementing Student Workload Measurement for More Effective and Holistic Learning Outcome in the Philippines’ Higher Education Ateneo de Manila University September 22-23, 2024
Paper Presenter	Conference of the Comparative Society of Hong Kong (CESHK) The Education University of Hong Kong, Tai Po, Hong Kong July 22-23, 2023 Research Title: <i>Physical Education Curriculum Implementation using Hyflex Learning Modality in the New Normal</i>
Participant	International Conference on Quality Education in the New Normal Rizal Park Hotel, Ermita Manila

	November 17-18, 2022
Technical Consultant	Consultation Workshop with the Commission on Higher Education Technical Panel on the Revised K to 10 Curriculum Area: PE and Health October 3-5, 2022
Facilitator / Steering Committee Member	AdZU ForTe: Formation and Teaching through Technology Ateneo de Zamboanga University June - July 2021, July 25-27, 2022
Participant	CHED RECPE Quality and Continuous Improvement: Empowering Higher Education Teachers to Conduct Action Research October 2, 2021 –August 13, 2022
Facilitator / Steering	Department of Education Region IX Certificate Course on School Management, Monitoring, and Evaluation (SMME) November 9 – December 18, 2020
Presenter	21st Annual Pre-service Teachers' Convention Ateneo de Zamboanga University February 25-27, 2019
Presenter	Try Out of the Revised Policy on Recruitment, Selection, Placement, and Induction for Teaching Personnel Ateneo de Zamboanga University February 18-19, 2019

VI. PROFESSIONAL ORGANIZATIONS

Curriculum Studies Association of the Philippines, Inc. (CSAPI)
Associate Member
January - December 2025

Philippine Normal University - Association of Curricularists and Educators
(PNU - ACEs)
Secretary, A.Y. 2024-2025^{go}