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Artificial Intelligence Tools: Teachers' Pedagogical Adaptation in English Curriculum

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Abstract. The study investigated English language teachers' experiences with the adoption of artificial intelligence (AI) tools in the English language classroom. This study employed a phenomenological research design to determine the experiences and perceptions of the eight participants. The themes under the positive experiences of English teachers on adapting artificial intelligence (AI) tools in the teaching-learning process were assists in improving language skills and providing enhanced and immediate feedback. Meanwhile, the themes under negative experiences were poor academic integrity due to over reliance and reduced human interaction. Teachers coping with the challenges instilled academic integrity through citation and attribution, practicing critical framing, applying transformative learning, and providing authentic learning. Lastly, the educational management insight's themes were finding the right AI tools for language learning, employing hybrid teaching strategies, and acquiring digital literacy skills. The themes suggest that balancing technological advancements with traditional pedagogical methods becomes imperative, indicating that teachers must embrace innovation while preserving the essential human touch in education. Moreover, the results generated provided comprehensive data for future research with similar scope. This study may be published in a reputable research journal.

KEY WORDS
1. artificial intelligence tools 2. technological ethics 3. teaching-learning
4. English curriculum 5. Davao City

1. Introduction

The use of Artificial Intelligence tools in educational contexts is a major area of research and discussion in the field of language education. Amongst them, the English language classrooms have experienced a tremendous rise in artificial intelligence-based technologies that are intended to enhance teaching and learning experiences. These artificial intelligence devices comprise automated marking systems, chatbots, language learning apps, and voice recognition software. The rationale behind incorporating artificial intelligence tools into English language instruction lies in their potential to provide personalized learning experiences and immediate feedback, thus addressing the diverse needs of language learners. Furthermore, these technologies offer students access to a wealth of digital resources and opportunities for autonomous learning. However, the effective integration of artificial intelligence tools in educational contexts is contingent on the perceptions and adaptations of teachers (Wu Wang, 2021). Teacher perceptions of Artificial Intelligence tools play a crucial role in shaping their utilization in the

classroom. These perceptions encompass attitudes, beliefs, and expectations regarding artificial intelligence's role in education. Teachers' acceptance and willingness to adapt to artificial intelligence tools can significantly influence their integration into pedagogical practices. Thus, understanding teacher perceptions and the factors that affect their adaptation to artificial intelligence tools in English language classrooms is essential to maximizing the potential benefits of these technologies (Kurt, 2022). As stated by Joshi (2019), Artificial Intelligence may not mean designing an incredibly smart computer that solves all problems, but rather building a machine that is capable of human-like action. The purpose of artificial intelligence is to build computer software or hardware systems that demonstrate human-like thought or display features traditionally associated with human intelligence (Campesato, 2020). Artificial Intelligence as a computer system theory can perform tasks normally involving human intelligence. Speech understanding, language awareness, decision making, and visual perception are aspects of human intelligence that can be understood by artificial intelligence. There is a demand for artificial intelligence to create an expert system and to find solutions for complex problems such as recognition or natural language processing (Devi, 2020). Artificial Intelligence as a tutor for the language. Artificial Intelligence offers tireless, individualized training, providing learners the large volume of feedback and scaffolding activities needed to achieve fluency, all within a low-stakes atmosphere (learners are more likely to take chances and make mistakes). Artificial Intelligence's big promise is that it will shorten the time it takes to develop abilities. Previous research has identified several key factors that influence teacher perceptions and adaptation to Artificial Intelligence tools in education. These factors include teacher attitudes toward technology (Ertmer, 2019), training and professional development opportunities (Koehler Mishra, 2019), and the alignment of artificial intelligence tools with pedagogical goals (Alkhateeb, 2018). Additionally, studies have explored the impact of contextual variables, such as the availability of resources and support from educational institutions (Koehler, 2018). The pedagogical impact of artificial intelligence programs has been increasingly emphasized in global studies on English. All over the world, education is being individualized and made more interactive with artificial intelligence -driven platforms such as intelligent tutoring systems and adaptive learning technologies. In China for example, speech recognition technology is used by artificial intelligence tools to enhance English pronunciation through exactitude corrections and personalized practice sessions (Zhou, 2020). In America, Grammarly and similar artificial intelligence -powered writing assistants instantly critique students' grammar, style, or coherence(Zhang Zou, 2021). Europe also boasts of Duolingo and other adaptive education systems that change task levels in line with user's performance making them get a tailored experience (Hwang, 2019). In Thailand, moreover, being proficient in English can be crucial in studying abroad or acquiring employment opportunities. researchers have explored how to apply Artificial Intelligence to the process of language learning and speech recognition in their country. Liaw (2019) examined its capability and use for Taiwanese students and demonstrated that the commercial software used was problematic in its over-correcting, even though the students were sure they were correct. This is consistent with Eskenazi (2019), who also stated that incorrect feedback avoidance remains challenging in applying automatic speech recognition software. In the Philippines, a study by Lazarro and Mandela (2019) focuses on the study of English as a language of communication in Philippines. They argue that Filipinos lack proficiency in English language and have therefore lost valuable

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opportunities in development of education because of lack of proficiency in English language. The lack of linguistic abilities in English could also hamper the use of technology in Philippines. This study is specific to Philippines but does not address the issue of use of technology in Filipino classrooms and resulting unintended consequences of use of technology in teaching and learning. Moreover, despite the great potentials of artificial intelligence-enabled learning supports, the pervasive use of technology in education does not guarantee teachers' ability to deploy technology in classrooms, nor does it ensure the quality of teaching (Mercader and Gairín, 2020) since teachers are not yet fully prepared to implement artificial intelligence -based education. Another study in the Philippines found that the integration of artificial intelligence tools in English pedagogy is increasingly explored and has highlighted new opportunities as well as challenges. With regard to this diverse group of learners, artificial intelligence technology can greatly facilitate learning processes through adaptive and personalized learning environments that are especially useful for heterogeneous classes having students with varied abilities. For example, artificial intelligence -driven programs can be used to automate administrative tasks leaving teachers with more time for teaching and individualized student support (Llego,2023). One of these major uses is the employment of these tools in adapting lesson plans and assessing how a student progresses so as to match their needs. Given limited resources and high student-teacher ratios in Philippine classrooms, it is important to consider personalization as a significant element (Llego, 2023). Additionally, tools like interactive educational games and speech recognition can make learning more fun and stimulating leading to improved language proficiency among students (Ribeiro, 2020). Meanwhile, Undersecretary Epimaco Densing III (2023) said the Department of Education (DepEd) is looking at the use of technology, including artificial intelligence, as an alternative tool in addressing the perennial problem of classroom shortage in the Philippines. Vice President-DepEd Secretary said that the department also looks at technology, blended learning as another way of looking at addressing classroom shortage. The department further shared that they scheduled a meeting with Microsoft technology for a briefing on artificial intelligence virtual classrooms (Manila Bulletin, 2023). Further, in Davao City, despite decades of professional development about educational technology integration, a great number of teachers still view the implementation of technology in the classroom negatively and are not inclined to use it. Instead, they continue using the same materials and teaching methodologies, rejecting the application of anything that might bring negative outcomes. Moreover, anxiety brought about by using new technologies can act as a burden and hinder teachers' efforts to introduce technology on-site. Despite the growing body of literature on Artificial Intelligence in education, there is a need for more in-depth investigations into how English language teachers perceive and adapt to Artificial Intelligence tools in their classrooms. This study seeks to address this gap by examining the experiences and viewpoints of English language educators in the context of Artificial Intelligence integration. This research aimed to provide valuable insights that can inform educational policy, curriculum development, and teacher training initiatives, ultimately contributing to the ongoing discourse on Artificial Intelligence Technologies in English language education.

1.1. Purpose of the Study—The purpose of this study was to investigate and gain a comprehensive understanding of English language teachers' experiences on the adaption of Artificial Intelligence tools in the English language classroom. By examining the attitudes, beliefs, challenges, and strategies of educators, this research aims to contribute valuable insights into

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the evolving landscape of technology-enhanced language instruction. Specifically, it seeks to assess the attitudes and beliefs of English language teachers towards the integration of Artificial Intelligence tools in their teaching practices, examine the perceived benefits, challenges, and limitations that teachers associate with the use of Artificial Intelligence tools in English language classrooms, and investigate the strategies employed by teachers to integrate Artificial Intelligence tools effectively into their pedagogical approaches, including lesson planning, content delivery, and assessment.

1.2. Research Questions—The primary research questions of this study were the following:

(1) What are the experiences of English teachers on the adaptation of Artificial Intelligence Tools in the teaching-learning process?
(2) How do teachers cope with the challenges of integrating Artificial Intelligence Tools in the teaching-learning process?
(3) What values can be drawn from the experiences of the teachers?

This study holds significant implications for multiple stakeholders in the field of education, including policymakers, school principals, teachers, and students: Policy Makers. This knowledge can inform the development of policies that encourage the responsible adoption of artificial intelligence technologies in schools. Understanding the perceptions and needs of teachers can guide policymakers in allocating resources for teacher training programs and providing access to artificial intelligence tools that align with educational objectives. School Administrators. School principals can use the findings to consider adjustments to the curriculum to incorporate artificial intelligence -enhanced learning experiences that align with teachers' and students' needs and preferences. Insights into teacher adaptation strategies can assist school leaders in designing tailored professional development programs that empower educators to effectively integrate artificial intelligence tools. Teachers. English language teachers can benefit from a deeper understanding of their peers' successful adaptation strategies and gain insights into how to overcome challenges related to the integration of artificial intelligence tools. This knowledge can lead to enhanced professional growth. Teachers can refine their pedagogical approaches by learning from best practices identified in the study, resulting in more engaging and effective instruction. Future Researchers. The results generated from this research will provide comprehensive data in conducting future research with similar or relevant scope. The following are the terms used in the study: Artificial Intelligence Tools. The software applications and technologies that utilize artificial intelligence and machine learning to enhance various aspects of the teaching and learning process. These tools are specifically designed for educational purposes, helping educators and students achieve their goals more effectively and efficiently. Pedagogical Adaptation. The process through which educators modify their teaching methods, strategies, and approaches to meet the specific needs, learning styles, and circumstances of their students. Pedagogical adaptation is a dynamic and responsive aspect of teaching that involves making intentional changes to instructional practices to enhance student learning and engagement. English Curriculum. The structured and organized plan of instructional content and activities designed to guide the teaching and learning of the English language and its associated components, including literature, writing, grammar, and communication skills. It outlines the educational goals, objectives, content, and assessment methods for English language instructions.

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1.3. Review of Significant Literature—The literature review outlines significant insights from various scholars on artificial intelligence (AI) and its role in English language teaching (ELT).

1.3.1. Artificial Intelligence Technology—John McCarthy coined the term AI, describing it as machines performing tasks that typically require human intelligence, such as language use and problem-solving (McCarthy, 2019). AI's integration into language learning evolved from Computer Assisted Language Learning (CALL) to Intelligent CALL (ICALL), incorporating adaptive systems that cater to individual learner needs (Lu, 2020). Researchers have noted AI's potential in providing personalized learning experiences, effective grammar feedback, and enhancing language skills, although concerns about over-reliance and the teacher's role remain (Bailey, 2021; Kukulska-Hulme and Lee, 2020).

1.3.2. AI and English Language Teaching—AI supports diverse learners, including those with disabilities, by creating inclusive classrooms (Gawate, 2019; Li, 2018). It enhances learning environments by integrating multimedia for immersive experiences and optimizing teaching impacts through simulated dialogues and cultural content (Zilberman, 2019; Wang, 2019). AI also increases students' practical skills by requiring them to interact with technology, thereby improving their operational capabilities (Mukhallafi, 2020).

1.3.3. Advantages of AI-Based English Teaching—AI provides customized instructional programs, high-quality content across language skills, and rapid feedback systems (Gawate, 2019). It transforms the teacher's role into a guide and director, offering global connectivity and personalized learning experiences. AI facilitates self-paced learning, allowing students to focus on challenging areas and engage in interest-based activities, thus enhancing the teaching-learning process (Gawate, 2019).

1.3.4. Challenges and Coping Strategies—Teachers often prefer relying on their classroom dynamics over AI systems, emphasizing authentic social relationships with students (Seo, 2021). Best practices for AI integration include maintaining academic integrity through proper citation, critical framing to encourage independent thinking, and transformative learning to foster content creation and application of knowledge (Perkins, 2023; Biswas, 2021; Angay-Crowder, 2023). Ethical considerations, transparency, and student privacy are essential when implementing AI in education (Alneyadi and Wardat, 2023).

1.3.5. Feedback and Academic Integrity—AI tools provide immediate, detailed feedback, enhancing students' writing and speaking skills (Fang et al., 2023; Huang and Tan, 2023). However, over-reliance on AI may diminish critical thinking and creativity, with concerns that students might prioritize AI-generated solutions over deep learning (Iskender, 2023; Johinke, 2023). Reduced human interaction due to AI use can also affect interpersonal skills and societal well-being (Aiken and Epstein, 2020; Tao, 2019).

1.4. Theoretical Lens—The study was anchored on the Technology Acceptance Model (TAM) proposed by Davis (1989) serves as a foundational theory for understanding the adoption of technology in educational contexts. TAM posits that perceived ease of use and perceived usefulness significantly influence an individual's intention to use technology. In the context of this study, teacher perceptions of artificial intelligence tools' ease of use and usefulness will be explored as critical factors affecting their adaptation. Another theory is the Unified Theory of Acceptance and Use of Technology (UTAUT) proposed by Venkatesh (2003) extends the TAM by including additional variables such as social influence, facilitating conditions, and behavioral intentions. It offers a comprehensive framework for examining the

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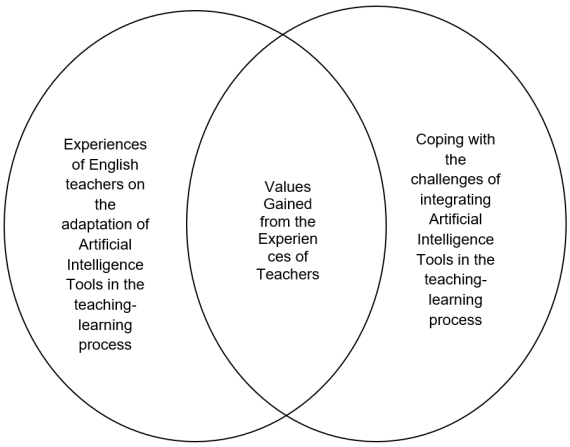

Fig. 1. Conceptual Framework of the study

complex interplay of factors influencing technology adoption. In this study, social influence from colleagues and administrators and facilitating conditions provided by the educational institution will be considered when investigating teacher adaptation to artificial intelligence tools. Further, Rogers' Diffusion of Innovations Theory (1962) provides insights into how innovations spread and are adopted over time. This theory identifies categories of adopters, ranging from early adopters to laggards, and highlights the role of perceived attributes of innovations in the adoption process. In this context, teachers' perceptions of artificial intelligence tools' relative advantage, compatibility, complexity, and trialability will be examined as determinants of their adaptation. The Technological Pedagogical Content Knowledge (TPACK) framework, proposed by Mishra and Koehler (2006), focuses on the interaction of technological, pedagogical, and content knowledge. TPACK is particularly relevant when examining how teachers integrate artificial intelligence tools into their pedagogical practices, as it emphasizes the importance of aligning technology with subject matter and teaching strategies.

2. Methodology

This chapter of the study presented the method, research participants, data collection, role of the researcher, data analysis, trustworthiness of the study, and ethical considerations. Exploring facts and knowledge in this study necessitated the consequent design and implementation, as elaborated in this chapter.

2.1. Philosophical Assumptions of the Study—The philosophical assumption was a framework used to collect, analyze, and interpret data in a specific field of study. It established the background for the following conclusions and decisions. Typical philosophical assumptions had different types and were elaborated below. Ontology. This part of the research pertained to how the issue relates to the nature of reality. According to Creswell (2019), reality was subjective and multiple as seen by participants in the study. The ontological issue addressed the nature of reality for the qualitative researcher. The reality was constructed by individuals involved in the research situation. Thus, multiple realities exist, such as the realities of the researcher, those of individuals being investigated, and those of the reader or audiences interpreting the study. In this study, the perceptions of English teachers in the adapta-

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tion of Artificial Intelligence tools in the classroom was explored. In this study, the researcher relied on voices and interpretations of the participants through extensive quotes, themes that reflected their words and provided evidence of different perspectives. The answers of the participants to the study were coded and analyzed to build and construct for the commonality and discreteness of responses. It was made sure that the responses of the participants were carefully coded to ensure the reliability of the result. The researcher upheld the authenticity of the responses and precluded from making personal biases as the study progressed. Epistemology. This referred to the awareness of how knowledge claims were justified by staying as close to the participants as possible during the study to obtain firsthand information. Guba and Lincoln, as cited by Creswell (2019), stated that on the epistemological assumption, the researcher attempted to lessen the distance between himself or herself from the participants. He suggested that being a researcher he or she collaborates, spends time in the field with participants, and becomes an 'insider'. The intention of this study was to gather information from the perceptions of English teachers in the adaptation of Artificial Intelligence tools in the classroom. It is assumed that close interaction with the participants was established to gain direct information that would shed light on the knowledge behind the inquiry. Axiology refers to the role of values in research. Creswell (2019) averred that the role of values in a study was significant. Axiology suggests that the researcher openly discusses values that shape the narrative and includes their interpretation in conjunction with the interpretation of participants. The researcher ensured the dignity and value of every detail of information obtained from the participants. The researcher understood the personal and value-laden nature of the information gathered from the study. Therefore, as a researcher, I preserved the merit of the participants' answers and carefully interpreted the answers in light of the participants' interpretation. Rhetoric. This philosophical assumption stressed that the researcher wrote in a literary, informal style using the personal voice, using qualitative terms, and limited definitions. In the context of the study, the researcher used the first person to elucidate the experiences of teachers.

2.2. Qualitative Assumptions—The methodology was different from the method. Methodology is a creative and responsive approach to understanding questions and subject matter, while method refers to the exact knowledge and procedure (Gerodias, 2019). In this study, the perceptions of English teachers, particularly the English teachers of Cluster 7, Davao City Division, regarding the adaptation of artificial intelligence tools in the classroom were explored. The researcher's drive to know the deeper meaning of their experiences became the basis for doing qualitative research, a means which was considered helpful in looking for "meanings and motivations that underlie cultural symbols, personal experiences, and phenomena." By using phenomenology, this need was hoped to be addressed by bringing the stories of the English teachers in a manner that, as David (2019) wrote, the themes, symbols, and meaning of the experiences were presented. Phenomenological research was based on two premises. The first was that experience was a valid, rich, and rewarding source of knowledge; this experience is a source of knowledge and shapes one's behavior. From the definition, human experience was viewed as a cornerstone of knowledge about human phenomena and not as an unreliable source. The second premise of phenomenological research was that the everyday world was a valuable and productive source of knowledge, and we could learn much about ourselves and reap key insights into the nature of an event by analyzing how it occurs in our daily lives (Morrissey Higgs, 2019). By using phenomenology, which concerns the

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"what" and the "how" (Moustakas, 2019), the researcher projected that the subjective experiences, challenges, and coping mechanisms of the English teachers were explored, and insights were drawn as a basis for possible future research and policy analysis in relation to this research.

2.3. Design and Procedure—This study employed a qualitative approach to research, specifically a phenomenological research design, since it focused on the perceptions of English teachers in the adaptation of Artificial Intelligence tools in the classroom. According to Creswell, (2019), phenomenology was an approach to qualitative research that focused on the commonality of lived experiences within a particular group. The fundamental goal of the approach is to arrive at a description of the nature of the particular phenomenon. Typically, interviews were conducted with a group of individuals who have first-hand knowledge of an event, situation, or experience. Other forms of data, such as documents, observations, and art, were also used. The data were read and reread and were culled for phrases and themes that were grouped into clusters of meanings. Through this process, the researcher was able to construct the universal meaning of the event, situation, or experience and arrived at a more profound understanding of the phenomenon. Moreover, Maxwell (2019) also added that with roots in philosophy, psychology, and education, phenomenology attempted to extract the purest, untainted data, and in some interpretations of the approach, bracketing was used by the researcher to document personal experiences with the subject to help remove him or herself from the process. One method of bracketing is taking notes. According to Corbetta (2020), the phenomenological research design was a qualitative type of research for which interviews provided in-depth methods that granted access to deep knowledge and explanations and helped grasp the subjects' perspective. Creswell, (2019) also claimed that interviews were primarily done in qualitative research and occurred when researchers asked one or more participants general, open-ended questions and recorded their answers. Often audio tapes were utilized to allow more consistent transcription. Interviews were also useful to follow-up with individual respondents after questionnaires, such as to further investigate their responses. In qualitative research, interviews were used to pursue the meanings of central themes in the world of their subjects. The main task in doing interviews was to understand the meaning of what the interviewees said (McNamara, 2019). Based on Quad's (2019) statements, the researcher transcribed and typed the data into a computer file to analyze it after the interview. Interviews were particularly useful for uncovering the story behind a participant's experiences and pursuing in-depth information about a topic. The researcher collected data, typically via long interviews, from individuals who have experienced the phenomenon under investigation. Next, the data analysis involved triangulation that extracted significant statements from the transcribed interviews. The significant statements were transformed into clusters of meanings according to how each statement fell under specific psychological and phenomenological concepts. Moreover, these transformations were tied up together to make a general description of the experience both the textural description of what was experienced and the structural description of how it was experienced. The researcher incorporated his or her personal meaning of the experiences here. Finally, the report was written such that readers understand better the essential, invariant structure of the essence of the experience. Conversely, several challenges have been pointed out. The researcher required a solid grounding in the philosophical guidelines of phenomenology. The subjects that were selected into the study were individuals who have experienced the phenomenon. The researcher needed to bracket his or her own ex-

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periences and observations, which were difficult to do. The researcher also needed to decide as to how and when his or her personal observations were incorporated into the study. Epistemologically, phenomenological approaches were based on the paradigm of personal knowledge and subjectivity and emphasized the importance of personal perspective and interpretation. As such they were powerful tools for understanding subjective experience, gaining insights into people's motivations and actions, and cutting through the cluster of taken-for-granted assumptions and conventional wisdom. Since the focus of this study was to explore and assess the teacher's experience and feelings towards the school environment and the perspectives of the English teachers, the researcher intended to employ phenomenological methods of qualitative research.

2.4. Ethical Considerations—The ethical considerations were significant in the design of this research study. The researcher needed to consider several ethical issues about the research participant in this fieldwork. Ethical considerations were specified as one of the most important parts of the research. The researcher needed to adhere to promote the aims of the research imparting authentic knowledge, truth and prevention of error. Social Value. Research is essential to society. This study focused on the social value of teachers' experiences, specifically among English teachers. It also served as a basis for higher authorities to create more programs and resolutions from which classroom teachers could benefit. Informed Consent. In the conduct and practice of this study, the Treaty Principle of Participation, as cited by McLeod (2019), was adhered to. The invitation to the participants ensured that their participation in the research was completely voluntary in nature and was based on the understanding of adequate information. The participant recruitment and selection were lodged in the appendices of this study. Gaining the trust and support of research participants was critical to informed and ethical academic inquiry and phenomenological research (Walker, 2007, as cited by Pillerin, 2019). All participants were given an informed consent form before scheduling the interviews and participating in the phenomenological research process. Each participant was required to provide a signed personal acknowledgement, consent, and an indication of a willingness to participate in the study release. The purpose of the informed consent letter was to introduce the research effort, provide contact information, articulate the intent of the study, request voluntary participation by the recipients, and anticipate the information that the informants were expected to provide. All participants were required to sign and return the letter of consent to the researcher before participating in the research. Vulnerability of Research Participants. The participants of this study were capable of answering the research instrument for they were all professional teachers in public schools. Thus, the researcher assured them that as the researcher, he or she could easily be reached through the contact number and be addressed in case there were some clarifications or questions with regard to the study. Risks, Benefits, and Safety. The recruitment of the respondents was free of coercion, undue influence, or inducement. Moreover, respondents were provided with the contact numbers of the chair of the panel or panel members in case they had queries related to the study. Furthermore, in the event that respondents experienced potential discomfort and inconvenience while answering the questions, they were not compelled to participate in any manner. Further, the researcher ensured that the respondents were safe during the conduct of the survey and interview. Thus, the distribution of the questionnaire was conducted in a safe venue and administered at their convenient time. The dominant concern of this study is the Treaty Principle of Protection, as reflected in the respect for the rights of privacy and confi-

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dentiality and the minimization of risk. This was done by assigning pseudonyms for each informant so as not to disclose their identity. The possibility of a degree of risk inherent to this was minimized by taking all reasonable steps to guarantee participant confidentiality. Privacy and Confidentiality of Information. This study observed the Data Privacy Act of 2002 to ensure that the data cannot be traced back to their real sources to protect participants' identities. Thus, utmost care was taken to ensure the anonymity of the data sources. Hence, any printed output that was carried out from this study was kept in anonymity. Furthermore, all the issues were given consideration so that there was no conflict of interest among the researcher and the respondents. Any type of misleading information, as well as representation of primary data findings in a biased way, were avoided. Justice. The respondents were informed of the researcher's role and their corresponding role during data gathering. They were briefed that they had to give their full honesty in answering the survey questions and additionally, any type of communication in relation to the research was done with honesty. Similarly, they were informed that they were the ones to benefit first from the results of the study. Transparency. The results of the study were accessed by the respondents and heads of the participating schools because the information was available and was placed on CD or other storage devices, which they can request the researcher to provide. In addition, by learning from the results of the study, participants were aware of the significance of the study and its contribution to their well-being. Further, each of the participants was advised that they have the right to withdraw their information at any time up to the completion of the data collection process and that they can be requested and allowed to verify their individual transcript after the interview was carried out. This provided the participants with the opportunity to amend or remove any information which they felt might identify them. The researcher reserved the right to employ the use of pseudonyms, and changing names and or non-significant dates in the interest of the protection of the identity of the participant in all subsequent data analysis and reporting. Qualification of the Researcher. The researcher ensured that he or she possessed the needed qualifications to conduct the study. The researcher completed the academic requirements and passed the comprehensive examination prior to thesis writing, which was the last requirement to obtain the master's degree. The researcher was qualified to conduct the study physically, mentally, emotionally, and financially. In addition, the advisee-adviser tandem ensured that the study reached its completion. Adequacy of Facilities. The researcher strived that the study can be completed successfully in the specified time and that he or she is equipped with the necessary resources. Likewise, the technical committee helped in the enhancement of the paper by giving the needed suggestions and recommendations for the improvement of the study. Also, the researcher ensured that he or she had enough funds to continue and finish the research. Thus, this study was hoped to be completed in the target time. Community Involvement. The researcher showed respect to the local tradition, culture, and views of the respondents in this study. Moreover, this study did not involve any use of deceit in any stage of its implementation, specifically in the recruitment of the participants or methods of data collection. Furthermore, the researcher necessarily expressed great pleasure in the wholehearted participation of the interviewees in the conduct of the study. Plagiarism and Fabrication as the researcher. The researcher respected other works by properly citing the author and rewriting what someone else has said his or her own way. The researcher used quotes that are indicated in the text and have been taken from another paper. Similarly, the researcher assured that honesty was present in

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working on the manuscript and no intentional misrepresentation and making up of data or results was included, or purposefully put forward conclusions that are not accurate.

2.5. Roles of the Researcher—The researcher had a responsibility to uncover, transfer and exploit knowledge for the benefit of educational institutions. To do so, the researcher took up the following roles in the course of the study: Facilitator and Promoter of Unbiased Research. The researcher conducted interviews to the participants and guided them in the process. The researcher interpreted ideas and responded based on existing literature and related studies and not on the researcher's own knowledge, thoughts and feelings to avoid the intrusion of bias. Expert in qualitative method. The researcher implemented the qualitative method correctly. To do so, the researcher assessed himself and sought help from the research adviser and other research professionals. These helped him exhibit competence in explaining the study without biasing the participants, conducting interviews properly according to the design, making appropriate field observations, selecting appropriate artifacts, images, and journal portions, employing Environmental Triangulation and Thematic Content Analysis precisely. Collector and Keeper of data. The researcher ensured different ways of making a record of what was said and done during the interview and Focus Group Discussion, such as taking handwritten notes or audio and/or video recording. The recordings were transcribed verbatim before data analysis can begin. Records done by the researcher were properly secured as they contained sensitive information and were relevant to the research. However, the data were being collected, and the primary responsibility of the researcher was to safeguard participants and their data. Mechanisms for such safeguarding were clearly articulated to participants and were approved by a relevant research ethics review board before the research began. Analyst of data. The researcher saw the phenomenon or problem from the participants' perspective by interpreting data, transcribing and checking, reading between the lines, coding and theming. The researcher made sure that the findings were true to the participants and that their voices were heard. The researcher organized and presented the data. The researcher presented the problem and the related literature and studies that supported it. The findings of the study were presented, too, by research question, stating the results for each one by using themes to show how the research questions were answered in the study. Moreover, the researcher gave future directions and implications of the study for improving educational policy and practices.

2.6. Data Collection—The following was the step-by-step process of gathering the data needed. Asking permission from the Schools Division Superintendent. On February 2024, the researcher asked permission from the Schools Division Superintendent to conduct the study in the identified school. The researcher sent a letter addressed to the Schools Division Superintendent with Chapters 1 and 2 attached, together with the research instrument explaining the objectives of the study and the identification of the participants. The researcher waited for the SDS's response before conducting the study. Asking permission from the school heads. In the same month, after securing the approval of the SDS, the researcher sent letters to the principals of the schools explaining the study to be conducted in their schools. Obtaining consent from the participants. Still in February 2024, the researcher asked permission from the participants. They were formally oriented about the study and of the process they shall go through as participants. Conducting the interview. In February 2024, the researcher conducted the in-depth interview using the interview questionnaire. The profile of the participants was taken, notes were jotted down, and conversations were recorded using a sound recorder for ease of

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transcription. The researcher carefully listened and responded actively during the interviews. Transcribing the responses of the interviewees. In March 2024, the researcher transcribed the responses of the interviewees precisely by recalling their answers from the sound recorder. Since the participants used their vernacular language, the researcher translated it to English language. Data Coding and thematizing. In March 2024, After the transcription, the data were then categorized and coded. Then, themes were extracted and individual data within the participants were compared and contrasted. The researcher then conducted a second round of interviews (FGD) to corroborate any data that needs further explanation and input from the participants. Additional information gathered was examined thoroughly and integrated into the existing body of data. After which, data were compared and contrasted between the participants in order to come up with patterns and trends.

2.7. Data Analysis—In this study, thematic analysis was utilized to analyze the gathered data. The researcher analyzed the answers of the participants from the conducted interviews with the use of Creswell's Model specifically the identifying of themes approach. According to Creswell (2019) themes in qualitative research were similar codes aggregated together to form a major idea in the database. Familiarization with the data was common to all forms of qualitative analysis, the researcher immersed herself in, and became intimately familiar with, their data; reading and re-reading the data and noting any initial analytic observations. Coding was also a common element of many approaches to qualitative analysis, involving generating pithy labels for important features of the data of relevance to the (broad) research question guiding the analysis. Coding was not simply a method of data reduction; it was also an analytic process, so codes captured both a semantic and conceptual reading of the data. The researcher coded every data item and ended this phase by collating all their codes and relevant data extracts. Searching for themes was a coherent and meaningful pattern in the data relevant to the research question. The researcher ended this phase by collating all the coded data relevant to each theme. Reviewing themes. The researcher reflected on whether the themes tell a convincing and compelling story about the data, and began to define the nature of each individual theme, and the relationship between the themes. Defining and naming themes: The researcher prepared a detailed analysis of each theme, identifying the 'essence' of each theme and constructing a concise, punchy, and informative name for each theme. Writing-up. This involved weaving together the analytic narrative and data extracts to tell the reader a coherent and persuasive story about the data, and contextualizing it in relation to existing literature. The researcher made sure that the perspectives of English teachers were presented comprehensively.

2.8. Analytical Framework—The framework analysis of this research was flexible to allow the researcher to either collect all the data and then analyze it or do data analysis during the collection process. In the analysis stage, the gathered data was sifted, charted, and sorted in accordance with key issues and themes. This involved a five-step process: familiarization, identifying a thematic framework, indexing, charting, and mapping and interpretation (Ritchie Spencer, 2019). Familiarization referred to the process during which the researcher became familiarized with the transcripts of the data collected interview or focus group transcripts, observation or field notes) and gained an overview of the collected data. In other words, the researcher became immersed in the data by listening to audiotapes, studying the field or reading the transcripts. Throughout this process, the researcher became aware of key ideas and recurrent themes and made a note of them. Due to the

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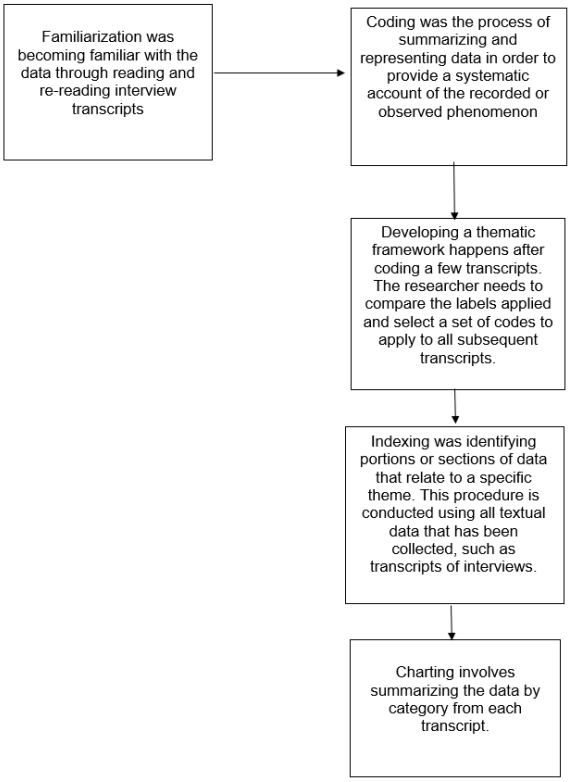

Fig. 2. Analytical Framework of the Study

sheer volume of data that was collected in qualitative research, the researcher was not able to review all of the material. Thus, a selection of the data set was utilized. The selection depended on several aspects of the data collection process. Identifying a thematic framework, the second stage, occurred after familiarization when the researcher recognized emerging themes or issues in the data set. These emerging themes or issues that had arisen from a priori themes were issues. However, it was at this stage that the researcher allowed the data to dictate the themes and issues. To achieve this end, the researcher used the notes taken during the familiarization stage. The key issues, concepts, and themes that had been expressed by the participants now formed the basis of a thematic framework that was used to filter and classify the data. Indexing meant identifying portions or sections of the data that corresponded to a particular theme. This process was applied to all the textual data that had been gathered. For the sake of convenience, Ritchie and Spencer recommend that a numerical system be used for the indexing references and annotated in the margin beside the text. Qualitative data analysis tools were ideal for such a task. The final stage, mapping and interpretation, involved the analysis of the key characteristics as laid out in the charts. This analysis was able to provide a schematic diagram of the event thus guiding the researcher in his/her interpretation of the data set. It was at this point that the researcher was cognizant of the objectives of qualitative analysis. Therefore, any strategy or recommendations made by the researcher echoed the true attitudes, beliefs, and values of the participants.

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2.9. Trustworthiness of the Study—The concepts of validity and reliability were to be relatively foreign to the field of qualitative research. Instead of focusing on reliability and validity, qualitative researchers substituted data trustworthiness, which consisted of components such as credibility, transferability, dependability, and conformability (Harts, 2018). Credibility involved establishing that the findings of the research were credible or believable from the perspectives of the participants. Observing the attributes of prolonged engagement is where credibility contributed to a belief in the trustworthiness of data. To address the issue of credibility, the researcher interviewed as many research participants as possible or up to the point of saturation. Meanwhile, transferability was the degree to which the findings were generalized or transferred to other contexts. In this, the researcher did a thorough job in describing the research context and assumptions that were relevant. On the other hand, dependability was the consistency and repeatability of the research. The researcher made sure that the findings of the study were evaluated by the participants and scrutinized by an external reviewer. Lastly, conformability was the degree to which findings could be confirmed or corroborated by other researchers. The researcher documented the procedures and did a rechecking of the data during the entire research process. The researcher also made sure that the findings were true and correct.

3. Results and Discussion

In this chapter, the results of the study are presented and discussed with reference to the aim of the study. The themes that emerged from the data gathered were discussed in this chapter. The results present the description and background of the participants who are assigned pseudonyms to conceal their identities.

3.1. Experiences of English teachers on the adaptation of Artificial Intelligence Tools in the teaching-learning process—The rapid advancement of artificial intelligence has revolutionized various domains, including education, with profound implications for teaching and learning practices (Chen, 2020). As a branch of computer science, enables machines to simulate human intelligence, learn from experiences, and perform tasks that typically require human cognitive abilities. In the education context, these technologies hold immense potential to transform traditional instructional methods, providing personalized learning experiences tailored to individual needs and preferences (Hwang, 2020). Artificial intelligence technology is becoming increasingly popular as a tool for improving language learning, and many English students are now looking to use artificial intelligence to help them learn English faster, however, there are also drawbacks in this kind of technology. This section presents the experiences of English teachers on the adaptation of artificial intelligence tools in the teaching-learning process Their responses were narrowed down into one to generate themes and subthemes. These were carefully analyzed and formulated based on what came from informants' accounts and reflections.

3.1.1. Unforgettable Experiences—Learning English with artificial intelligence has become increasingly popular due to its numerous benefits. Assists in improving language skills. One of the responses of the participants delved into the development and improvement of language skills using artificial intelligence tools. They divulged that artificial intelligence tools can offer a variety of exercises and ac-

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tivities to enhance listening, speaking, reading, and writing skills. They provide interactive and engaging materials, making language learning more enjoyable and effective. Moreover, the participants' responses described artificial intelligence language learning platforms as a natural language processing technology, allowing students to practice conversations with virtual chatbots in a realistic and comfortable environment. Additionally, the participants shared that artificial technology tools can provide students with access to a vast library of content, including podcasts, interviews, and conversations, to help them practice their skills. These tools often offer interactive exercises and quizzes to ensure learners are actively engaged and able to track their progress over time. The responses of the participants corroborates with the numerous research that have been conducted to determine how well artificial intelligence may be used to learn and improve English skills. According to a study done on psychology students at Universitas Sarjanawiyata, using artificial intelligence -based services like Netflix and Joox Music can significantly and successfully help students enhance their listening abilities (Suryana, Asrianto Murwantono, 2020). Additionally, artificial intelligence can appear as chatbots that simplify conversation and help people learn new languages. Then, according to research by Noviyanti, using artificial intelligence in the form of a spell-checking app can enhance pronunciation skills. It is thought that the use of spell Checker programs are useful for improving English pronunciation in self-study. The usage of artificial intelligence -based tools can therefore be inferred to enhance English language proficiency, particularly in speaking (Muhammad, 2020). Furthermore, research shows that between the pre- and post-test, students' vocabulary, listening, interpretation, and speech skills significantly improve. Students that struggle to master certain concepts in class may benefit from using this adaptive artificial intelligence translation (Jiang, 2021). Thus, it shows that students are motivated to use artificial intelligence for communication and learning. Provides enhanced and immediate feedback. According to the participants, traditional methods of language learning often involve delayed correction of errors, hindering the development of language skills. Artificial intelligence tools, on the other hand, offer real-time correction of pronunciation, grammar, and vocabulary usage. This immediate feedback allows learners to rectify mistakes on the spot, reinforcing correct language patterns and facilitating a more rapid learning curve. The participants asserts that artificial technology tools allow for the automated detection and correction of errors without the need for human input or intervention. This reduces the time teachers spend manually checking their topics for mistakes while allowing them to focus more on other tasks. artificial technology can also provide personalized feedback tailored to an individual's need and level of writing expertise. This study corroborates the findings of Fang et.al (2023) that Artificial intelligence assisted tool can be utilized in language learning settings to help learners develop their language learning skills and sub-skills. It can provide language learners with the required feedback and comments on different language learning skills and sub-skills issues to contribute to learners' language achievement in general. There are technologies that also provide grammatically sound sentences which can help learners produce well-organized texts. This artificial intelligence -assisted language learning tool can also understand human inquiries and provide the best possible answers and feedback to students' performance. One of the research shows that the artificial intelligence -powered language learning approach enhanced the students' academic research writing by giving them the required feedback, comments, and alternative sentences (Huang and Tan, 2023). Further, An autonomous tools equipped with speech recog-

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nition can also understand a students' speech and give immediate feedback when the student is practicing English speaking alone (Hyun Im, 2019; Kim, 2019). In a recent feasibility study, Dai (2023) used ChatGPT as one of the artificial intelligence tools to provide corrective feedback in undergraduate writing. They found the artificial intelligence feedback be more readable and detailed than instructor feedback, but still maintained high agreement levels with instructor feedback on certain (but not all) aspects of student writing. Another study that examined ChatGPT for essay evaluation and feedback by Mizumoto and Eguchi (2023) fed a corpus of 12,100 essays by non-native English writers to ChatGPT and compared rubric-grounded feedback and scores to benchmark levels. Their results showed that ChatGPT as one of the artificial intelligence tools was reasonably reliable and accurate.

3.1.2. Adverse Experiences—While using artificial intelligence to learn English can be incredibly beneficial, there are also a few challenges to consider. Poor academic integrity due to overreliance. In the dynamic landscape of education, the integration of Artificial Intelligence tools has significantly reshaped the way people approach language learning. While these tools offer unprecedented opportunities for personalized learning and immediate feedback, their overreliance raises critical concerns about academic integrity. According to the participants, excessive reliance on artificial intelligence-based tools hinders the development of self-reliance and critical thinking skills in learners. Relying solely on technology might limit creativity and the ability to adapt to diverse real-world linguistic scenarios. Teachers are also more likely to face the challenge of students submitting artificial intelligence - generated assignments. Moreover, the teachers express concerns about the overreliance on artificial intelligence tools limiting their ability to assess students' true understanding of the material. While these tools may provide correct answers, they may not reflect the depth of comprehension and critical thinking skills that traditional assessments aim to evaluate. The responses of the participants validate the argument of Iskender (2023) that the use of artificial intelligence writing tools could lead to diminished critical thinking skills if students become overly dependent on them. They expressed concern that students might prioritize quick fixes from artificial intelligence tools over deeply understanding and learning from their mistakes, which would essentially negate the process of learning, growth, and development in writing. In addition to concerns about over-reliance, the impact of artificial intelligence writing tools on creativity has also been questioned. Some educators worry that students might use these tools not just for refining their language, but also for generating ideas, potentially curtailing their creative thinking and originality (Johinke, 2023). Furthermore, Farrokhnia (2023) pointed out that while artificial intelligence tools can improve certain writing skills, they may not be as effective in addressing higher-order writing elements, such as argument structure and coherence. These aspects require a deep understanding of the topic, logical thinking, and the ability to connect ideas, which are currently beyond the capacity of artificial intelligence tools. Reduced human interaction. Another challenge expressed by the participants is the potential lack of human interaction. Learning a language is not just about memorizing vocabulary and grammar rules, but also about practicing communication with real people. Artificial intelligence tools may not provide the same level of engagement or authentic interaction as a human language partner. These language learning tools typically do not offer the same level of personal connection and real-time feedback as a human teacher. The teachers' responses stress the significance of soft skills, such as communication, teamwork, and empathy, which are best

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nurtured through human interactions. The diminished emphasis on these skills in artificial intelligence -centric classrooms may hinder students' holistic development. Human interaction allows educators to discern individual emotional states and provide necessary support, which may be overlooked in a technology-centric setting. Moreover, they highlight the importance of cultural sensitivity and contextual understanding, aspects that are often nuanced and better addressed through human interactions. artificial intelligence tools may struggle to grasp the intricacies of cultural nuances, limiting their effectiveness in certain educational contexts. The responses of the participants affirmed the notion of Aiken Epstein (2020) that a threat that artificial intelligence technology seems to present to students and teachers alike in the educational landscape is the (lack) of societal well-being offered through personalized, human interaction. It is a well-noted possibility that artificial intelligence systems may very well weaken human interaction leading to a worsening of interpersonal skills, possibly rendering youth as impotent at the individual level. In fact, this is already taking place in different parts of the world. In line with this argument, Tao (2019) contend that there exists what they refer to as "The Distancing Effect", defined by the feeling of disassociation and disconnectedness students experience as they are separated or disassociated from their object of study/work in time and space through their use of artificial intelligence technology in particular. In a study of Seo (2021), teacher participants choose to rely on own kind of sense of the classroom dynamic instead of artificial intelligence systems because they believed that the social relationship between students and instructors should be authentic. In fact, research shows that positive interactions between students and teachers influence student success. The figure above showed the emerging themes on the experiences of English teachers on the adaption of artificial intelligence tools in teaching-learning process. The themes under unforgettable experiences were assists in improving language skills, and provides enhanced and immediate feedback. The themes under adverse experiences were poor academic integrity due to overreliance, and reduce human interaction. The implications of the emerging themes on the experiences of English teachers with artificial intelligence tools underscore the need for a nuanced and balanced approach. Teachers must leverage the positive aspects of technology while addressing the challenges associated with academic integrity and human interaction. This requires a commitment to ethical use, ongoing professional development, and a thoughtful integration of artificial intelligence tools into the broader educational framework.

3.2. Teachers Coping with the Challenges of Integrating Artificial Intelligence Tools in the Teaching-Learning Process—Best practices for incorporating artificial technology into the classroom can help teachers effectively integrate this technology into their teaching practices and provide students with a more personalized and engaging learning experience. This section presents the coping strategies of teachers in adapting artificial intelligence tools in the teaching English curriculum. Their responses were narrowed down into one to generate themes and subthemes. These were carefully analyzed and formulated based on what came from informants' accounts and reflections.

3.2.1. Instilling academic integrity through citation and attribution—The participants acknowledge the responsibility of for upholding academic integrity and promoting ethical conduct in the classrooms. However, with the rise of artificial intelligence, it can be difficult to navigate these issues and ensure

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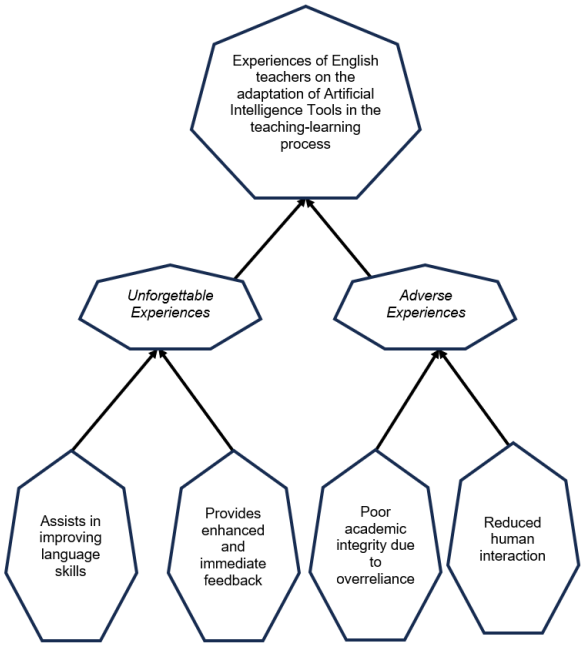

Fig. 3. Emerging Themes on the Experiences of English teachers on the adaptation of Artificial Intelligence Tools in the teaching-learning process

that the students are using artificial intelligence in a responsible and ethical manner. As such, it is important to have clear policies on the use of artificial intelligence in academic work that ensure academic integrity is upheld. The participants shared that academic integrity can be achieved through proper citation and attributions. Students must be equipped with the knowledge of citing sources accurately, whether those sources are traditional academic texts or outputs generated by artificial intelligence tools. Clarifying the distinction between original work and artificial intelligence -generated content is crucial in fostering a culture of honesty and intellectual rigor. For the participants, practical application is key to mastering the skill of citation. Providing students with hands-on training in various citation styles, ensures that they are proficient in the conventions of academic writing. This training should extend to encompassing the citation of artificial intelligence -generated content, reinforcing the idea that these tools are valuable aids but not substitutes for independent thought. Moreover, the participants claimed that paraphrasing is as important as proper citation. Paraphrasing in academic writing is an effective way to restate, condense, or clarify another author's ideas while also providing credibility to their own argument or analysis. While successful paraphrasing is essential for strong academic writing, unsuccessful paraphrasing can result in unintentional plagiarism. The responses of the participants corroborates with the perspectives of Perkins (2023) that artificial technology language models as tools can aid in the writing processes. According to his perspective, if the generated content is critically evaluated, rephrased, and properly cited, its use in academic writing can be acceptable and does not constitute plagiarism. Supporters of this viewpoint argue that artificial intelligence language models can be valuable resources for generating ideas, exploring different perspectives, and overcoming writer's block. He emphasize that the writer is responsible for evaluating and transforming the generated content into original work. Similarly, Gavilán (2022) acknowledged that academic integrity and ethical writing practices emphasize the importance of proper citation and attribu-

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tion. When artificial intelligence language tools are used in academic writing, it is crucial to acknowledge it as a tool or source of assistance and to cite it accordingly when incorporating generated content . Although many academic institutions accept this view, reviewing institution's or educational communities' specific rules on using artificial technology language models and citation conventions is vital. It is essential to follow the regulations and standards established by the academic community, as institutional policies may differ. Alneyadi Wardat (2023) assent that it's crucial to understand that these technologies have limitations. They are not error-proof and should be used with human skill and judgment. Additionally, ethical considerations, transparency, and student privacy should be carefully addressed when implementing artificial intelligence technologies in educational settings.

3.2.2. Practicing critical framing—For the participants critical framing is where teachers build students critical thinking, relating learning into social context, framing learner's growing mastery, conscious control, and social context and purpos. They believed that it is one of the areas where there is a drastic change in moving from traditional literacy practices to the adoption of artificial intelligence pedagogy, especially when it comes to reading and creating texts. In futuristic learning practice where artificial intelligence tools are involved, students need to be able to use their critical thinking abilities to develop their own meaning. For the participants, this is an imperative skill for students to learn in order to be successful in a new capitalistic society upon leaving school. One way that the participants frame critical thinking to students is by relating artificial intelligence learning into social context. This explores how learning relies on communication and interaction with others as communities of learners. The participants believed that students cannot learn if they depend on artificial intelligence tools, they do when one assist the other by providing assistance and sharing experiences and expertise. Building a camaraderie and open-mindedness to situations that calls for it. These findings validates the notion of Biswas (2014) that in order for students to be successful, they need to apply critical framing skills in all aspects of their life, he suggested that different prospects of critical framing are crucial for the application of artificial intelligence tools in 21st century learning, there is a need to include their pleasure and experience from family, friends, popular culture, social media, and language in the process of making content a touch of their own. Teachers can encourage students to notice and analyze practices of communicating meaningful ideas in schools and communities. Moreover, Angay-Crowder, Choi, Yi, (2019) asserted that to create students who are ready for an unknown future influenced by artificial intelligence, a pedagogy that supports, and engages students to think critically, and independently, about what they are reading, and interacting with is necessary. Students should be asking "why?" when engaging generated contents, and using problem solving strategies to search and validate answers. Through critical framing students can step back from overreliance to artificial intelligence instead they will think of what they have learned, critique their learning, extend and apply their learning in new or own contexts.

3.2.3. Applying transformative learning—For the participants it is not enough for the students to know the content and critically analyzing it but the application of it in real life is as necessary as knowing. Hence, the participants made sure to provide opportunities for the students to create an output that shows their reflections, experiences and awareness from the ideas they acquired in artificial technology tools. This could be done through incorporating artificial intelligence platforms alongside with student-centered activities. In addition, the participant stated that teachers need to guide and assist stu-

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dents in the process of creating their output. When students get stuck they need to know that the teachers are there to clarify concepts and keep them on track. Teacher's feedback in output making provides specific guidance on how to improve learning outcomes and it enables the students to think about the learning involved in the task and not just the activity of completing the tasks. These findings supports the conception of Angay-Crowder (2020) who affirmed that transformative practice, is arguably the most difficult, and most important component of integrating Artificial Intelligence in teaching-learning practice. It shows students understanding of texts, and what it meant to them. Being able to create own content is also one of the most important skills students will need to be successful in adapting to artificial intelligence tools. People live in a society where the ability to work collaboratively in order to create something is paramount. A certain degree of tension exists when students engage in transformed practice, especially when they juxtapose and integrate diverse discourses and remake their own realities or discourses to suit their needs and purposes. Biswas (2021) also noted that the transformative process through the use of technological tools in creating personalized outputs enables students to not only to comprehend the content that they have encountered, but they are also comprehending the process in which they are learning. This metacognition is one of the most important skills for 21st century students and beyond.

3.2.4. Provision of authentic learning— The participants believed that although artificial intelligence is flexible, accessible and relevant in this time, teachers should not overlook the importance of active engagement and social interactions among people they engage. Constructivist believe that learning happens when there is authentic learning in students such as engaging in dialogue and sharing real life experiences. Herrington and Herrington (2019) believe that the elements of authentic learning are authentic context, authentic activities, collaboration, communication, reflection, access to expert performance, multiple roles and perspective, articulation and authentic assessment. This provides a real-world learning experience and environment that have loosely-defined tasks for students. In the traditional setting, a teacher's role has changed from presenter to facilitator of knowledge. The teacher emphasis is replaces by collaboration and teamwork and even the assessment is not conducted conventionally through essays and exams but rather through diagnosis, reflection and self-assessment. This changes the student's role from a mere passive learner to a knowledge seeker. They learn to discover and create knowledge rather than simply receive it. Technology has been used to support both learning and teaching for a long time, albeit with limited success. Despite a less than stellar history of effective usage in education, however, technology appears to have great potential to support student performance of authentic tasks and their resultant learning. Before the widespread diffusion of computers and internet technologies, it was much more difficult and in some situations even impossible for teachers or instructional designers to provide authentic activities in real-life settings because of the limitations of the subject matter, time and finances, and practical constraints and risks of physically moving students to fields of practice. With the potential of technology, such limitations have eased (Woo, 2020). The figure above showed the emerging themes on teachers coping with the challenges of integrating artificial intelligence tools in the teaching learning process which were instilling academic integrity through citation and attribution, practicing critical framing, applying transformative learning, and provision of authentic learning. These themes implied that artificial technology tools can assist in plagiarism detection, helping teachers maintain academic integrity by identifying and addressing

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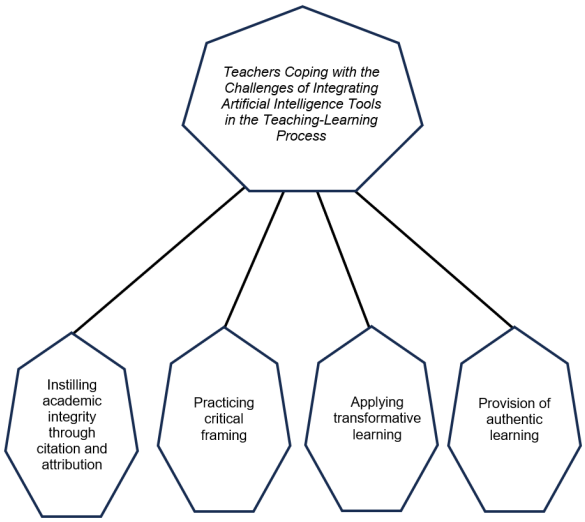

Fig. 4. Emerging Themes on Teachers Coping with the Challenges of Integrating Artificial Intelligence Tools in the Teaching-Learning Process

instances of unauthorized copying or unoriginal work. Teachers have the opportunity to engage students in discussions about the ethical use of artificial technology, promoting a deeper understanding of responsible technology usage. Further, the technology can analyze vast amounts of information, assisting teachers in guiding students to critically frame and evaluate content. This helps learners develop analytical skills and discern reliable sources from misinformation.

3.3. Values Drawn from the Experiences of the Teachers—This section presents the educational management insights drawn from the experiences of the teachers. Their responses were narrowed down into one to generate themes and subthemes. These were carefully analyzed and formulated based on what came from informants' accounts and reflections.

3.3.1. Finding the right artificial intelligence tools for language learning—The importance of finding the right artificial technology tools for language acquisition cannot be overstated, as these tools not only revolutionize the learning experience of students but also address the individualized needs of learners in a way that traditional methods often fall short. The participants voiced that with the abundance of artificial technology learning platforms available, it can be overwhelming to choose the most suitable one. Furthermore, the teacher participants consider the feedback and assessment capabilities of the artificial technology tool. For them tools must provide detailed feedback on students' pronunciation, grammar, and vocabulary usage. This will allow them to identify areas for improvement and track their students' progress over time. In addition, they mentioned to start small and find what best fits the students level. The participants also asserted that responsible use of Artificial Intelligence is needed. It is crucial to ensure that the chosen artificial intelligence tools do not put students at risk of harm. This validates the findings of Llego (2020) that it is essential to ensure that artificial intelligence -powered educational tools and resources are designed and used in ways that protect student privacy. It is also vital to ensure that artificial intelligence is not used to replace human teachers or to automate educational decision-making in ways that could negatively affect students. Moreover, scholars have claimed that the successful implementation of new instructional

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technologies is closely related to the attitudes of the teachers who lead the lesson (Fernández-Batanero, 2021). In view of this, teachers need to learn not only how to use technology but also how to successfully integrate it into their curricula and also know the right tools to use to achieve the required competencies. In order to be open to integrating advanced technology into their lessons, teachers need to understand the importance of educational technology and the affordances that it can bring to instruction. Furthermore, when it comes to artificial technology, a great number of teachers and school officials have not yet experienced artificial intelligence -based learning support and might simply recognize it as slightly more advanced educational technology. Consequently, before the successful application of an artificial technology support system into education and an evaluation of its effectiveness, teachers should first utilize it themselves so that they can fully understand how it can scaffold students' learning.

3.3.2. Employing hybrid teaching strategies—The participants asserted that the best way to use artificial technology is to combine it with traditional language learning methods. While artificial technology offers numerous advantages in language learning, it is important to recognize that it should not replace traditional language learning methods entirely. Instead, a combination of artificial technology and traditional methods can lead to more comprehensive and effective language acquisition. Moreover, according to the participants, artificial intelligence can complement traditional language learning methods by offering a wealth of resources and tools. Online dictionaries, grammar checkers, and language learning apps powered by artificial intelligence can assist learners in improving students vocabulary, grammar, and pronunciation skills. The responses of the participants validate the findings of Molenaar (2023) that educators must now learn not only how to effectively use artificial technology tools in the classroom but also how to guide and support students in leveraging these technologies for their own learning. They must find innovative ways to leverage artificial technology in order to foster active engagement among students. This may involve incorporating traditional classroom instruction, and or interactive elements into lessons or using artificial intelligence -powered platforms that encourage collaboration and discussion among peers. With proper training and understanding of how best to utilize these tools, educators have immense potential to revolutionize traditional education systems and improve outcomes for all learners. In the age of artificial technology, educators are taking on an evolving role that requires them to embrace technology while maintaining their expertise as educational professionals. Through specialized training programs focused on utilizing artificial technology tools effectively and fostering student engagement, educators can adapt to this changing landscape and create personalized learning experiences that meet the diverse needs of their students (Molenaar, 2023). It will be up to instructional designers and educational technologies to make the most of the opportunities provided by technology to change education so that effective and efficient education is available to students.

3.3.3. Acquiring digital literacy skills—The new trend in learning adheres to the use of technology. The participants are continuously familiarizing themselves with different digital tools, particularly in artificial intelligence, to use in improving students skills. To equip themselves with this new trend in education, the participants attend webinar sessions, attend trainings, watch video tutorials, and are mentored by peers. Constant learning widens teachers' knowledge and develops useful skills as they design their instructional plans. It also provides growth and development for teachers as professionals, making them ready to embrace changes in the teaching landscape. Teachers play a significant role in improving the quality of educa-

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tion; hence, capacity building for teachers' digital literacy must receive top priority. Moreover, teacher-participants claimed that should learn how to use appropriate artificial intelligence - driven technologies such as adaptive learning systems and intelligent agents to facilitate their daily teaching management and practices to collaborate with different parties (e.g., parents, colleagues), enhance personalized learning to understand students' learning progress and needs, and conduct various tasks such as offering automatic feedback, self-diagnosing, and promoting online collaboration among learners. The responses of the participants affirmed the findings of Yaras Ozturk (2022) that digital technology directly affects education which reshapes the educational approaches and educational institutions It also has a an indispensable importance in education (Ozcan, 2022). Therefore, to be equipped with these changes, teachers as the crucial roles in education must be digitally literate. Being teachers in this 21st century is dissimilar with being teachers in the 20s in which teachers are required to be capable in innovating and creating innovate the infusion of digital technology as the conventional system of learning is no longer compatible for nowadays students (Milawati Sholeh, 2020). Teachers must own digital literacy. Digital literacy skills enable them to utilize technology safely and effectively into the teaching learning process. These skills include basic computer tasks like starting and shutting down a computer, opening and using programs, typing, making changes to files, and saving them. They also involve sending and receiving emails and using web browsers. Another ability is to make and keep friends online through websites like Facebook. Another skill is to find and use information from library websites and databases effectively (Edeh, 2022). In incorporating ICT to the teaching practices, teachers must obtain the technological and pedagogical knowledge and abilities required. To put it another way, based on Almerich (2021), if teachers are not technologically and pedagogically proficient with these tools, they will not be able to integrate them into their regular teaching practices. There are several things that can help with attempts to democratize education in a nation, especially digital literacy, like focusing on the caliber of teachers and evaluating the educational attainment of pupils in each generation (Bahri, 2022). The figure above shows the emerging themes on the educational management insights drawn from the experiences of the teachers in using artificial tools in teaching English subjects. The themes were finding the right artificial technology tools for language learning, employing hybrid teaching strategies, and acquiring digital literacy skills. The themes implied that schools and institutions need to engage in strategic planning to align the integration of artificial technology tools with educational goals and outcomes. This involves setting clear objectives, timelines, trainings and assessing the impact of these tools on student learning.

4. Implications and Future Directions

This chapter presents a brief overview of the study followed by implications based on its findings. Future directions in the field of school heads' experiences are also discussed here.

4.1. Conclusions—This is an investigation that aims to learn and understand the experience of English language teachers who used or had to adapt to the use of Artificial Intelligence tools in their pedagogy. The findings stress the utmost necessity of a practiced and sensible policy towards using artificial intelligence systems in education. Teachers will need to be able to

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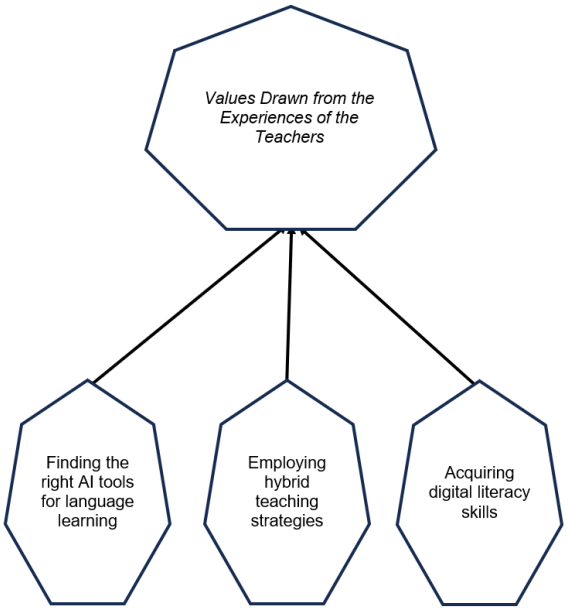

Fig. 5. Emerging Themes on the Values Drawn from The Experiences of the Teachers

use the benefits of artificial intelligence while addressing academic integrity related issues and ensuring that the human connection is not lost. This means that they should be able to use artificial intelligence ethically and keep up to date with the subject, and they must also be able to embed it within the educational framework. It is necessary to create an equilibrium in technological advancement at the same time as classroom practices in order to maintain the human factor in teaching. Teacher's duty is to mentor students and to create classrooms in which technology does not violate the principles of honesty and integrity. Constant professional training is, in turn, vital for the teachers to always stay updated with the new tech innovations in different fields and use artificial intelligence tools in the teaching process effectively. On top of that, closed human interaction leads us to give cultural sensitivity more attention in the technology integration process, so the artificial intelligence systems will not present a problem, instead, it will help to make the learning environment more inclusive.

4.1.1. Recommendations—The set of recommendations to solve the artificial intelligence technology integration difficulties in the education system are emerging as follows Artificial intelligence should be employed to maintain appropriate dishonesty standards at educational institutions through gathering plagiarism and developing a sense of morals within students. Teachers can capitalize on artificial intelligence -powered technologies to heighten critical reasoning by means of analyzing the content rather deeply and separating out credible and questionable sources. On the other hand, adopting the learning and simulation program which is artificial intelligence powered can smoothly enhance students' possibility of grasping the concepts and translating them into the real world situations. The teachers are tasked with being involved in building sound relationships with their students making the learning journey easier as they work through the artificial intelligence enhanced educations challenges. The set of recommendations to solve the artificial intelligence technology integration difficulties in the education system is emerging as a multifaceted approach. One key recommendation is to employ artificial intelligence to maintain appropriate dishonesty standards at educational

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institutions. artificial intelligence-powered plagiarism detection tools, for example, can help ensure academic integrity by scanning student submissions for similarities with existing works, thereby reducing instances of cheating. Additionally, these tools can serve as a teaching moment to develop a sense of ethics and responsibility among students, as they learn the importance of original work and proper citation practices. Teachers can also utilize artificial intelligence -powered technologies to enhance critical reasoning skills among students. For instance, artificial intelligence -driven research assistants can provide real-time feedback on the credibility of sources used in student essays, encouraging students to critically evaluate information rather than passively accepting it. This not only improves their analytical skills but also prepares them for the complexities of navigating information in the digital age. Adopting artificial intelligence -powered learning and simulation programs can significantly enhance students' ability to grasp complex concepts and apply them to real-world situations. For example, virtual laboratories powered by artificial intelligence can simulate scientific experiments, allowing students to conduct experiments safely and observe outcomes that would be impossible or impractical in a traditional classroom. This hands-on approach helps students better understand theoretical concepts and see their practical applications, thereby bridging the gap between classroom learning and real-world skills. Teachers play a crucial role in this integration process by building strong relationships with their students, which can make the learning journey smoother. These tools can assist teachers in identifying students' strengths and weaknesses, allowing for more personalized instruction. For instance, artificial intelligence -driven assessment tools can track student progress in real-time, providing teachers with insights to tailor their teaching strategies to meet individual needs. This personalized approach fosters a supportive learning environment where students feel valued and understood. To attain these goals, finding powerful and reliable artificial intelligence tools for education is essential. Implementing programs that integrate traditional teaching methods with artificial intelligence technology is a recipe for success. Enhancing digital fluency within educational institutions is a pivotal aspect of this integration. Professional development programs to bridge the skills gap are necessary to ensure that teachers can effectively use these tools in their teaching. For example, workshops and training sessions on artificial intelligence applications in education can equip teachers with the knowledge and confidence to incorporate these technologies into their classrooms. An urgent strategic approach to artificial intelligence integration is needed to complement educational outcomes. This includes clear goal-setting, resource allocation for purchasing and implementing the tools, and ongoing teacher support. Establishing a collaborative environment where educators can share experiences, discuss challenges, and adopt best practices that will foster a culture of continuous learning and innovation. For instance, creating online forums or regular meetups for teachers to exchange ideas and strategies can enhance collective knowledge and drive innovation in teaching methods.

4.2. Implications—The purpose of this study was to investigate and gain a comprehensive understanding of English language teachers' experiences with the adoption of artificial intelligence tools in the English language classroom. The Unified Theory of Acceptance and Use of Technology gives emphasis on performance expectancy, effort expectancy, social influence, and facilitating conditions that talk about what makes lecturers and students accept artificial intelligence tools for language learning, among others. For instance, performance expectancy discusses how artificial intelligence tools like automated feedback systems can improve language learning outcomes while effort

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expectancy gauges the perceived ease of using these tools. Similarly, the importance of social influence is placed on peer and institutional support while the role of facilitating conditions is concerned with resources as well as training. Conversely, according to Rogers' theory, need to know what artificial intelligence can do for them; it must be proved that it works through evidence or testimonials; teachers would have someone to hold their hands before they embrace it completely. With an understanding on these theories therefore, educators and policy makers would have grasp over the dynamics if adopting these tools into teaching English. The themes under the unforgettable experiences of English teachers on the adaptation of artificial intelligence tools in the teaching-learning process were assists in improving language skills and providing enhanced and immediate feedback. Meanwhile, the themes under adverse experiences were poor academic integrity due to overreliance and reduced human interaction. The implications of the emerging themes on the experiences of English teachers with artificial technology tools underscore the need for a nuanced and balanced approach. Teachers must leverage the positive aspects of technology while addressing the challenges associated with academic integrity and human interaction. This requires a commitment to ethical use, ongoing professional development, and thoughtful integration of artificial technology tools into the broader educational framework. The emerging themes suggest that English teachers must carefully integrate artificial technology tools. Balancing technological advancements with traditional pedagogical methods becomes imperative, indicating that teachers must embrace innovation while preserving the essential human touch in education. The concerns related to academic integrity underscore the importance of ethical considerations and responsible use of artificial technology tools. Teachers may need to guide students on the ethical use of technology, fostering a culture where technology enhances learning without compromising the principles of honesty and integrity. Also, the experiences of teachers with artificial technology tools suggest a continuous need for professional development and adaptability. Teachers must stay abreast of technological advancements, acquiring the skills necessary to effectively integrate artificial technology tools into their teaching methodologies. Further, the reduction in human interaction theme highlights the importance of cultural sensitivity in technology integration. Teachers may need to ensure that artificial intelligence tools are implemented in a way that respects and accommodates diverse cultural norms, fostering an inclusive, interactive, and supportive learning environment. Meanwhile, on teachers coping with the challenges of integrating artificial intelligence tools in the teaching-learning process, the themes were instilling academic integrity through citation and attribution, practicing critical framing, applying transformative learning, and providing authentic learning. These themes implied that artificial technology tools can assist in plagiarism detection, helping teachers maintain academic integrity by identifying and addressing instances of unauthorized copying or unoriginal work. Teachers have the opportunity to engage students in discussions about the ethical use of artificial technology, promoting a deeper understanding of responsible technology usage. Further, the technology can analyze vast amounts of information, assisting teachers in guiding students to critically frame and evaluate content. This helps learners develop analytical skills and discern reliable sources from misinformation. This new technology enables personalized learning experiences, catering to individual student needs and learning styles. This fosters transformative learning by tailoring instruction to enhance comprehension and skill development. Moreover, artificial intelligence-driven simulations and virtual environments provide authentic learning experiences, allowing stu-

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dents to apply theoretical knowledge in practical scenarios. This enhances their problem-solving skills and real-world application of concepts. Teachers should be there to guide the students on their learning path. Lastly, the emerging themes on the educational management insights drawn from the experiences of the teachers in using artificial tools in teaching English subjects were finding the right artificial technology tools for language learning, employing hybrid teaching strategies, and acquiring digital literacy skills. The themes implied that schools and institutions need to engage in strategic planning to align the integration of artificial technology tools with educational goals and outcomes. This involves setting clear objectives, timelines, trainings and assessing the impact of these tools on student learning. Educational institutions need to allocate resources for acquiring and implementing appropriate artificial technology tools for language learning. This may include investing in licenses, training programs, and technical support. They should prioritize and facilitate professional development programs for teachers to enhance their skills in using artificial technology tools effectively and integrating them into the curriculum. Moreover, establishing collaborative platforms for teachers to share experiences, challenges, and best practices in using artificial technology tools is essential. This can foster a culture of collaboration and continuous improvement.

4.3. Future Directions—Data obtained had implications for various stakeholders in education including policymakers, administrators, and teachers. The future directions of this study are as follows: For Policy Makers. A central safety argument in the Department's policies is the need for data privacy and security in the systems used by teachers, students, and others in educational institutions. Policies on the ethical use of artificial intelligence tools in teaching English is necessary. For Administrators, school principals may ensure that the integration of artificial technology tools promotes inclusive education. This involves addressing potential disparities in access to technology and adapting teaching strategies to cater to diverse teaching and learning needs. Training may also be provided for teachers' competent use. For Teachers. Teachers needs to establish mechanisms for monitoring and evaluating the effectiveness of artificial technology tools. This includes regular assessments of their impact on student outcomes, teacher performance, and overall curriculum goals. For Stakeholders. Schools may ensure that that there is transparency in the use of artificial technology tools, and the broader community is aware of the benefits and potential challenges associated with its implementation. For Future Researchers. Further development on the similar and different contexts can be done in this study. Researchers may focus on the effectiveness of artificial intelligence in other subject areas, may cater participants on other level in basic education, and the impact of parental involvement in the integration of artificial technology. Moreover, there is also a need to examine the views and beliefs of administrators and policy makers which were not tackled in this study.

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