

Impact of Artificial Intelligence (AI) Tools on Teaching-Related Tasks of Teachers at Sorsogon National High School

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Abstract: This study explored how artificial intelligence (AI) tools support teaching-related tasks (TRT) among teachers at Sorsogon National High School, including both Junior and Senior High School departments. Specifically, it examined teachers' experiences in utilizing AI, the influence of these experiences on their performance of teaching-related tasks, their assessment of AI's impact on instructional outputs, challenges encountered during use, and the implementation of school-based AI utilization guidelines aligned with DepEd policies. A qualitative research design was employed using in-depth interviews and focus group discussions (FGD) with twenty-five (25) teacher-participants. Data were analyzed through thematic analysis and organized according to the five Statements of the Problem (SOP).

Findings revealed that teachers' initial encounters with AI tools—primarily ChatGPT, Canva AI, and Microsoft Copilot—were informal and self-initiated, often driven by workload demands rather than institutional directives. AI was commonly utilized as a drafting and support tool in lesson planning and Daily Lesson Log preparation (DepEd Order No. 42, s. 2016), instructional material development, assessment drafting aligned with DepEd Order No. 8, s. 2015, and language editing. These experiences influence teachers' organization of tasks, time management practices, instructional strategy selection, differentiated instruction, assessment alignment, and teaching confidence. Participants perceived improvements in the organization, clarity, and completeness of outputs, alongside reduced cognitive load and preparation stress when AI-assisted drafts were carefully reviewed and contextualized.

Despite these benefits, challenges were identified, including concerns regarding accuracy and reliability, the need for verification and extended editing, limitations in internet connectivity and device access, varying levels of prompting skills, and ethical considerations related to authenticity and responsible use. Teachers emphasized that AI should remain a supportive tool guided by professional judgment rather than a replacement for teacher expertise. The study highlights the importance of implementing structured, policy-aligned AI utilization practices supported through Learning Action Cell (LAC) initiatives and institutional support mechanisms. The findings suggest that AI integration can enhance teaching-related tasks when grounded in ethical practice, teacher agency, and curriculum alignment within the Philippine secondary education context.

Keywords: Artificial Intelligence, Teaching-Related Tasks, Instructional Materials Develop, Daily Lesson Log, Assessment Preparation.

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I. INTRODUCTION

Artificial Intelligence (AI) growth has set strong expectations for its future contribution to education. In the past few years, AI in education has attracted significant interest, with global investments reaching about US\$94 billion in 2021 and the AI in education market projected to surpass US\$20 billion within five years (Holmes & Tuomi, 2022). In line, AI has been key in administration, instruction, and learning. AI-and-education studies in recent years has been growing; whereas three technical pillars—machine learning, learning analytics, and educational data mining—and three models—learner, teaching, and knowledge—drive personalization, prediction, and feedback in education. Institutions recorded efficiency gains as AI graded essays, flagged plagiarism, and generated feedback, while teachers shifted time toward guidance (Chen et al., 2020).

Accordingly, AutoTutor and MATHia was adopted in the classroom as intelligent tutoring systems, together with web-based adaptive platforms, robots as assistants, and VR simulations that support practice and visualization (Chen et al., 2020). Students experienced personalized content paths, early-warning diagnostics, and global access to resources, with mobile AI (e.g., Android NNAPI, Snapdragon NPE) that enabled on-device speech, vision, and translation for anytime learning (Chen et al., 2020).

In the Philippine context, AI is steadily being integrated into the Philippine education system, with efforts to link it to teaching, learning, and administration. The government initiated the National AI Roadmap and the establishment of the National Center for AI Research to strengthen infrastructure and encourage innovation in schools (Department of Trade and Industry [DTI], n.d.). Universities such as Mariano Marcos State University and the University of Northern Philippines have started adopting smart campus systems to improve digital services and student access (Philippine News Agency [PNA], 2021; Philippine Information Agency [PIA], 2021). AI tools are also present in classrooms through adaptive learning platforms, plagiarism checkers, and intelligent tutoring systems, giving students tailored content and helping teachers reduce repetitive tasks (Estrellado & Miranda, 2023). However, issues such as limited digital skills, unequal access to technology, high costs of implementation, and data privacy risks continue to challenge adoption. Despite these concerns, AI has the potential to improve decision-making in schools and create more personalized learning experiences for Filipino learners. Its success will depend on teacher training, ethical safeguards, and the ability to close the digital divide (Estrellado & Miranda, 2023).

In line with this, In the basic education level, the most updated national directive that supports technology integration is DepEd Order No. 016, s. 2023. This order presents the Revised Guidelines on the Implementation of the DepEd Computerization Program (DCP). It aims to equip public schools with computers, connectivity, digital systems, and ICT infrastructure that strengthen teaching, learning, governance, and school operations. DO 016 stresses the need for public schools to adopt appropriate, equitable, and quality technologies that respond to the demands of the modern age.

Although the order does not specify rules for AI tools, it establishes the digital readiness framework that makes AI use possible inside classrooms (Department of Education [DepEd], 2023).

Moreover, the DepEd has continually promoted digital integration through the Digital Rise Program in recent years. This initiative focuses on digital literacy, ICT-assisted teaching, and ICT-assisted learning. Digital literacy involves productivity tools for Grades 4–6, programming and multimedia for Grades 7–10, and vocational skills for Senior High School. ICT-assisted teaching equips teachers with devices, software, and training, while ICT-assisted learning expands access through the DepEd Learning Management System, DepEd Commons, and DepEd TV/Radio. Partnerships with Microsoft and Google also contribute to the program. These projects are designed to build 21st-century skills and increase adaptability in the post-pandemic context (Department of Education [DepEd], 2022).

In other studies, schools and universities try tools such as robotics, gamified tasks, AI-assisted tutoring, and VR to personalize practice and build problem-solving skills (Melchor et al., 2023). Other studies such as Prestoza and Banatao (2024) demonstrated that AI-driven instruction using tools such as ChatGPT, Bard, Perplexity, and Bing led to significant gains in test performance. Students also expressed favorable perceptions of AI, highlighting its ability to provide personalized feedback, adapt lessons, and suggest relevant study materials. Earlier research also emphasized the importance of AI literacy, arguing that learners must be trained to effectively interact with emerging technologies (Bearman & Ajjawi, 2023).

Yet, despite these advances, concerns remain over privacy, data integrity, infrastructure requirements, and the preparation of teachers for AI use (Chen et al., 2020). Moreover, although some studies report measurable gains in AI and ICT use, large independent evaluations often present mixed or modest outcomes, leaving it uncertain whether AI consistently improves learning results (Holmes & Tuomi, 2022). Beyond student learning, AI is also applied in plagiarism detection, admissions processes, e-proctoring, and classroom monitoring, raising ethical and human rights concerns. Key challenges include personalization that narrows education to test outcomes, unequal access, data privacy risks, and the growing commercialization of schooling. As issues rise, AI continues to be promoted as a means to expand access to education and augment human cognition in the future (Holmes & Tuomi, 2022).

Against this backdrop, this study focused its lens on teaching-related tasks and AI. Tan et al. (2025) defined these as planning, delivering, assessing, and improving instruction, along with related responsibilities. AI tools have started to influence all these dimensions. DepEd's latest directive on the Immediate Removal of Administrative Tasks of Public School Teachers (DepEd Order No. 002, s. 2024) clarifies the scope of work that falls within teachers' primary functions. The order states that teachers must focus on instruction and tasks that directly support learning. These include lesson preparation, actual classroom teaching, assessment of learner progress,

classroom management, and professional development. The order distinguishes these from administrative tasks, which must be handled by school heads and non-teaching personnel (Department of Education, 2024). In effect, teaching-related tasks cover all duties that require a teacher's expertise in instruction, learning support, and learner development. AI tools have started to influence all these dimensions.

Yet the on the ground reality in Sorsogon National High School as observed by the researcher shows that the use of AI in teaching-related tasks is still in its early stage. Teachers face questions on how far AI can actually improve lesson preparation, instruction, assessment, and administrative work in this setting prompting for the need of the study. Before this study, the researcher completed a pre-survey through focus group discussions and informal conversations with teachers to determine their frequency of AI use, the tools they try, and their concerns. The pre-survey revealed varied experiences and limited confidence among teachers. The pre-survey also confirmed that Sorsogon National High School has no school-level guidelines on AI utilization as of this date. This gap creates uncertainty among teachers who want clarity on responsible and effective use of AI tools.

Tan et al. (2025) noted that for lesson preparation, teachers use AI to generate examples, design scenarios, and support flipped learning. In classroom teaching, AI applications such as chatbots, immersive tools, and automated prompts improve participation and motivation. Assessment and feedback has also been *AI-fied* as AI supported test item creation, essay scoring, and formative feedback that strengthens accuracy and timeliness. Meanwhile, administrative tasks such as grading records, reports, and monitoring learning data are also now supported through analytics that help teachers save time and understand progress. Even in professional development, AI continues to provide simulations, virtual mentors, and feedback systems that support teacher training and ethical literacy. Together, these developments connect how AI affects the efficiency and quality of the core work teachers perform in today's learning environment (Tan et al., 2025).

Evidence shows that teacher performance can be strengthened by AI utilization. AI's effect on teacher performance strengthens this perspective. Mulyani et al. (2025) analyzed generative AI in West Java through a survey of vocational teachers. They reported a significant effect on performance. The study found that perceived usefulness, ease of use, and ease of learning were central drivers of adoption, with usefulness as the strongest factor. Outcomes included improvements in student focus, richer content, and stronger classroom practices. Challenges included training demands, technical limits, inequality, and privacy risks. Similar findings appear in the literature, which shows that AI improves content generation, feedback, and routine tasks, but stresses that teacher oversight and preparation are necessary to avoid shallow results and ethical risks (Farrokhnia et al., 2024; Su & Yang, 2023).

Similar details are observed, by Celik et al. (2022) who showed that AI systems help teachers identify student needs more quickly, design lesson content more effectively, and save

time in grading through automated scoring tools (Celik et al., 2022). Teachers benefit from immediate feedback generated through AI-based monitoring, which allows them to adjust instruction and give timely support. These tools also reduce workload, making it possible for teachers to focus attention on student interaction and more complex teaching tasks. However, concerns remain about the accuracy and reliability of AI outputs, as some systems misinterpret student work or fail to adapt to local contexts. Teachers also face challenges in terms of technical skills, infrastructure, and slow response from AI platforms, which affect smooth classroom use (Celik et al., 2022).

Shi et al. (2024) also examined how six science teachers integrated an AI-enabled inquiry intelligent tutoring system (Inq-ITS) into their classroom practices. Two teachers applied a teacher-led orientation, mainly using the system's virtual tutor and post-session reports to supplement their instruction. Four others adopted an AI-led orientation, depending more on real-time alerts and guidance features to track progress and support student learning. Teachers expressed that the system helped deliver more personalized instruction and freed them to focus on higher-level student thinking. However, they also noted challenges such as difficulty for students with low English proficiency and the pressure of handling continuous data streams. Teachers' perceptions of the system differed, with some viewing it as a supportive classroom tool and others seeing it as a teaching assistant or collaborator. The authors concluded that teachers' orientations influenced how they perceived and used AI systems, pointing to the need for professional development that accounts for varied teacher perspectives (Shi, Ding, & Choi, 2024).

Furthermore, Fernández Jiménez (2024) argued that AI tutors can take over some traditional teaching tasks, which creates concern about jobs for human teachers. Reported gains include learning paths that match each student's pace and style, targeted materials, and higher engagement and performance (Fernández Jiménez, 2024). The paper highlights instant feedback and real-time checks that guide support and keep students motivated (Fernández Jiménez, 2024). AI also handles grading, lesson planning, and record-keeping, so teachers get more time for direct guidance (Fernández Jiménez, 2024). The author concluded that a teacher-AI partnership can reshape classroom practice and deliver more personal and effective learning if schools address ethics, training, and access (Fernández Jiménez, 2024).

Specific tools such as Chatgpt was also assessed. Dahri et al. (2025) examine how ChatGPT affects teaching performance with the SOR model linked to Self-Determination Theory and the Technology Acceptance Model.

The study surveyed 305 teachers in Pakistan and tests links among constructs with structural equation modeling and importance-performance map analysis (Dahri et al., 2025). Perceived usefulness, perceived ease of use, and perceived autonomy show strong positive effects on intentions to use ChatGPT in instruction (Dahri et al., 2025). Perceived relatedness raises affective involvement, while perceived competence shows no meaningful effect on cognitive involvement. IPMA points to teaching support and autonomy

as high-impact levers for teacher confidence and motivation to use AI tools. Teachers gain help with lesson planning, assessment design, and personalized learning paths, while routine work decreases. Hence, the authors call for tool design and training that lower friction, protect teacher autonomy, and target high-importance factors with room to improve performance (Dahri et al., 2025).

Tools like Canva has also been found to be useful. Astaño (2025) looked at 22 studies with 26 datasets (N = 1,540) on Canva in schools from 2022–2024, with most data from Indonesia. The combined estimate shows a very large boost in grades and test scores when classes use Canva (Hedges' $g = 1.703$; $p < .001$) (Astaño, 2025). Results differ a lot across studies, and signs of publication bias appear; even so, two extra checks (trim-and-fill and WAAP) still show very large, significant effects, so the headline result stands (Astaño, 2025; Bartoś et al., 2022). Differences show up across country and subject, with bigger gains in Indonesia and in English, while duration, class size, grade level, assessor blinding, who made the Canva materials, and outcome type show no clear pattern because subgroup counts are uneven (Astaño, 2025). Many studies sit at medium quality on NOS-E, with repeated issues in matching groups and in blinding that can inflate effects in education trials (Astaño, 2025; Pitre et al., 2023). The strongest gains show up in communication and writing when students make their own Canva work, especially in high school and university settings (Astaño, 2025). The paper urges clearer reporting of how long the interventions ran, stronger designs in more countries, and classroom use that puts students in charge of creating with Canva (Astaño, 2025; Page et al., 2021).

Locally, Garcia (2025) conducted at Mindanao State University–Lanao del Norte Agricultural College investigated how students and teachers view the use of AI writing tools such as ChatGPT, Grammarly, and Quillbot. Findings showed that students often relied on ChatGPT because of its convenience and grammar support, but there were concerns that frequent use reduced originality and critical thinking (Garcia et al., 2025). Teachers recognized the benefits of these tools in improving grammar and style but also questioned their long-term impact on writing development. Both groups acknowledged the usefulness of AI in providing immediate corrections and suggestions, although students risked overdependence. Teachers also stressed the need for guidance and institutional policies to regulate responsible use. The study highlighted the importance of AI literacy programs that would help students use these tools as aids rather than substitutes for their own skills. Overall, the research concluded that AI tools can support learning, but their educational value depends on how responsibly they are integrated into teaching and learning (Garcia et al., 2025).

Similarly, Corcuera (2024) investigated Filipino senior high school students' experiences with QuillBot and the factors influencing their use of this AI-powered writing tool. Findings showed that students viewed QuillBot as user-friendly and effective in improving grammar, vocabulary, and overall writing quality. Many participants reported that it helped them paraphrase, summarize, and organize essays, which often resulted in higher grades. However, the study also

revealed drawbacks, including student overreliance and occasional errors in generated texts. Three main factors influenced the use of QuillBot: the COVID-19 pandemic, the need to make writing faster and easier, and the goal of avoiding plagiarism. Despite concerns, students acknowledged that QuillBot played an important role in supporting their writing tasks. The study recommended that while QuillBot offers practical benefits, students should still develop critical thinking and maintain knowledge of English fundamentals to use the tool responsibly (Corcuera, 2024).

Despite hurdles, evidence points to AI as a helpful support system that can improve teacher efficiency and create more space for meaningful teaching practice. It reduces repetitive work such as grading, checking assignments, and preparing test items, which allows teachers to focus more on student interaction and higher-order tasks (Celik et al., 2022; Fernández Jiménez, 2024). AI tools also provide real-time feedback, identify learning gaps, and support differentiated instruction, which improves classroom planning and delivery (Shi, Ding, & Choi, 2024). While errors and technical limits remain, these systems have potential to support teacher performance when guided with training and clear policies (Mulyani et al., 2025).

Yet, in Sorsogon National High School, little evidence exists on how AI affects teacher performance in actual classroom practice. This gap creates uncertainty for teachers and administrators who need concrete guidance on its benefits and risks. To address this, the present study examined how teachers use AI tools such as ChatGPT, Quillbot, Grammarly, Google Bard, Canva AI, and AI-driven assessment platforms in their teaching work. The study also assessed how the frequency of AI use relates to the quality of teaching-related tasks, including lesson preparation, classroom instruction, assessment, administrative work, and professional development. In addition, it investigated whether teacher characteristics such as age, sex, educational attainment, and years of teaching experience influence their AI use. Finally, the study aimed to generate teaching plan recommendations that can guide effective and responsible use of AI in improving teaching-related tasks.

➤ *Statement of the Problem*

This study determined the Impact of Artificial Intelligence (AI) tools on teaching-related tasks of teachers at Sorsogon National High School. Specifically, it answered the following questions:

- What are the experiences of teachers in utilizing AI to support teaching-related task?
- How do these experiences influence the teachers' performance of teaching-related task?
- How do they assess the impact of AI utilization in improving their teaching related tasks?
- What are the challenges encountered by the participants in using AI tools in doing teaching related-tasks?
- What AI utilization guidelines for teachers can be proposed to support teaching-related tasks?

Propose AI utilization guidelines to enhance the quality of teaching-related tasks through the use of AI tools.

II. METHODOLOGY

➤ *Research Design*

Aligned with a descriptive-exploratory research design, the study used an interview guide and focus group discussion guide as primary instruments for data collection to explore teachers' experiences with artificial intelligence (AI) in teaching-related tasks. The qualitative design allowed the researcher to capture detailed descriptions, personal reflections, and shared perspectives that could not be obtained through numerical data alone. According to Creswell and Creswell (2021), qualitative research is appropriate when the goal is to understand meanings, experiences, and interpretations of participants within a specific context.

The design focused on gathering teachers' narratives about how they used AI tools, how these tools influenced their teaching-related tasks, the challenges they encountered, and the guidelines they believed the school should adopt. This design supported an in-depth exploration of teachers' real classroom and work experiences at Sorsogon National High School. The emphasis remained on understanding patterns and themes that emerged from participants' accounts rather than measuring variables or testing relationships.

➤ *The Respondents*

The participants of the study were teachers from Sorsogon National High School. The criteria for inclusion required participants to be full-time teachers in the school, to have at least one year of teaching experience, and to have prior familiarity or experience with AI tools such as ChatGPT, Quillbot, Grammarly, Google Bard, Canva AI, or AI-driven assessment platforms like Turnitin and other AI Tools. Teachers who did not meet these criteria were excluded since the study required participants with direct exposure to teaching-related tasks and AI-supported work.

A total of 25 teachers were purposively selected to participate in in-depth interviews and the focus group discussion. This number was considered appropriate for reaching thematic saturation, where additional interviews no longer produced new insights. Creswell and Creswell (2021) explained that qualitative studies often involve small sample sizes to allow close examination of participants' experiences. Guest, Namey, and Chen (2020) also noted that meaningful saturation is often achieved within 12 interviews. The selected participants provided sufficient depth and variation to support the objectives of the study.

➤ *Research Instruments*

The study used an interview guide and a focus group discussion guide as the primary instruments for data collection. These instruments were researcher-made and developed based on the objectives of the study and relevant literature on AI use in teaching-related tasks. The interview guide consisted of open-ended questions grouped into five major areas: teachers' experiences in teaching-related tasks, experiences in using AI tools, perceived influence of AI on their work, challenges encountered in AI use, and recommended AI utilization guidelines.

The focus group discussion guide was designed to encourage shared reflection among teachers regarding their collective experiences with AI. Questions focused on common practices, perceived benefits, concerns, ethical issues, and suggestions for school-level guidelines. Probing questions were included to encourage participants to elaborate on their responses and provide concrete examples.

For SOP 1, which examined the experiences of teachers in utilizing AI to support teaching-related tasks, the study relied on qualitative experiential data drawn from semi-structured in-depth interviews and reinforced through focus group discussions. The interview questions prompted teachers to narrate how they first encountered AI tools, how these tools were used in actual teaching-related tasks, and what personal reactions emerged during early and continued use. This approach enabled the collection of rich, descriptive accounts reflecting both positive and challenging experiences without imposing evaluative categories.

For SOP 2, which focused on how these experiences influenced teachers' performance of teaching-related tasks, qualitative reflective data were gathered using the same interview and FGD instruments, with questions deliberately framed to elicit connections between AI use and changes in task organization, instructional strategies, assessment preparation, and classroom readiness. Participants were encouraged to describe concrete instances where AI-assisted experiences affected how they planned, managed, or executed teaching-related responsibilities, allowing influence to emerge from lived practice rather than assumed outcomes.

For SOP 3, which explored teachers' assessment of AI's impact on improving teaching-related tasks, the study utilized qualitative evaluative data collected through guided interview prompts and group-level reflections during FGDs. Teachers were asked to compare their outputs and preparation processes before and after AI use, describe perceived changes in workload, confidence, and output quality, and articulate conditions under which AI was considered helpful or limited. This design allowed impact to be assessed through personal judgment and professional reflection rather than numerical indicators.

For SOP 4, which identified challenges encountered in using AI tools for teaching-related tasks, the study drew on qualitative problem-centered data generated from open-ended interview questions and collective sharing during FGDs. Participants described difficulties related to accuracy, verification, connectivity, technical skills, and ethical concerns based on actual encounters with AI tools. This method captured contextual and situational barriers as experienced in real teaching environments, particularly within public secondary school settings.

For SOP 5, which sought to propose AI utilization guidelines to support teaching-related tasks, the study employed qualitative synthesis data derived from interviews and FGDs, focusing on teachers' suggestions, expectations, and perceived needs. Participants were asked to reflect on what forms of guidance, training, and institutional support would help ensure responsible and effective AI use,

particularly in relation to DepEd-mandated tasks. These responses were consolidated to inform practical, task-specific, and policy-aligned guidelines grounded in teachers' lived realities rather than external prescriptions. To establish content validity, both the interview and focus group guides were reviewed by three experts: a professor in educational research, a specialist in educational technology, and a school administrator with experience in digital learning integration. The validators reviewed the instruments for clarity, alignment with research objectives, relevance of questions, and appropriateness for the school context. Their comments were used to refine the wording and sequence of questions before data collection.

➤ *Data Gathering Procedures*

The data collection process began last December 1 to 12, 2025 after the research proposal was reviewed and approved by the thesis adviser and panel. Permission to conduct the study was requested from the administration of Sorsogon National High School through a formal letter addressed to the school principal. Once approval was granted, the researcher coordinated with participants regarding schedules for interviews and the focus group discussion.

Participants were informed about the purpose of the study, the procedures involved, and their rights as participants. Informed consent was obtained prior to data collection. Teachers were assured of confidentiality and anonymity, and they were informed that participation was voluntary.

Individual interviews were conducted with the selected teachers at a time and place convenient to them. The focus group discussion was conducted with a smaller group of participants to encourage interaction and shared reflection. All interviews and the focus group discussion were audio-recorded with participants' consent. The recordings were later transcribed verbatim to ensure accuracy of the data.

➤ *Data Analysis*

The qualitative data from interviews and the focus group discussion were analyzed using thematic analysis. Transcripts were read repeatedly to achieve familiarity with the data. Significant statements, phrases, and ideas related to the research objectives were identified and coded. Similar codes were grouped together to form themes that reflected patterns in teachers' experiences, perceptions, challenges, and recommendations.

Special attention was given to recurring ideas related to AI support in lesson preparation, instructional materials, assessment, administrative work, and professional development. Challenges and ethical concerns were also examined closely. The themes were refined through constant comparison of responses across participants until clear and coherent categories emerged.

➤ *Trustworthiness of the Study*

To establish trustworthiness, the study followed the criteria of credibility, dependability, and confirmability. Credibility was supported through prolonged engagement with the data and careful transcription of participants' responses.

Member checking was conducted informally during interviews when clarifications were needed.

Dependability was supported through a clear documentation of procedures, including participant selection, data collection, and analysis steps. Confirmability was strengthened by grounding all interpretations in verbatim responses and maintaining an audit trail of coding decisions. These measures helped ensure that the findings accurately reflected teachers' perspectives rather than the researcher's assumptions.

III. RESULTS AND DISCUSSION

➤ *Experiences of Teachers in Utilizing AI to Support Teaching-Related Tasks*

• *Initial Encounters with AI as a Practical Teaching Support Tool*

Teachers' initial engagement with AI tools reflected an exploratory and adaptive approach driven by workload pressures rather than formal mandates. Many participants reported self-initiated exposure through colleagues or online platforms, aligning with research on teacher technology adoption that emphasizes informal learning pathways when institutional support is limited (Rogers, 2003).

Participant narratives portraying early hesitation and trial-and-error learning resonate with findings in studies where educators encountered generative AI with both curiosity and wariness (Holmes et al., 2019). Such experiences suggest that initial engagement is shaped by personal perceived usefulness, consistent with the Technology Acceptance Model, where individuals adopt technology based on beliefs about its utility and ease of use (Davis, 1989).

This process demonstrated that teachers generally approach AI pragmatically — seeking tools that reduce workload but remaining cautious about outputs. Their experiences illustrate that adoption begins with personal initiative and gradually evolves toward more systematic use as familiarity increases.

Teachers initially approached AI through trial and informal engagement, influenced by workload demands and personal utility expectations.

• *AI Use in Lesson Planning and Daily Lesson Log (DLL) Preparation*

Teachers frequently used AI for drafting lesson plans and DLLs, viewing AI outputs as initial frameworks that require professional modification. This aligns with quantitative studies on AI in education showing that teachers rely on AI for idea generation while teachers retain primary judgment over instructional content and alignment (Holmes et al., 2023).

Participant accounted indicating that AI suggestions were overly generic echo concerns raised by other researchers about AI's tendency to produce decontextualized or idealized content that must be grounded in specific classroom realities (Luckin et al., 2016). This highlighted the importance of

teacher agency in ensuring that AI serves as a support rather than a substitute for instructional expertise.

AI supported task initiation, but teachers consistently contextualized outputs to match learning environments and curricular expectations.

- *Experiences in Instructional Material and Activity Development*

AI's role in generating instructional materials reflects a broader pattern wherein teachers leverage technology to expedite routine tasks. Research indicates that teachers increasingly use AI tools like ChatGPT and design platforms (e.g., Canva AI) to create educational content more efficiently, consistent with participants' reflections on improved pacing and clarity (Holmes et al., 2019).

Participant remarked about necessary simplification of advanced AI-generated content correspond to literature that emphasized ongoing teacher mediation in AI-assisted material creation, ensuring cultural relevance and developmental appropriateness (Tomlinson, 2017). These experiences underscored that AI tools function as productivity boosters while preserving the teacher's role as curator of learning materials.

- *AI Assisted in Generating Instructional Content but Required Active Teacher Filtering to Ensure Relevance and Accessibility.*

- *Experiences in Assessment and Evaluation Preparation*

Teachers used AI to draft various assessment items and rubrics but maintained careful oversight in reviewing validity and alignment. This mirrors findings in broader studies where AI supports structural elements of assessment while human judgment remains central to evaluating item suitability and fairness (Holmes et al., 2019).

Participant emphasis on systematic organization reflects constructivist perspectives, where assessment is designed to align with learning objectives and learner profiles (Vygotsky, 1978). AI facilitated structural coherence, but professional interpretation was essential to ensure meaningful assessment.

- *AI Supported Assessment Structuring While Teachers Ensured Curricular Alignment and Validity.*

- *Language, Editing, and Presentation Support Experiences*

Teachers commonly used AI tools to refine language, enhance clarity, and improve presentation materials, particularly in English instruction and lesson delivery. This practical function aligns with research highlighting AI's utility in assisting language and communication tasks, freeing teachers to concentrate on higher-order pedagogical decisions (Holmes et al., 2019).

The benefits of improved grammar and coherence, as described by participants, support Cognitive Load Theory (Sweller, 1988) by suggesting that reducing extraneous linguistic load enabled teachers to allocate cognitive resources to core instructional planning.

- *AI Enhanced Communication Quality, Enabling Clearer Instructional Materials and Presentations.*

Influence of Teachers' Experience on Performance of Teaching-Related Tasks

- *Lesson Planning and Task Organization*

Repeated use of AI fostered a sense of structure and organization among teachers. Participants reported that starting frameworks provided by AI helped sequence activities and objectives more systematically, aligning with research that identifies AI as a cognitive aid in educational planning (Luckin et al., 2016).

The reduction in planning confusion and increased efficiency reflected constructs from Bandura's self-efficacy theory (1997), where increased competence in task performance enhanced confidence and task commitment. Participants' reliance on AI for scaffolding suggests that AI may contribute to teacher efficacy when used as a support tool rather than a crutch.

- *AI Aided in Organizing Planning Tasks and Bolstering Teacher Confidence Through Structured Support.*

- *Material Preparation and Time Management*

Teachers reported that AI tools accelerated visual aid and worksheet design, enabled them to invest more time in reviewing and differentiating content. These experiences aligned with cognitive offloading concepts in instructional design literature, where technology handled repetitive tasks, allowing human cognition to focus on strategic tasks (Sweller, 1988).

Teachers' descriptions of improved workflow continuity during periods of high workload reflect efficiency gains documented in studies of AI integrations in classroom settings (Holmes et al., 2019). Rather than diminishing teacher effort, AI reallocated it toward more meaningful instructional decisions.

- *AI Improved Time Management by Handling Repetitive Tasks, Allowing Teachers to Engage in Deeper Instructional Planning.*

- *Idea Generation and Instructional Strategy Selection*

AI's influence on strategy selection emerged through its role in suggesting diverse instructional activities. Teachers characterized AI-generated ideas as stimulants for pedagogical innovation — a finding supported by research indicating that educators often use AI to expand creative options (Holmes et al., 2019).

Participant reported that AI suggestions prompted adaptation to grade-specific needs echo the notion that technology can augment teacher creativity while requiring professional judgment for contextual relevance. This reinforced the view that AI's greatest contribution lies in broadening the teacher's cognitive repertoire rather than dictating instructional approaches.

➤ *AI Supported Creative Instructional Strategy Exploration While Preserving Teacher Discretion.*

• *Differentiated Tasks and Inclusivity*

Participants described using AI to generate multiple task versions for diverse learners, demonstrating that AI can be a practical aid in supporting differentiated instruction. This aligned with inclusive pedagogy principles, which advocated for scaffolded learning opportunities that meet diverse learner needs (Tomlinson, 2017).

Teachers' self-reported use of AI to tailor tasks underscored the potential for AI to complement efforts toward equity and accessibility, provided outputs are vetted for accuracy and appropriateness.

➤ *AI Aided in Differentiated Task Creation, Enhancing Inclusive Instructional Planning.*

• *Assessment Preparation and Consistency*

Teachers emphasized that AI influenced the drafting of assessments, improving alignment between activities and evaluation tools. This resonates with constructivist perspectives where instructional and assessment coherence supports learner understanding (Vygotsky, 1978).

AI's role in promoting consistency across instructional artifacts highlights its capacity as a design assistant while reaffirming the teacher's responsibility for final evaluation decisions.

➤ *AI Contributed to Alignment and Consistency in Assessment Planning While Teachers Retained Evaluative Control.*

• *Content Clarification and Teaching Confidence*

Reviewing AI-generated explanations helped teachers clarify challenging content and build confidence prior to instruction. These experiences aligned with self-efficacy theory, as increased perceived competence led to stronger instructional confidence (Bandura, 1997).

Participants' narratives suggested that AI can function as an informational scaffold when content is unfamiliar or complex, enabling teachers to internalize understanding while responsibly adapting explanations for learners.

➤ *AI Supported Content Mastery and Enhanced Teaching Confidence Through Structured Explanations.*

Teachers' Assessment of the Impact of AI Utilization

• *Perceived Improvement in Output Quality*

Teachers perceived AI's impact through enhanced organization, completeness, and clarity of instructional materials. This aligned with research showing that AI can elevate material quality by standardizing format and improving readability (Holmes et al., 2019; Luckin et al., 2016).

The structural support provided by AI reduced extraneous load, consistent with Cognitive Load Theory, and

allowed teachers to focus on content adaptation and pedagogical choices.

AI enhanced output quality by reducing extraneous formatting and organizational demands, allowing teachers to concentrate on learner-centered decisions.

• *Reduced Cognitive Load and Preparation Stress*

Participants reported that AI reduced stress associated with juggling multiple tasks by delivering starting points for content development. These experiences reflected findings in studies where AI reduced cognitive workload and enhanced productivity (Holmes et al., 2019).

AI's role as a cognitive offloader allowed teachers to reallocate effort to reflective tasks, improving efficiency and well-being during peak workload periods.

AI reduced cognitive load and preparatory stress, enabling teachers to attend to higher-order instructional considerations.

• *Improved Readiness and Confidence in Teaching Preparation*

Teachers described heightened readiness and instructional confidence when using AI-supported materials. This aligned with research that positions AI as an interpretive aid for complex content, helping educators better prepare for classroom delivery.

Conditional confidence — dependent upon verification — underscored the teacher's role as final arbiter of content validity and pedagogical suitability.

➤ *AI Supported Readiness but Required Verification to Sustain Confidence.*

Challenges Encountered in Using AI Tools

• *Accuracy and Reliability Concerns*

Teachers consistently noted inaccuracies and incomplete information in AI outputs, necessitating careful verification. This echoes concerns documented in the literature, where AI's probabilistic nature can produce plausible but misguided content (Holmes et al., 2019).

The need for verification increases cognitive load, reaffirming that AI should function as an assistant rather than an authoritative source.

Accuracy issues required teachers to engage in thorough evaluation, maintaining human oversight.

• *Verification and Extended Editing Time*

While AI reduced initial drafting time, teachers reported extended editing to ensure curriculum alignment and contextual appropriateness. This underscored the importance of professional expertise in refining AI outputs.

Verification and editing remain integral to responsible AI use, reinforcing the view that AI complements rather than replaces human judgment.

➤ *AI Saved Time on Draft Creation but Shifted Effort Toward Quality Control and Contextual Adaptation.*

- *Internet Connectivity and Device Limitations*

Inconsistent internet access and device availability restricted AI use primarily to off-site preparation. This reflects global findings where technology adoption is mediated by infrastructure constraints, impacting ease of use and frequency of implementation (Davis, 1989).

These limitations emphasized the need for sustainable infrastructure support to maximize AI's instructional potential.

Connectivity and access challenges constrained AI's classroom use.

- *Prompting and Technical Skill Difficulties*

Teachers reported learning AI through trial and error, indicating a need for structured skill development. Diffusion of Innovations Theory posits that adoption accelerates as users become more competent, suggesting that formal training can shorten learning curves and increase confidence (Rogers, 2003).

This highlighted the importance of professional development targeted at AI literacy and prompting strategies.

Technical skill limitations highlighted the need for professional development.

- *Ethical and Authenticity Issues*

Concerns about distinguishing between student-generated and AI-assisted work reflect broader ethical discussions in educational AI research, emphasizing the importance of academic integrity and clear use guidelines (Zawacki-Richter et al., 2019).

Teachers' reflections illustrated the necessity of embedding ethical considerations into AI practices to uphold authentic learning.

Ethical issues underscored the need for integrity-affirming practices.

- *Proposed AI Utilization Guidelines for Teachers*

Call for Clear, Task-Specific Guidelines Anchored on DepEd Policies

Teachers recommended guidelines that delineate where and how AI can be used for specific teaching tasks. This aligns with literature recommending policy frameworks that specify acceptable AI practices to ensure pedagogical alignment and minimize misuse.

Clear guidelines provide a structure that supports consistency and accountability across instructional tasks.

➤ *Task-specific AI guidelines can standardize and legitimize practice.*

- *Training and School-Based Support Mechanisms*

Participants emphasized hands-on training through Learning Action Cell (LAC) sessions, focusing on practical tasks rather than theoretical lectures. Research on professional development stressed that context-specific, practice-oriented training enhances technology integration and teacher confidence.

- *Practical, school-based training supports sustainable AI adoption.*

- *General AI Utilization Guidelines for Responsible Integration*

Teachers expressed that AI should function as a supportive tool that preserves professional judgment and requires ethical practice, verification, and alignment with DepEd standards. These principles resonate with ethical frameworks in educational technology research, which advocate for responsible, transparent, and teacher-centered AI use (Holmes et al., 2019; Zawacki-Richter et al., 2019).

Responsible AI use requires verification, ethical standards, and teacher agency.

Teachers agreed that AI should function as a supportive tool that preserves teacher agency and professional judgment. Key recommendations include:

- Use AI for preparatory tasks: lesson planning, DLL drafting, instructional materials, and assessments.
- Treat AI outputs as drafts requiring verification for accuracy, appropriateness, and alignment with DepEd standards.
- Develop school-specific policies defining acceptable AI applications and student use.
- Promote ethical and responsible practice, including proper acknowledgment and preventing overreliance.
- Provide infrastructure support, including stable internet and access to AI-enabled devices.

Teachers' experiences demonstrate that AI can enhance efficiency, organization, and instructional support when used as an assistive tool. While AI reduces cognitive load and supports task completion, teachers remain central in verifying, contextualizing, and ethically integrating AI outputs. Infrastructure, skill development, and policy guidelines are necessary to sustain meaningful AI use in education.

IV. FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

➤ *Findings*

- Teachers' experiences in utilizing AI for teaching-related tasks showed that most encounters were self-initiated and workload-driven. AI was mainly used as a drafting and support tool in lesson planning, DLL preparation, instructional materials, assessments, and language editing. Teachers consistently modified outputs to fit MELCs, learner levels, and classroom context, emphasizing that AI supports—but does not replace—professional judgment.
- These experiences influenced teachers' performance by improving organization, workflow, and time management. AI provided cognitive scaffolds that helped structure

lesson plans, generate instructional ideas, and prepare differentiated activities. Teachers reported more systematic task completion while maintaining autonomy in decision-making and classroom implementation.

- Teachers assessed AI as beneficial in improving the clarity, completeness, and organization of teaching outputs. AI reduced preparation stress by offering starting points for repetitive tasks and enhanced teaching readiness and confidence when materials were reviewed and validated before use.
- The challenges encountered by teachers are related to accuracy, reliability, and the need for extensive verification and editing. Limited internet connectivity, device access, and difficulties in prompting or technical skills also affected utilization. Ethical concerns regarding authenticity and responsible use highlighted the necessity of clear guidance.
- Participants emphasized the need for clear, school-based AI utilization guidelines aligned with DepEd policies. Teachers highlighted the importance of task-specific guidance, hands-on Learning Action Cell (LAC) support, and ethical use anchored on professional judgment. Their responses reflected a collective call for structured implementation and institutional support to guide responsible AI integration in teaching-related tasks.

➤ Conclusions

- Teachers' experiences show that AI is primarily used as a practical support tool for lesson planning, instructional materials, assessment drafting, and language editing, emerging through informal exploration rather than formal institutional direction.
- The integration of AI positively influences teachers' performance by improving organization, efficiency, instructional creativity, and confidence while preserving professional autonomy.
- Teachers assess AI utilization as beneficial in enhancing output quality and reducing cognitive load, provided that outputs are verified and contextualized to learners' needs.
- The effective use of AI remains challenged by issues of accuracy, technical skills, ethical concerns, and limited technological infrastructure within the school context.
- Sustainable AI integration requires structured, DepEd-aligned guidelines, continuous training, and institutional support systems that reinforce responsible and pedagogically sound use.

➤ Recommendations

- Provide orientation sessions introducing teachers to practical and ethical uses of AI for teaching-related tasks to support informed and confident adoption.
- Encourage teachers to use AI as a planning and organizational scaffold while maintaining professional judgment and contextual adaptation.
- Promote reflective evaluation of AI-assisted outputs through peer collaboration and curriculum alignment checks to ensure quality and relevance.
- Strengthen infrastructure, internet access, and professional development programs to address technical and ethical challenges in AI utilization.

- Facilitate the implementation of established school-based AI utilization guidelines aligned with DepEd policies through structured Learning Action Cell (LAC) support.

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