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English Teachers' AI Knowledge and Upskilling to Their Digital Competence and Literacy

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Abstract*—This study investigated the relationship between English teachers' AI knowledge and AI upskilling and their digital competence and digital literacy among Junior and Senior High School teachers in selected public schools in Laguna, Philippines. Specifically, it aimed to determine the levels of English teachers' AI knowledge, AI upskilling, digital competence, and digital literacy. It also examined the significant relationships between AI knowledge and AI upskilling with teachers' digital competence and digital literacy. Employing a quantitative descriptive-correlational research design, the study involved 50 Junior and Senior High School English teachers selected through total enumeration sampling from the districts of Lumban, Kalayaan, Paete, Pangil, and Siniloan. Data were collected using a researcher-made and validated questionnaire with a five-point Likert scale. Weighted mean, standard deviation, and Pearson Product-Moment Correlation Coefficient were used to analyze the data at a 0.05 level of significance. Findings revealed that teachers were generally Knowledgeable in AI knowledge, with ethical knowledge rated Highly Knowledgeable and pedagogical knowledge being the least developed. They were generally Upskilled in AI upskilling, with instructional innovation obtaining the highest mean and training and professional development interpreted as Moderately Upskilled. Teachers demonstrated Competence across all dimensions of digital competence, with cybersecurity rated highest. Digital literacy was generally Highly Literate, although basic computer skills obtained the lowest rating and was interpreted as Literate. Results showed significant positive relationships between English teachers' AI knowledge and their digital competence and digital literacy, indicating that higher levels of conceptual, technical, pedagogical, and ethical AI knowledge are associated with stronger digital capabilities. Ethical knowledge demonstrated the strongest associations among the AI knowledge dimensions. Likewise, AI upskilling was significantly related to digital competence and digital literacy, particularly in terms of adaptability to technology, instructional innovation, classroom application, and collaboration and resource sharing, while training and professional development did not exhibit a significant relationship. These findings suggest that experiential and practice-based AI upskilling contributes more substantially to teachers' digital competence and digital literacy, with instructional innovation emerging as the most influential dimension. Therefore, the null hypothesis stating that there is no significant relationship between English teachers' AI knowledge and their digital competence and digital literacy was rejected, and the null hypothesis stating that there is no significant relationship between English teachers' AI upskilling and their digital competence and digital literacy was likewise rejected. The study recommends targeted interventions to strengthen pedagogical AI knowledge and structured institutional support for sustainable AI-related professional development.*

***Keywords*—** *Artificial Intelligence (AI), AI Knowledge, AI Upskilling, Digital Competence, Digital Literacy, Instructional Innovation, Teacher Professional Development.*

I. Introduction

Artificial intelligence (AI) has become a transformative force in global education systems, fundamentally reshaping how information is accessed and distributed across institutions worldwide. The integration of AI technologies into educational infrastructures has created new expectations for educators to continuously expand their technological capabilities and respond to emerging pedagogical demands. English teachers, as key facilitators of language development and critical thinking, occupy a particularly important position in this digital transformation, as they must navigate and leverage AI-supported learning environments while maintaining instructional quality.

In response to these systemic changes, individual English teachers must develop two interconnected competencies: digital competence and digital literacy. Digital competence encompasses the practical ability to effectively evaluate, select, and implement AI tools—such as Grammarly and QuillBot—for analyzing student writing, identifying linguistic errors, and providing constructive feedback on grammar, word choice, sentence construction, and tone. Digital literacy extends beyond tool proficiency to include the critical skills of responsible technology adoption, informed decision-making about which technologies best serve pedagogical goals, online information evaluation, and the creation of meaningful digital content within classroom contexts.

The relationship between teachers' foundational understanding of AI and their systematic upskilling efforts directly influences their capacity to develop and demonstrate digital competence and literacy. As teachers engage in formal training, experiential learning with new platforms, and deliberate practice with AI applications, they build the knowledge base and practical skills necessary for confident, effective, and responsible technology integration in language instruction.

This study examines how English teachers' AI knowledge and upskilling initiatives correlate with and contribute to their development of digital competence and digital literacy, ultimately addressing a critical gap in teacher preparation for the AI-enabled classroom.

1.1 Statement of the Problem

Problem/s which were addressed by the research

This study aimed to determine the English Teachers' AI Knowledge and Upskilling to Their Digital Competence and Digital Literacy.

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Specifically, the study sought to answer the following questions:

1. What is the level of English Teachers' AI Knowledge of English Teachers in terms of:
   1.1 Conceptual Knowledge;
   1.2 Technical Knowledge;
   1.3 Pedagogical Knowledge; and
   1.4 Ethical Knowledge?
2. What is the level of English Teachers' AI Upskilling in terms of:
   2.1 Training and Professional Development;
   2.2 Adaptability to Technology;
   2.3 Instructional Innovation;
   2.4 Classroom Application; and
   2.5 Collaboration and Resource sharing?
3. What is the level of English Teachers' Digital Competence in terms of:
   3.1 Online Communication;
   3.2 Digital Content Creation;
   3.3 Cybersecurity; and
   3.4 Troubleshooting?
4. What is the level of English Teachers' Digital Literacy in terms of:
   4.1 Basic Computer Skills;
   4.2 Media Literacy;
   4.3 Information Literacy; and
   4.4 Digital Etiquette?
5. Is there a significant relationship between English Teachers' AI knowledge and their Digital Competence and Digital Literacy?
6. Is there a significant relationship between the AI upskilling of English Teachers and their Digital Competence and Digital Literacy?

II. Methodology

Employing a quantitative descriptive-correlational research design, the study involved 50 Junior and Senior High School English teachers selected through total enumeration sampling from the districts of Lumban, Kalayaan, Paete, Pangil, and Siniloan. Data were collected using a researcher-made and validated questionnaire with a five-point Likert scale. Weighted mean, standard deviation, and Pearson Product-Moment Correlation Coefficient were used to analyze the data at a 0.05 level of significance.

III. Results and Discussion

This part deals with the presentation, analysis and interpretation of data. All specific questions stated in Chapter 1 under the Statement of the Problem are addressed in this chapter, supported by appropriate tables. It discusses the results derived from the collected data, particularly focusing on the significant relationship between English teachers' AI knowledge, upskilling, and their digital competence and digital literacy.

Level of English Teachers' AI Knowledge

In this study, the level of English teachers' AI knowledge referred to Conceptual Knowledge, Technical Knowledge, Pedagogical Knowledge, and Ethical Knowledge.

The following tables presented the statements, mean scores, standard deviations, remarks, and verbal interpretations based on the responses of the respondents.

Among the five statements, "I select AI tools for teaching based on their core functions and my instructional goals" obtained the highest mean score (M = 4.24, SD = 0.62), interpreted as "Always." This was followed by "I explain the purpose of AI and its role in educational contexts" (M = 4.22, SD = 0.79), also interpreted as "Always." The statement "I can identify key AI concepts such as machine learning, algorithms, and automation" ranked third (M = 4.14, SD = 0.64), interpreted as "Often." Next was "I design learning activities that integrate AI concepts to enhance student learning outcomes" (M = 4.06, SD = 0.84), also interpreted as "Often." The lowest mean score was recorded for "I compare different AI technologies and determine their suitability for instructional use" (M = 3.96, SD = 0.78), interpreted as "Often." This pattern suggested that English teachers were more confident in selecting and explaining AI tools than in critically comparing various AI technologies for instructional use.

The table revealed an overall weighted mean of 4.12 with a standard deviation of 0.72, which was verbally interpreted as "Knowledgeable." This indicates that the respondents generally demonstrated a strong understanding of fundamental AI concepts and their relevance to instructional practice. It further suggests that the teachers are familiar with basic AI principles, which may support their readiness to integrate AI-related tools and concepts in teaching and learning contexts.

The findings implied that English Teachers possessed a solid conceptual foundation in AI and were generally capable of linking AI concepts to their teaching goals. Their strong performance in selecting AI tools based on instructional purpose suggested that they were not merely aware of AI as a general concept but were able to apply their understanding in practical ways. However, the comparatively lower score in comparing different AI technologies indicated that teachers may still need further exposure to emerging AI applications and more opportunities to evaluate their appropriateness for specific classroom contexts. In general, the results indicated that conceptual knowledge was well developed among the respondents, although deeper comparative understanding of AI technologies remained an area for improvement.

Table 2 presents the level of English Teachers' AI Knowledge in terms of Technical Knowledge. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the respondents.

Among the five statements, "I can identify common AI-powered tools and applications used for instructional purposes" obtained the highest mean score (M = 4.16, SD = 0.65), interpreted as "Often." This was followed by "I describe the functions and features of AI tools used in teaching and learning" (M = 3.94, SD = 0.79), interpreted as "Often." Two statements tied for the next rank: "I use AI-based tools to perform teaching-related tasks such as content preparation or

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student support" (M = 3.92, SD = 0.75) and "I examine the technical performance of AI tools and address issues encountered during their use" (M = 3.92, SD = 0.72), both interpreted as "Often." The lowest mean score was recorded for "I develop or customize instructional materials using multiple AI-powered tools" (M = 3.86, SD = 0.81), also interpreted as "Often." This ordering suggested that the respondents were more familiar with identifying and describing AI tools than with performing more advanced tasks such as customization and material development using multiple AI applications.

Table 1. Level of English Teachers' AI Knowledge in terms of Conceptual Knowledge

Statements	Mean	SD	Remarks
I can identify key AI concepts such as machine learning, algorithms, and automation.	4.14	0.64	Often
I explain the purpose of AI and its role in educational contexts.	4.22	0.79	Always
I select AI tools for teaching based on their core functions and my instructional goals	4.24	0.62	Always
I compare different AI technologies and determine their suitability for instructional use.	3.96	0.78	Often
I design learning activities that integrate AI concepts to enhance student learning outcomes.	4.06	0.84	Often
Weighted Mean	4.12		
SD	0.72		
Verbal Interpretation	Knowledgeable		

The table revealed an overall weighted mean of 3.96 with a standard deviation of 0.72, which was verbally interpreted as "Knowledgeable." This indicated that English teachers generally possessed a high level of technical knowledge in relation to AI, particularly in identifying and using AI-powered tools for instructional purposes. The findings implied that English Teachers had already developed the basic technical knowledge needed to engage with AI in educational settings. Their familiarity with AI-powered tools suggested readiness to adopt such technologies in classroom practice. However, the lower score in developing or customizing instructional materials indicated that more advanced technical skills were not yet as consistently practiced.

Table 2. Level of English Teachers' AI Knowledge in terms of Technical Knowledge

Statements	Mean	SD	Remarks
I can identify common AI-powered tools and applications used for instructional purposes.	4.16	0.65	Often
I describe the functions and features of AI tools used in teaching and learning.	3.94	0.79	Often
I use AI-based tools to perform teaching-related tasks such as content preparation or student support.	3.92	0.75	Often
I examine the technical performance of AI tools and address issues encountered during their use.	3.92	0.72	Often
I develop or customize instructional materials using multiple AI-powered tools.	3.86	0.81	Often
Weighted Mean	3.96		
SD	0.72		
Verbal Interpretation	Knowledgeable		

Table 3 presents the level of English Teachers' AI Knowledge in terms of Pedagogical Knowledge. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the participants.

Among the five statements, "I recognize instructional strategies that integrate AI tools into English language teaching" obtained the highest mean score (M = 4.08, SD = 0.70), interpreted as "Often." This was followed by "I articulate how AI-supported strategies enhance student engagement and learning outcomes" (M = 3.96, SD = 0.78), also interpreted as "Often." Next was "I evaluate the effectiveness of AI-assisted teaching strategies based on student performance" (M = 3.86, SD = 0.78), interpreted as "Often." The statement "I incorporate AI tools into my teaching strategies to support lesson objectives" ranked fourth (M = 3.82, SD = 0.75), also interpreted as "Often." The lowest mean score was recorded for "I design learning activities that purposefully integrate AI tools to address diverse learner needs" (M = 3.74, SD = 0.80), interpreted as "Often." This pattern suggested that the respondents were more confident in recognizing and explaining AI-supported instructional approaches than in designing differentiated learning activities that intentionally integrated AI.

The table revealed an overall weighted mean of 3.89 with a standard deviation of 0.74, which was verbally interpreted as "Knowledgeable." This indicated that English teachers generally possessed a high level of pedagogical knowledge in using AI, particularly in linking AI tools with instructional strategies and classroom teaching. The findings implied that English teachers had already developed a sound understanding of how AI could support teaching and learning in general instructional contexts. Their stronger performance in recognizing, explaining, and articulating AI-related instructional strategies suggested a high level of readiness to incorporate AI tools into classroom practice, particularly in planning lessons and identifying appropriate points for integration. This indicates that teachers are not only aware of AI technologies but also understand their potential instructional value in enhancing teaching efficiency and learner engagement. However, the lower score in designing learning activities for diverse learners indicated that teachers may still require additional support in applying AI in more purposeful, student-centered, and differentiated instructional approaches.

This suggests a gap between theoretical understanding and practical classroom application, particularly in adapting AI tools to meet varying learner needs, abilities, and learning styles. It further implies that while teachers are capable of identifying AI-supported strategies, they may still face challenges in translating these strategies into well-structured and inclusive learning experiences. This highlighted the importance of professional development programs that focus not only on awareness and basic use of AI tools but also on instructional design, differentiation strategies, learner diversity, and the critical evaluation of AI-supported teaching practices. Such training may help bridge the gap between knowledge and application by providing teachers with hands-on experiences in designing AI-integrated lessons. In general, the results indicated that pedagogical knowledge of AI was evident among the respondents, although it was stronger in

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recognition and conceptual understanding than in actual instructional application, differentiation, and design of learning activities.

Table 3. Level of English Teachers' AI Knowledge in terms of Pedagogical Knowledge

Statements	Mean	SD	Remarks
I recognize instructional strategies that integrate AI tools into English language teaching.	4.08	0.70	Often
I articulate how AI-supported strategies enhance student engagement and learning outcomes.	3.96	0.78	Often
I incorporate AI tools into my teaching strategies to support lesson objectives.	3.82	0.75	Often
I evaluate the effectiveness of AI-assisted teaching strategies based on student performance.	3.86	0.78	Often
I design learning activities that purposefully integrate AI tools to address diverse learner needs.	3.74	0.80	Often
Weighted Mean	3.89		
SD	0.74		
Verbal Interpretation	Knowledgeable		

Table 4 presents the level of English Teachers' AI knowledge in terms of Ethical Knowledge. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the respondents.

Among the five, two statements are tied for the highest mean score: "I recognize ethical issues related to the use of AI in teaching, such as data privacy and academic honesty" (M = 4.38, SD = 0.73) and "I follow ethical standards when using AI tools in instructional activities" (M = 4.38, SD = 0.70), both interpreted as "Always." These were followed by "I establish classroom guidelines that promote responsible and ethical use of AI among students" (M = 4.34, SD = 0.72), also interpreted as "Always." Next was "I assess potential ethical risks before integrating AI tools into classroom activities" (M = 4.26, SD = 0.75), likewise interpreted as "Always." The lowest mean score was recorded for "I reference established ethical guidelines when planning or using AI tools in my teaching" (M = 4.14, SD = 0.81), interpreted as "Often." This pattern suggested that while English teachers consistently recognized ethical issues and followed ethical standards in practice, they were somewhat less likely to rely on formal ethical guidelines or institutional frameworks when making decisions about AI use.

The table revealed an overall weighted mean of 4.30 with a standard deviation of 0.73, which was verbally interpreted as "Highly Knowledgeable." This indicated that ethical knowledge was the most strongly developed dimension of AI knowledge among English teachers. The five statements were all interpreted as being "Always," indicating that the participants' professional activities were firmly grounded in ethical awareness and responsibility.

The findings implied that English Teachers had developed a strong ethical orientation toward AI, particularly in recognizing risks, observing professional standards, and promoting responsible AI use among students. This ethical strength provided an important foundation for the responsible integration of AI in educational settings. However, the comparatively lower score in referencing established ethical guidelines suggested that teachers may have relied more on personal judgment and professional values than on formal policies or documented frameworks. This pointed to the need for clearer and more accessible institutional guidelines to support decision-making on AI use in schools.

Table 4. Level of English Teachers' AI Knowledge in terms of Ethical Knowledge

Statements	Mean	SD	Remarks
I recognize ethical issues related to the use of AI in teaching, such as data privacy and academic honesty.	4.38	0.73	Always
I reference established ethical guidelines when planning or using AI tools in my teaching.	4.14	0.81	Often
I follow ethical standards when using AI tools in instructional activities.	4.38	0.70	Always
I assess potential ethical risks before integrating AI tools into classroom activities.	4.26	0.75	Always
I establish classroom guidelines that promote responsible and ethical use of AI among students.	4.34	0.72	Always
Weighted Mean	4.30		
SD	0.73		
Verbal Interpretation	Highly Knowledgeable		

Level of English Teachers' AI Upskilling

In this study, the level of English Teachers' AI Upskilling Referred to Training and Professional Development, Adaptability to Technology, Instructional Innovation, Classroom Application, And Collaboration and Resource Sharing.

Table 5 presents the level of English teachers' AI Upskilling in terms of Training and Professional Development. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the participants.

Among the five statements, "I evaluate the relevance and usefulness of AI-related training programs" obtained the highest mean score (M = 3.44, SD = 1.03), interpreted as "Often." This was closely followed by "I share insights from AI training with colleagues to improve instructional practices" (M = 3.42, SD = 1.14), also interpreted as "Often." The next highest mean was recorded for "I apply knowledge or skills gained from AI training in my teaching practices" (M = 3.40, SD = 1.03), interpreted as "Sometimes." This was followed by "I attend professional learning sessions to enhance my use of AI tools" (M = 3.34, SD = 1.08), also interpreted as "Sometimes." The lowest mean score was recorded for "I participate in seminars, workshops, or webinars related to AI in education" (M = 3.32, SD = 1.04), likewise interpreted as "Sometimes." This pattern suggested that when teachers engaged in AI-related training, they were more likely to evaluate its usefulness and share what they learned than to regularly attend formal professional learning activities.

The table revealed an overall weighted mean of 3.38 with a standard deviation of 1.04, which was verbally interpreted as "Moderately Upskilled." This indicated that while English teachers showed some level of engagement in AI-related training and professional development, such engagement remained comparatively limited and inconsistent. The relatively high standard deviation also suggested considerable variability among the respondents, meaning that some teachers

actively pursued AI-related training while others engaged only minimally or sporadically.

The findings implied that English teachers were more inclined to reflect on and discuss AI-related training than to consistently participate in structured learning opportunities. This gap may have been influenced by limited availability of relevant training programs, time constraints, insufficient institutional support, or a perceived mismatch between available training and actual classroom needs. It also suggests that opportunities for sustained and formal AI capacity-building may not yet be fully integrated into teachers' professional development experiences. The notably high standard deviation for sharing insights with colleagues further suggested that collaborative professional learning around AI was uneven, with some respondents functioning as active peer sharers while others remained less engaged. In general, the results indicated that training and professional development represented the least consistently developed aspect of AI upskilling and required stronger institutional support, accessibility, and alignment with teachers' practical instructional needs.

Table 5. Level of English Teachers' AI Upskilling in terms of Training and Professional Development

Statements	Mean	SD	Remarks
I participate in seminars, workshops, or webinars related to AI in education.	3.32	1.04	Sometimes
I apply knowledge or skills gained from AI training in my teaching practices.	3.40	1.03	Sometimes
I attend professional learning sessions to enhance my use of AI tools.	3.34	1.08	Sometimes
I evaluate the relevance and usefulness of AI-related training programs.	3.44	1.03	Often
I share insights from AI training with colleagues to improve instructional practices.	3.42	1.14	Often
Weighted Mean	3.38		
SD	1.04		
Verbal Interpretation	Moderately Upskilled		

Table 6 presents the level of English teachers' AI Upskilling in terms of Adaptability to Technology. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the respondents. Among the five, two statements tied for the highest mean score: "I adjust my teaching methods when new AI technologies are introduced" (M = 3.80, SD = 0.88) and "I experiment with new AI tools to improve instructional delivery" (M = 3.80, SD = 0.78), both interpreted as "Often." These were followed by "I adopt alternative strategies when traditional methods are not compatible with AI tools" (M = 3.72, SD = 0.83), also interpreted as "Often." Next was "I modify my lesson plans to integrate new AI features or tools" (M = 3.68, SD = 0.87), likewise interpreted as "Often." The lowest mean score was recorded for "I troubleshoot minor technical issues when using AI tools in teaching" (M = 3.56, SD = 0.88), interpreted as "Often." This ordering suggested that teachers were more comfortable adjusting methods and experimenting with tools than handling the practical technical problems that arose during AI use.

The table revealed an overall weighted mean of 3.71 with a standard deviation of 0.83, which was verbally interpreted as "Upskilled." This indicated that English teachers generally demonstrated a strong tendency to adjust, experiment, and respond to emerging AI technologies in their instructional practice. All five statements were interpreted as "Often," reflecting a generally consistent pattern of adaptive behavior across the different aspects of technology responsiveness. The standard deviation further suggested moderate variability among the participants, indicating that some teachers were more technologically adaptive than others.

The findings implied that English Teachers possessed a generally adaptive orientation toward new technologies, particularly in terms of pedagogical flexibility and openness to experimentation. Their willingness to adjust teaching methods and explore unfamiliar AI tools suggested a readiness to respond positively to technological change. However, the comparatively lower score in troubleshooting minor technical issues indicated that hands-on technical problem-solving remained a weaker aspect of their adaptability. This meant that while many respondents could modify strategies and lessons in response to new tools, they were less confident in independently resolving technical difficulties. In general, the results indicated that adaptability to technology was well developed among English teachers, although additional support in technical troubleshooting would further strengthen this dimension of AI upskilling.

Table 6. Level of English Teachers' AI Upskilling in terms of Adaptability to Technology

Statements	Mean	SD	Remarks
I adjust my teaching methods when new AI technologies are introduced.	3.80	0.88	Often
I experiment with new AI tools to improve instructional delivery.	3.80	0.78	Often
I troubleshoot minor technical issues when using AI tools in teaching.	3.56	0.88	Often
I modify my lesson plans to integrate new AI features or tools.	3.68	0.87	Often
I adopt alternative strategies when traditional methods are not compatible with AI tools.	3.72	0.83	Often
Weighted Mean	3.71		
SD	0.83		
Verbal Interpretation	Upskilled		

Table 7 presents the level of English Teachers' AI Upskilling in terms of Instructional Innovation. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the participants.

Among the five statements, "I evaluate the effectiveness of AI-supported instructional innovations" obtained the highest mean score (M = 4.04, SD = 0.90), interpreted as "Often." This was followed by "I identify opportunities to incorporate AI into lesson design" (M = 3.92, SD = 0.70), also interpreted as "Often." Next was "I refine or redesign lessons based on AI-supported outcomes and student feedback" (M = 3.83, SD = 0.89), interpreted as "Often." The statement "I use AI tools to design interactive and engaging learning activities" ranked fourth (M = 3.82, SD = 0.75), likewise interpreted as "Often." The lowest mean score was recorded for "I create new teaching approaches that integrate AI concepts" (M = 3.66, SD = 0.75), also interpreted as "Often." This pattern suggested

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that the respondents were more confident in identifying, evaluating, and refining AI-supported practices than in generating entirely new teaching approaches grounded in AI concepts.

The table revealed an overall weighted mean of 3.86 with a standard deviation of 0.77, which was verbally interpreted as "Upskilled." This indicated that English teachers frequently engaged in innovation-related practices when using AI and showed a strong inclination to improve instruction through AI-supported approaches. All five statements were interpreted as "Often," suggesting a consistent pattern of innovation-oriented behavior across the measured aspects.

The findings implied that English Teachers were generally willing to innovate through AI, particularly by improving existing lessons, evaluating outcomes, and adjusting instruction based on feedback. Their stronger performance in evaluation and opportunity recognition suggested that AI was already being used as a tool for instructional enhancement. However, the comparatively lower score in creating new teaching approaches indicated that deeper innovation involving original AI-informed pedagogy remained less developed. This pointed to a need for professional support that would help teachers move from modifying existing strategies to designing more novel and context-specific approaches to teaching with AI. In general, the results indicated that instructional innovation was a strong aspect of AI upskilling, although higher-level creative innovation still required further development.

Table 7. Level of English Teachers' AI Upskilling in terms of Instructional Innovation

Statements	Mean	SD	Remarks
I identify opportunities to incorporate AI into lesson design.	3.92	0.70	Often
I create new teaching approaches that integrate AI concepts.	3.66	0.75	Often
I use AI tools to design interactive and engaging learning activities.	3.82	0.75	Often
I evaluate the effectiveness of AI-supported instructional innovations.	4.04	0.90	Often
I refine or redesign lessons based on AI-supported outcomes and student feedback.	3.83	0.89	Often
Weighted Mean	3.86		
SD	0.77		
Verbal Interpretation	Upskilled		

Table 8 presents the level of English Teachers' AI Upskilling in terms of Classroom Application. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the respondents.

Among the five statements, "I integrate AI-supported assessments into classroom activities" obtained the highest mean score (M = 3.76, SD = 0.74), interpreted as "Often." This was followed by "I monitor and adjust AI-based classroom activities based on student responses" (M = 3.66, SD = 0.87), also interpreted as "Often." Next was "I implement AI tools to support differentiated instruction for diverse learners" (M = 3.64, SD = 0.75), interpreted as "Often." The statement "I align AI-assisted activities with lesson objectives and student needs" ranked fourth (M = 3.62, SD = 0.81), likewise interpreted as "Often." The lowest mean score was recorded for "I use AI tools regularly during classroom instruction" (M = 3.58, SD = 0.76), also interpreted as "Often." This pattern suggested that teachers were more comfortable using AI for specific classroom tasks such as assessment and monitoring than for routine, day-to-day instructional integration.

The table revealed an overall weighted mean of 3.65 with a standard deviation of 0.77, which was verbally interpreted as "Upskilled." This indicated that English teachers engaged in AI-supported classroom activities with reasonable regularity. All five statements were interpreted as "Often," suggesting that while AI use in actual classroom settings was present, it had not yet become a deeply embedded or habitual component of daily instruction. The standard deviation reflected moderate variability among the participants, consistent with the patterns observed in the other dimensions of AI upskilling.

The findings implied that while English Teachers had begun incorporating AI into classroom practice, their use tended to be task-specific rather than comprehensive and consistent. The stronger performance in AI-supported assessment and classroom monitoring suggested that these functions served as the most accessible entry points for actual classroom use. However, the lower score in regular AI use during instruction indicated that sustained integration of AI into daily teaching remained less developed. This may have been influenced by time constraints, limited technological infrastructure, or insufficient confidence in managing AI tools during live instruction. In general, the results indicated that classroom application of AI was evident among the respondents, although transforming occasional use into routine instructional practice remained a key area for development.

Table 8. Level of English Teachers' AI Upskilling in terms of Classroom Application

Statements	Mean	SD	Remarks
I use AI tools regularly during classroom instruction.	3.58	0.76	Often
I align AI-assisted activities with lesson objectives and student needs.	3.62	0.81	Often
I integrate AI-supported assessments into classroom activities.	3.76	0.74	Often
I monitor and adjust AI-based classroom activities based on student responses.	3.66	0.87	Often
I implement AI tools to support differentiated instruction for diverse learners.	3.64	0.75	Often
Weighted Mean	3.65		
SD	0.77		
Verbal Interpretation	Upskilled		

Table 9 presents the level of English teachers' AI Upskilling in terms of Collaboration and Resource Sharing. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the participants. Among the five statements, "I support colleagues in applying AI tools for teaching and learning" obtained the highest mean score (M = 3.80, SD = 0.81), interpreted as "Often." This was closely followed by "I collaborate with colleagues to share AI resources and tools" (M = 3.78, SD = 0.76), also interpreted as "Often." Next was "I participate in group discussions to exchange best practices on AI integration" (M = 3.60, SD = 0.83), interpreted as "Often." The statement "I seek input from

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peers when designing AI-supported lessons" ranked fourth (M = 3.56, SD = 0.91), likewise interpreted as "Often." The lowest mean score was recorded for "I contribute AI-related instructional materials to a shared repository" (M = 3.50, SD = 0.79), also interpreted as "Often." This pattern suggested that teachers were more comfortable with informal peer support and sharing than with more formalized and structured resource contribution.

The findings implied that English Teachers tended to engage in collaboration through interpersonal and collegial interactions rather than through formal systems of documentation and resource management. Their stronger performance in supporting colleagues and sharing resources informally suggested that collaborative AI upskilling was largely relationship-driven and organically developed. However, the lower score in contributing materials to a shared repository indicated that formalized collaboration, remained less practiced.

The table revealed an overall weighted mean of 3.65 with a standard deviation of 0.81, which was verbally interpreted as "Upskilled." This indicated that English teachers engaged in collaborative AI-related activities with reasonable frequency, although collaborative knowledge exchange and resource sharing had not yet become deeply embedded professional habits. All five statements were interpreted as "Often," reflecting a consistent but moderate level of collegial engagement around AI. The standard deviation further suggested moderate variability across the respondents, indicating that collaborative cultures around AI differed across teachers and school contexts.

Table 9. Level of English Teachers' AI Upskilling in terms of Collaboration and Resource sharing

Statements	Mean	SD	Remarks
I collaborate with colleagues to share AI resources and tools.	3.78	0.76	Often
I contribute AI-related instructional materials to a shared repository.	3.50	0.79	Often
I participate in group discussions to exchange best practices on AI integration.	3.60	0.83	Often
I seek input from peers when designing AI-supported lessons.	3.56	0.91	Often
I support colleagues in applying AI tools for teaching and learning.	3.80	0.81	Often
Weighted Mean	3.65		
SD	0.81		
Verbal Interpretation	Upskilled		

Level of English Teachers' Digital Competence

In this study, the level of English teachers' digital competence referred to online communication, digital content creation, cybersecurity, and troubleshooting.

Table 10 present the level of English Teachers' Digital Competence in terms of Online Communication. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the participants.

Among the five statements, "I identify appropriate digital platforms for communicating with students and colleagues" obtained the highest mean score (M = 4.24, SD = 0.62), interpreted as "Always." This suggested that teachers were highly confident and deliberate in selecting suitable digital tools for communication purposes. This was followed by "I use online communication platforms to facilitate class discussions and interactions" (M = 3.96, SD = 0.73), interpreted as "Often." Next was "I convey instructions and feedback clearly through online communication tools" (M = 3.88, SD = 0.75), also interpreted as "Often." The statement "I evaluate the effectiveness of my online communication and adjust strategies based on responses" ranked fourth (M = 3.82, SD = 0.85), likewise interpreted as "Often." The lowest mean score was recorded for "I design structured online communication activities that promote meaningful student engagement" (M = 3.80, SD = 0.81), also interpreted as "Often." This pattern suggested that while teachers were highly capable of identifying and navigating digital communication platforms, the more complex tasks of critically evaluating communication effectiveness and designing structured digital interactions remained comparatively less developed.

The table revealed an overall weighted mean of 3.94 with a standard deviation of 0.62, which was verbally interpreted as "Competent." This indicated that English teachers generally possessed a strong baseline capability in utilizing digital channels to communicate and interact with students and colleagues. The relatively low standard deviation further suggested a high degree of consistency among the respondents in their online communication practices.

The findings implied that English Teachers had developed a strong foundational competence in online communication, particularly in selecting appropriate platforms and facilitating basic digital interactions. However, the lower scores in evaluating communication effectiveness and designing structured activities suggested that teachers may still need further support in developing the pedagogical dimension of their online communication. Moving beyond tool selection and routine use toward the deliberate design of purposeful and engaging digital interactions required a deeper integration of instructional thinking and digital skills. In general, the results indicated that online communication was a well-developed area of digital competence among the respondents, although strengthening their ability to design and evaluate structured digital communication activities would further enhance the quality of their online instruction. Furthermore, continuous professional development programs and technology-integrated training may help English teachers further strengthen their online communication skills and improve the effectiveness of digital interaction in the teaching and learning process.

Table 11 presents the level of English Teachers' Digital competence in terms of Digital Content Creation. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the respondents.

Among the five, two statements are tied for the highest mean score: "I identify digital tools used for creating instructional materials" (M = 4.00, SD = 0.64) and "I create digital instructional materials such as presentations, worksheets, or videos" (M = 4.00, SD = 0.64), both interpreted as "Often." These results suggested that teachers were both highly aware of available content creation tools and actively engaged in producing common forms of digital instructional

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content. This was followed by "I develop original and interactive digital learning materials for classroom use" (M = 3.94, SD = 0.59), also interpreted as "Often." Next was "I organize digital content to match lesson objectives and learner needs" (M = 3.88, SD = 0.80), likewise interpreted as "Often." The lowest mean score was recorded for "I review and revise digital content to improve clarity and instructional effectiveness" (M = 3.84, SD = 0.77), also interpreted as "Often." This descending pattern from identification and production to organization and revision suggested that teachers were more confident in generating digital materials than in critically reviewing and refining them for optimal instructional impact.

Table 10. Level of English Teachers' Digital Competence in terms of Online Communication

Statements	Mean	SD	Remarks
I identify appropriate digital platforms for communicating with students and colleagues.	4.24	0.62	Always
I convey instructions and feedback clearly through online communication tools.	3.88	0.75	Often
I use online communication platforms to facilitate class discussions and interactions.	3.96	0.73	Often
I evaluate the effectiveness of my online communication and adjust strategies based on responses.	3,82	0.85	Often
I design structured online communication activities that promote meaningful student engagement.	3.80	0.81	Often
Weighted Mean	3.94		
SD	0.62		
Verbal Interpretation	Competent		

The table revealed an overall weighted mean of 3.93 with a standard deviation of 0.56, which was verbally interpreted as "Competent." This indicated that English teachers generally demonstrated a strong level of competence in creating digital instructional materials. All five statements were interpreted as "Often," reflecting a consistent pattern of engagement with digital content creation practices across all measured aspects. The relatively low standard deviation further suggested a high degree of agreement among the participants regarding their content creation practices.

The findings implied that English Teachers possessed a solid competence in digital content creation, particularly in identifying appropriate tools and producing standard forms of instructional materials. Their strong performance in these areas reflected the practical demands of English language teaching, which routinely required the preparation of diverse and engaging learning materials. However, the comparatively lower score in reviewing and revising digital content suggested that the evaluative and iterative dimension of content creation remained less developed.

Table 12 presents the level of English Teachers' Digital Competence in terms of Cybersecurity. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the participants.

Among the five statements, "I assess potential security threats before using new digital platforms" obtained the highest mean score (M = 4.30, SD = 0.71), interpreted as "Always." This suggested that teachers exercised a proactive and anticipatory approach to cybersecurity by evaluating potential threats before integrating new tools. This was followed by "I follow safe digital practices to protect personal and student data" (M = 4.28, SD = 0.70), also interpreted as "Always." Next was "I establish classroom rules that promote safe and responsible digital behavior" (M = 4.24, SD = 0.80), likewise interpreted as "Always." The statement "I recognize common cybersecurity risks when using digital platforms and tools" ranked fourth (M = 4.22, SD = 0.68), also interpreted as "Always." The lowest mean score was recorded for "I apply security measures such as password protection and access controls in digital tools" (M = 4.18, SD = 0.80), interpreted as "Often." While still relatively high, this comparatively lower score suggested that the technical implementation of specific security protocols remained the most challenging aspect of cybersecurity for the respondents. The higher standard deviation for this statement also indicated greater variability in practice, possibly reflecting differences in institutional infrastructure, platform features, or available technical support.

Table 11. Level of English Teachers' Digital Competence in terms of Digital Content Creation

Statements	Mean	SD	Remarks
I identify digital tools used for creating instructional materials.	4.00	0.64	Often
I organize digital content to match lesson objectives and learner needs.	3.88	0.80	Often
I create digital instructional materials such as presentations, worksheets, or videos.	4.00	0.64	Often
I review and revise digital content to improve clarity and instructional effectiveness.	3.84	0.77	Often
I develop original and interactive digital learning materials for classroom use.	3.94	0.59	Often
Weighted Mean	3.93		
SD	0.56		
Verbal Interpretation	Competent		

The findings implied that English Teachers possessed a strong and proactive orientation toward cybersecurity, particularly in recognizing risks, protecting student data, and promoting safe digital behavior among learners. Their tendency to assess threats before adopting new platforms reflected a responsible and deliberate approach to digital tool integration. However, the comparatively lower score in applying specific technical security measures suggested that teachers might benefit from additional guidance in implementing concrete security protocols such as password management and access controls. Strengthening this technical dimension would complement the strong awareness and ethical commitment to digital safety that teachers already demonstrated. In general, the results indicated that cybersecurity was among the more strongly developed aspects of digital competence, although further reinforcement of technical security practices would ensure more comprehensive and consistent digital safety among the respondents.

The table revealed an overall weighted mean of 4.24 with a standard deviation of 0.68, which was verbally interpreted as "Competent." This indicated that English teachers demonstrated a robust awareness of cybersecurity risks and a strong commitment to safe digital practices in their

professional environments. Notably, four out of five statements were interpreted as "Always," signifying that cybersecurity-related behaviors were deeply embedded in teachers' routine digital practice. The relatively low standard deviation further suggested a high degree of consensus among the respondents, confirming that strong cybersecurity awareness was broadly shared across the group.

Table 12. Level of English Teachers' Digital Competence in terms of Cybersecurity

Statements	Mean	SD	Remarks
I recognize common cybersecurity risks when using digital platforms and tools.	4.22	0.68	Always
I follow safe digital practices to protect personal and student data.	4.28	0.70	Always
I apply security measures such as password protection and access controls in digital tools.	4.18	0.80	Often
I assess potential security threats before using new digital platforms.	4.30	0.71	Always
I establish classroom rules that promote safe and responsible digital behavior.	4.24	0.80	Always
Weighted Mean	4.24		
SD	0.68		
Verbal Interpretation	Competent		

Table 13 presents the level of English Teachers' Digital Competence in terms of Troubleshooting. It displayed the statements, mean scores, standard deviations, and remarks based on the responses of the respondents.

Among the five statements, "I develop alternative strategies or solutions when digital tools fail during instruction" obtained the highest mean score (M = 4.08, SD = 0.53), interpreted as "Often." This suggested that teachers were most confident in their ability to devise workarounds or backup plans to maintain instructional continuity when technology failed. This was followed by two statements that tied for the second highest mean: "I identify common technical problems encountered during digital instruction" (M = 4.02, SD = 0.62) and "I resolve basic technical issues encountered while using digital tools" (M = 4.02, SD = 0.68), both interpreted as "Often." Next was "I determine possible causes of technical issues during online or digital activities" (M = 3.94, SD = 0.68), also interpreted as "Often." The lowest mean score was recorded for "I analyze recurring technical problems to prevent future disruptions" (M = 3.92, SD = 0.75), likewise interpreted as "Often." This pattern suggested that while teachers could respond to immediate technical problems, proactive and preventive troubleshooting remained the least developed aspect of this competency.

The table revealed an overall weighted mean of 4.00 with a standard deviation of 0.57, which was verbally interpreted as "Competent." This indicated that English teachers were generally well-equipped to identify, diagnose, and resolve common technical problems that arose during digital instruction. The standard deviation of 0.57 was the lowest across all digital competence dimensions, signaling a high degree of consensus among the participants and suggesting that troubleshooting capabilities were relatively uniform across the group. All five statements were interpreted as "Often," reflecting consistent engagement with troubleshooting practices.

The findings implied that English Teachers had developed a strong capacity for reactive troubleshooting, particularly in identifying problems, resolving basic issues, and devising alternative strategies when tools failed during instruction. However, the comparatively lower score in analyzing recurring problems for preventive purposes suggested that teachers were more responsive than proactive in addressing technical difficulties. This indicated the importance of strengthening teachers' proactive troubleshooting skills to help prevent recurring technical issues.

Table 13. Level of English Teachers' Digital Competence in terms of Troubleshooting

Statements	Mean	SD	Remarks
I identify common technical problems encountered during digital instruction.	4.02	0.62	Often
I determine possible causes of technical issues during online or digital activities.	3.94	0.68	Often
I resolve basic technical issues encountered while using digital tools.	4.02	0.68	Often
I analyze recurring technical problems to prevent future disruptions.	3.92	0.75	Often
I develop alternative strategies or solutions when digital tools fail during instruction.	4.08	0.53	Often
Weighted Mean	4.00		
SD	0.57		
Verbal Interpretation	Competent		

Level of English Teachers' Digital Literacy

In this study, the level of English teachers' digital literacy referred to Basic Computer Skills, Media Literacy, Information Literacy, and Digital Etiquette.

Table 14 presents the level of English Teachers' Digital Literacy in terms of Basic Computer Skills. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the participants.Among the five statements, "I operate computers and commonly used software to accomplish teaching tasks" obtained the highest mean score (M = 4.28, SD = 0.67), the only statement interpreted as "Always." This indicated that the practical operation of computers and standard software applications — such as word processors, presentation tools, and learning management systems — was the most deeply embedded digital skill among English teachers, likely reinforced through years of daily instructional practice. This was followed by "I identify basic computer functions such as file management and software navigation" (M = 4.20, SD = 0.67), interpreted as "Often." Next was "I develop efficient workflows using computer tools to support instructional tasks" (M = 4.16, SD = 0.65), also interpreted as "Often." The statement "I organize digital files and folders according to instructional purposes" ranked fourth (M = 4.06, SD = 0.87), likewise interpreted as "Often." The lowest mean score was recorded for "I examine computer-related issues and adjust settings to improve performance" (M = 4.00, SD = 0.78), also interpreted as "Often." This pattern suggested that diagnostic and optimization tasks — such as adjusting system settings, managing storage, or resolving performance issues — remained the most challenging aspect of basic computer skills for the respondents, echoing similar

patterns observed in earlier dimensions of the study where hands-on technical tasks consistently scored lower than identification and operational competencies.

The table revealed an overall weighted mean of 4.14 with a standard deviation of 0.65, which was verbally interpreted as "Literate." This indicated that English teachers generally demonstrated a strong and well-established level of basic computer proficiency. The relatively low standard deviation further reflected a high degree of consensus among the respondents, suggesting that basic computer skills were broadly and uniformly developed across the teacher population rather than concentrated among a few technically skilled individuals. All five statements were interpreted as "Often," with one statement reaching the "Always" threshold, signifying that basic computer skills represented a well-established and routinely exercised competency among the participants.

The findings implied that English Teachers possessed a solid and well-developed foundation in basic computer skills, particularly in operating commonly used software and navigating standard computer functions essential for teaching. Their strong performance in these areas reflected the practical and daily demands of classroom instruction, which routinely required the use of computers and digital tools. However, the comparatively lower score in examining and adjusting computer settings suggested that teachers may still need support in developing more advanced technical management skills. Strengthening this aspect would enable teachers to independently address performance-related issues and maintain the reliability of their digital tools during instruction. In general, the results indicated that basic computer skills were one of the most consistently and uniformly developed competencies among the respondents, forming a strong foundation for more advanced digital practices. This strong foundation in basic computer skills also highlights the teachers' readiness to integrate technology into everyday instructional tasks with confidence and efficiency. It further suggests that continuous exposure and practice in school-based digital environments have contributed to the consistent development of these essential competencies.

Table 14. Level of English teachers' Digital Literacy in terms of Basic Computer Skills

Statements	Mean	SD	Remarks
I identify basic computer functions such as file management and software navigation.	4.20	0.67	Often
I organize digital files and folders according to instructional purposes.	4.06	0.87	Often
I operate computers and commonly used software to accomplish teaching tasks.	4.28	0.67	Always
I examine computer-related issues and adjust settings to improve performance.	4.00	0.78	Often
I develop efficient workflows using computer tools to support instructional tasks.	4.16	0.65	Often
Weighted Mean	4.14		
SD	0.65		
Verbal Interpretation	Literate		

Table 15 presents the level of English Teachers' Digital Literacy in terms of Media Literacy. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the respondents.

Among the five statements, "I identify various digital media sources used for teaching and learning" obtained the highest mean score (M = 4.38, SD = 0.57), interpreted as "Always." This indicated that teachers were highly proficient in recognizing and locating the range of digital media resources available for instructional use. This was followed by "I select appropriate media content to support lesson objectives" (M = 4.32, SD = 0.62), also interpreted as "Always," reflecting strong pedagogical intentionality in choosing media aligned with curricular goals. Next was "I produce or adapt digital media content for instructional use" (M = 4.24, SD = 0.66), likewise interpreted as "Always," demonstrating that teachers went beyond consumption and selection to actively create or modify media content for their classrooms — a higher-order media literacy skill. The statement "I evaluate the credibility and relevance of digital media sources" ranked fourth (M = 4.10, SD = 0.84), interpreted as "Often." The lowest mean score was recorded for "I interpret messages presented in digital media used in instructional materials" (M = 4.06, SD = 0.84), also interpreted as "Often." The noticeably higher standard deviations for these two statements indicated greater variability among teachers, suggesting that the more analytically demanding tasks of critical evaluation and interpretation of media content were less consistently practiced.

The table revealed an overall weighted mean of 4.22 with a standard deviation of 0.65, which was verbally interpreted as "Highly Literate." This was the highest-rated dimension among the digital literacy areas examined in this study, surpassing basic computer skills (M = 4.14), and indicated that English teachers possessed an exceptionally strong capacity to identify, select, evaluate, produce, and interpret digital media for instructional purposes. The low standard deviation further reflected a high degree of consensus among the participants, indicating that strong media literacy was broadly distributed across the teacher population. Notably, three out of five statements were interpreted as "Always," suggesting that several media literacy practices had become deeply embedded and habitual among English teachers.

The findings implied that English Teachers had developed a strong and well-rounded media literacy competence, particularly in identifying, selecting, and producing digital media resources for instructional use. These strengths reflected both operational fluency and pedagogical intentionality in media engagement. However, the comparatively lower scores in evaluating source credibility and interpreting media messages suggested that the more critical and analytical dimensions of media literacy — such as assessing bias, verifying source reliability, and unpacking the nuanced meanings embedded in multimodal texts — required further development. Strengthening these competencies would equip teachers to model and teach critical media consumption to their students, which was increasingly essential in today's information-rich digital environment. In general, the results indicated that media literacy was among the most strongly

developed areas of digital literacy among English teachers, although deepening critical and interpretive practices would further elevate the quality of media engagement in their classrooms. This also highlighted the need for continuous training in critical media analysis and source evaluation among teachers.

Table 15. Level of English Teachers' Digital Literacy in terms of Media Literacy

Statements	Mean	SD	Remarks
I identify various digital media sources used for teaching and learning.	4.38	0.57	Always
I interpret messages presented in digital media used in instructional materials.	4.06	0.84	Often
I select appropriate media content to support lesson objectives.	4.32	0.62	Always
I evaluate the credibility and relevance of digital media sources.	4.10	0.84	Often
I produce or adapt digital media content for instructional use.	4.24	0.66	Always
Weighted Mean	4.22		
SD	0.65		
Verbal Interpretation	Highly Literate		

Among the five statements, "I identify reliable online sources for academic and instructional purposes" obtained the highest mean score (M = 4.42, SD = 0.57), interpreted as "Always." This indicated that teachers were highly proficient in discerning credible and relevant digital sources, a foundational information literacy skill. This was followed by "I use digital information sources to support teaching and learning activities" (M = 4.38, SD = 0.60), also interpreted as "Always," reflecting a strong pattern of actively integrating digital information into instructional practice. Next was "I synthesize information from multiple digital sources to create instructional materials" (M = 4.36, SD = 0.60), likewise interpreted as "Always," demonstrating that teachers engaged in the higher-order cognitive task of combining information from varied sources into coherent instructional outputs with remarkable consistency. The statement "I organize information gathered from digital sources for lesson preparation" ranked fourth (M = 4.20, SD = 0.81), interpreted as "Often." The lowest mean score was recorded for "I examine the accuracy and relevance of information obtained online" (M = 4.18, SD = 0.83), also interpreted as "Often." The noticeably higher standard deviations for these two statements indicated greater variability among teachers in these areas, suggesting that organizational and evaluative practices differed meaningfully across the respondents.

The table revealed an overall weighted mean of 4.33 with a standard deviation of 0.64, which was verbally interpreted as "Highly Literate." This indicated that English teachers demonstrated an exceptionally strong capacity to locate, evaluate, organize, and synthesize digital information for instructional purposes. The low standard deviation reflected a high degree of consensus among the participants, suggesting that information literacy was a broadly and uniformly developed competency across the teacher population. Three out of five statements were interpreted as "Always," signifying that key information literacy practices — identifying reliable sources, using digital information for teaching, and synthesizing information from multiple sources — had become deeply embedded professional habits among the respondents. This strong performance may have been attributable to the nature of English language instruction itself, which inherently demanded continuous engagement with diverse textual and digital sources for lesson preparation, material development, and content delivery.

The findings implied that English Teachers possessed an exceptionally strong information literacy competence, particularly in identifying reliable sources, integrating digital information into instruction, and synthesizing content from multiple sources. These strengths reflected both the high demands of English language teaching and the well-developed habits of digital information engagement among the respondents. However, the comparatively lower scores in organizing and critically evaluating digital information suggested that more reflective and analytical information practices required further development. The higher standard deviations observed for these two statements also pointed to meaningful differences among teachers in terms of organizational habits and the rigor of critical evaluation, possibly reflecting variations in training background, institutional resources, or individual professional practices. In general, the results indicated that information literacy was one of the most strongly developed dimensions of digital literacy among English teachers, although deepening critical evaluation and systematic organization of digital information would further strengthen the quality of their instructional preparation.

Table 16. Level of English Teachers' Digital Literacy in terms of Information Literacy

Statements	Mean	SD	Remarks
I identify reliable online sources for academic and instructional purposes.	4.42	0.57	Always
I organize information gathered from digital sources for lesson preparation.	4.20	0.81	Often
I use digital information sources to support teaching and learning activities.	4.38	0.60	Always
I examine the accuracy and relevance of information obtained online.	4.18	0.83	Often
I synthesize information from multiple digital sources to create instructional materials.	4.36	0.60	Always
Weighted Mean	4.33		
SD	0.64		
Verbal Interpretation	Highly Literate		

Table 17 presents the level of English Teachers' Digital Literacy in terms of Digital Etiquette. It displays the statements, mean scores, standard deviations, and remarks based on the responses of the participants.

Among the five statements, "I practice proper digital etiquette when communicating online with students and colleagues" obtained the highest mean score (M = 4.50, SD = 0.65), interpreted as "Always." This indicated that teachers were most confident in their ability to model appropriate online communication norms in their professional interactions. This was closely followed by two statements that tied for the second highest mean: "I recognize appropriate online behavior in educational digital environments" (M = 4.46, SD = 0.65) and "I establish rules that promote responsible and respectful

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online conduct" (M = 4.46, SD = 0.71), both interpreted as "Always." Next was "I address inappropriate online behavior during digital interactions" (M = 4.42, SD = 0.78), likewise interpreted as "Always." The lowest mean score was recorded for "I demonstrate respectful and responsible behavior during online interactions" (M = 4.40, SD = 0.73), also interpreted as "Always." Despite being the lowest-rated statement, the score remained exceptionally high. The narrow range between the highest (M = 4.50) and lowest (M = 4.40) mean scores underscored the remarkable uniformity of teachers' digital etiquette practices, with the subtle variation suggesting that while awareness and rule-setting were highly consistent, the behavioral enactment of respect in diverse online situations may have exhibited minor situational fluctuations.

The table revealed an overall weighted mean of 4.45 with a standard deviation of 0.67, which was verbally interpreted as "Highly Literate." This indicated that English teachers demonstrated an exceptionally strong commitment to practicing and promoting respectful, responsible, and professional online behavior in educational settings. Remarkably, all five statements were interpreted as "Always," making digital etiquette the only dimension in this study where every statement reached the highest threshold. The relatively low standard deviation further reflected a high degree of consensus among the respondents, confirming that exemplary digital etiquette practices were broadly and uniformly embedded across the teacher population.

The findings implied that English Teachers had deeply internalized the norms of digital citizenship and professional online conduct. Their consistent practice of proper etiquette, establishment of clear behavioral rules, and willingness to address inappropriate online behavior demonstrated that they served as active role models for responsible digital interaction in their educational communities. The uniformity of the high scores suggested that digital etiquette was not merely a personal preference but a shared professional standard, likely reinforced by institutional expectations, professional norms, and the inherent visibility of teacher conduct in online learning environments. While the competency was exceptionally strong across all measured aspects, the subtle distinction between rule-setting and behavioral enactment suggested that continuous reflection on the consistent demonstration of respectful norms remained valuable. In general, the results indicated that digital etiquette represented the most uniformly developed and highest-rated competency among all dimensions of digital literacy examined in this study.

Test of association between the English Teachers' AI knowledge and their Digital Competence and Digital Literacy

To test the significant relationship between the English Teachers' AI Knowledge and their Digital Competence in terms of Online Communication, Digital Content Creation, Cybersecurity, and Troubleshooting and Digital Literacy in terms of Basic Computer Skills, Media Literacy, Information Literacy, and Digital Etiquette they were treated statistically using Real Statistics Data Analysis Tools using the Pearson Product Moment Correlation Coefficient.

Table 17. Level of English Teachers' Digital Literacy in terms of Digital Etiquette

Statements	Mean	SD	Remarks
I recognize appropriate online behavior in educational digital environments.	4.46	0.65	Always
I demonstrate respectful and responsible behavior during online interactions.	4.40	0.73	Always
I practice proper digital etiquette when communicating online with students and colleagues.	4.50	0.65	Always
I address inappropriate online behavior during digital interactions.	4.42	0.78	Always
I establish rules that promote responsible and respectful online conduct.	4.46	0.71	Always
Weighted Mean	4.45		
SD	0.67		
Verbal Interpretation	Highly Literate		

Table 18 presents the results of the Pearson Correlation analysis examining the relationship between English teachers' AI Knowledge — across its four dimensions of Conceptual, Technical, Pedagogical, and Ethical Knowledge — and their Digital Competence (Online Communication, Digital Content Creation, Cybersecurity, Troubleshooting) and Digital Literacy (Basic Computer Skills, Media Literacy, Information Literacy, Digital Etiquette). A significant positive correlation was observed between English Teachers' AI Knowledge and their Digital Competence and Digital Literacy, indicating that teachers who possess stronger AI Knowledge tend to achieve higher levels of Digital Competence and Digital Literacy ($r(50)$, $p < .05$). Out of 32 correlation pairs examined, 31 yielded statistically significant positive relationships, suggesting that increased AI Knowledge is broadly and robustly associated with better Digital Competence and Digital Literacy across nearly all measured dimensions.

Table 18. Significant Relationship between the English Teachers' AI knowledge and their Digital Competence and Digital Literacy

English Teachers' AI knowledge		O C	DCC	C	T	BCS	M L	I L	D E
Conceptual knowledge	Pearson Correlation	.489**	.615**	.515**	.564**	.492**	.461**	.417**	.430**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.001	.003	.002
	N	50	50	50	50	50	50	50	50
Technical knowledge	Pearson Correlation	.601**	.622**	.586**	.550**	.435**	.374**	.344**	.338**
	Sig. (2-tailed)	.000	.000	.000	.000	.002	.007	.014	.016
	N	50	50	50	50	50	50	50	50
Pedagogical knowledge	Pearson Correlation	.609**	.604**	.487**	.416**	.370**	.342**	.367**	.252
	Sig. (2-tailed)	.000	.000	.000	.003	.008	.015	.009	.077
	N	50	50	50	50	50	50	50	50
Ethical knowledge	Pearson Correlation	.636**	.545**	.666**	.584**	.646**	.624**	.516**	.591**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.000
	N	50	50	50	50	50	50	50	50

These findings are strongly supported by the work of Chiu et. al., (2023), who proposed a comprehensive framework

aligning teachers' AI digital competencies with 21st-century skills, arguing that AI knowledge — particularly in its ethical, conceptual, and technical dimensions — serves as a foundational enabler of broader digital competence across areas such as digital communication, content creation, cybersecurity, and problem-solving. AI knowledge does not operate in isolation but functions as a powerful catalyst that strengthens teachers' overall digital capabilities — a conclusion comprehensively supported by the 31 significant positive correlations documented in Table 18. This suggests that strengthening AI-related competencies may yield cascading improvements across multiple dimensions of teachers' digital practice. It further underscores the integrative role of AI knowledge in bridging and enhancing interconnected digital skills essential for modern teaching.

Test of association between the English Teachers' AI Upskilling and their Digital Competence and Digital Literacy

To test the significant relationship between the English Teachers' AI Upskilling and their Digital Competence in terms of Online Communication, Digital Content Creation, Cybersecurity, and Troubleshooting and Digital Literacy in terms of Basic Computer Skills, Media Literacy, Information Literacy, and Digital Etiquette they were treated statistically using Real Statistics Data Analysis Tools using the Pearson Product Moment Correlation Coefficient.

A significant positive correlation was observed between English teachers' AI upskilling in terms of adaptability to technology, instructional innovation, classroom application, and collaboration and resource sharing and their digital competence and digital literacy, indicating that teachers who are more engaged in these areas tend to achieve higher levels of digital competence and digital literacy ($r(50)$, $p < .05$). This suggests that increased AI upskilling in these dimensions is associated with better digital competence and digital literacy among English teachers. Overall, this highlights the importance of continuous professional learning and active engagement in technology-related development activities to further strengthen teachers' digital capabilities in instructional practice. This also implies that professional development programs focusing on AI upskilling can play a crucial role in enhancing teachers' readiness for technology-integrated instruction. Sustained engagement in such initiatives may further support the long-term improvement of both pedagogical effectiveness and digital proficiency in educational setting.

Non-Significant Correlation

No statistically significant correlation was found between the English Teachers' AI Upskilling in terms of Training and Professional Development and their Digital Competence and Digital Literacy ($r(50)$ $p > .05$). This indicates that, within this group, the English Teachers' AI Upskilling in terms of Training and Professional Development did not significantly predict Digital Competence and Digital Literacy, contrary to some anecdotal expectations. This presents a critical paradox for institutional planning: while schools frequently rely on structured workshops to upskill their staff, this passive form of professional development does not translate into tangible digital competence for these respondents. Instead, the data unequivocally demonstrates that digital literacy and competence are forged experientially—specifically by adapting to new tools on the fly, innovating instructional designs, and applying AI directly in the classroom.

Table 19. Significant Relationship between the English Teachers' AI Upskilling and their Digital Competence and Digital Literacy

English Teachers' AI Upskilling		O C	DCC	C	T	BCS	M L	I L	D E
Training and Professional Development	Pearson Correlation	.188	.093	.087	.061	.136	.205	-.111	.109
	Sig. (2-tailed)	.191	.521	.548	.674	.346	.153	.443	.451
	N	50	50	50	50	50	50	50	50
Adaptability to Technology	Pearson Correlation	.557**	.490**	.341**	.455**	.346**	.402**	.097	.293*
	Sig. (2-tailed)	.000	.000	.015	.000	.014	.000	.503	.039
	N	50	50	50	50	50	50	50	50
Instructional Innovation	Pearson Correlation	.518**	.547**	.372**	.508**	.463**	.559**	.288**	.324**
	Sig. (2-tailed)	.000	.000	.008	.000	.000	.000	.035	.022
	N	50	50	50	50	50	50	50	50
Classroom Application	Pearson Correlation	.406**	.340**	.252	.411**	.263	.336**	.080	.103
	Sig. (2-tailed)	.000	.016	.077	.000	.065	.017	.581	.477
	N	50	50	50	50	50	50	50	50
Collaboration and Resource sharing	Pearson Correlation	.483**	.344**	.370**	.413**	.369**	.343**	.072	,267
	Sig. (2-tailed)	.000	.014	.008	.000	.008	.015	.619	.061
	N	50	50	50	50	50	50	50	50

These results are consistent with the findings of Taimalu and Luik (2019), who identified a significant gap between formal professional development and the actual integration of digital tools. Their research emphasized that while teachers may attend structured training, such "passive upskilling" rarely predicts digital competence unless it is accompanied by "enactive mastery"—the hands-on, experiential process of applying technology in real classroom contexts. This supports the observed paradox in the current study, where formal training ($M = 3.38$) showed no significant correlation, whereas active dimensions like instructional innovation and classroom application emerged as the true drivers of digital literacy. This suggests that for English teachers, digital competence is not "taught" in workshops but is instead "forged" through the iterative, experiential process of adapting to and innovating with AI tools in practice.

IV. Conclusion and Recommendations

There is a significant relationship between English teachers' AI knowledge and their digital competence and digital literacy, indicating that higher levels of AI knowledge are associated with higher levels of digital competence and digital literacy. This suggests that teachers who possess

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stronger conceptual, technical, pedagogical, and ethical knowledge of AI are more likely to demonstrate improved digital capabilities in instructional practice. The result further implies that AI knowledge plays an important role in enhancing teachers' effective use of digital technologies in education. Thus, the null hypothesis stating that there is no significant relationship between English teachers' AI knowledge and their digital competence and digital literacy is rejected.

There is a significant relationship between English teachers' AI upskilling and their digital competence and digital literacy. Although the dimension on training and professional development did not show a significant relationship, the remaining dimensions—adaptability to technology, instructional innovation, classroom application, and collaboration and resource sharing—showed a consistent and significant association. This indicates that experiential and practice-based upskilling activities are more strongly linked to teachers' digital competence and digital literacy. The finding emphasizes that meaningful engagement in AI-related upskilling contributes to improved digital teaching capabilities. Thus, the null hypothesis stating that there is no significant relationship between English teachers' AI upskilling and their digital competence and digital literacy is rejected.

In formulated conclusions from the findings, it is recommended that:

English Teachers may strengthen their pedagogical AI knowledge by actively designing and implementing learning activities that intentionally integrate AI tools to address diverse learner needs. This recommendation aligns with the finding that pedagogical knowledge was the least developed dimension of AI knowledge among teachers. By moving beyond mere awareness of AI tools and toward the deliberate application of AI in designing differentiated, student-centered, and outcome-driven instructional activities in English language teaching, teachers can enhance both their instructional practice and student learning experiences.

School Administrators may establish formal structures that support teachers' AI readiness, such as organizing context-specific professional development programs, creating centralized digital resource repositories, and designating time for structured peer collaboration on AI integration. This recommendation aligns with the finding that training and professional development obtained the lowest level among the dimensions of AI upskilling. By providing institutional mechanisms that complement teachers' existing informal upskilling practices, administrators can foster a more systematic and sustainable framework for developing digital competence and digital literacy across the school community.

Students will benefit from teachers who are better equipped to design engaging, effective, and responsible AI-integrated learning experiences. This recommendation aligns with the finding that teachers demonstrated high levels of digital competence and digital literacy, particularly in digital etiquette and information literacy. To translate these teacher competencies into improved student outcomes, administrators and teachers may collaborate to design AI-supported lessons that emphasize personalized instruction, timely feedback, and the ethical use of AI tools in the classroom.

Future Researchers may also conduct similar studies involving a larger and more diverse population of English teachers across different school divisions, regions, or school types — including private schools and higher education institutions — to determine whether the patterns observed in this study are consistent across broader and more varied educational contexts. This recommendation aligns with the limitations of the current study, which focused on a specific group of public school teachers. By expanding the scope of future research, scholars can enrich the understanding of AI integration and digital competence in Philippine education.

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