Associating Teaching Performance And Technological, Pedagogical And Content Knowledge Among Public Elementary School Teachers Of San Francisco Cluster VI

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Abstract- The main goal of the study is to explore the association of technological, pedagogical, and content knowledge of teachers on their teaching performance. This study looked into the level of the technological, pedagogical, and content knowledge of the teachers and their level of teaching performance. The study used probability sampling; simple random in particular. Fifty-three teachers from public elementary schools of San Francisco Cluster VI participated in the study. The study revealed that the teachers' level of technological, pedagogical, and content knowledge is very extensive. In terms of the level of teachers' performance based on their IPCRF ratings, most of them have outstanding performance. The teachers' level of technological, pedagogical, and content knowledge is not significantly associated with their teaching performance. It is essential to explore factors such as classroom management skills, interpersonal relationships with students and colleagues, instructional leadership abilities, and professional development participation that could be investigated to determine their impact on teaching effectiveness.

Keywords: content knowledge, individual performance commitment rating form, pedagogical knowledge, teacher's performance, technological knowledge

INTRODUCTION

In the evolving landscape of education, the interplay between teaching performance and the integration of technology has become increasingly significant. TPACK posits that effective teaching relies on a teacher's ability to integrate technology with pedagogical understanding and content expertise (Adipat, 2021). The growth of the use of the TPACK framework by researchers has also been explored in published reviews of the literature (Foulger et al. 2021; Yeh et al. 2021) that speak to the proliferation of the use of the TPACK framework by scholars. Technological Pedagogical Content Knowledge (TPACK) describes the knowledge synthesized from each field of knowledge that has been described previously (Technological Knowledge, Content Knowledge, Pedagogical Knowledge, Pedagogical Content Knowledge, Technological Content Knowledge, and Technological Pedagogical Knowledge), focusing on how technology can be made specific which is suitable with a pedagogical need to teach the right content in a particular context. Each element of the knowledge field describes a need and the importance of these aspects in teaching. Yet, effective teaching requires more than each part of it.

Various technologies digital and non-digital have been a key component in responding to the educational needs arising from the pandemic. This scenario marked by didactic and school management uncertainties made visible limitations and opportunities in educational models around the world, and in many cases, a moment of deep reflection to reconfigure pedagogical and investigative practices in educational establishments. This global situation allowed technologies to be positioned more vigorously, even turning them into indispensable learning resources with which families, teachers, and students managed to advance (Rivas, 2020).

While technology has emerged as a valuable resource to enhance teaching and learning, there remains a challenge in teacher training and professional development to move beyond a technocentric view of technology. It is crucial to mobilize technology toward an understanding and implementation of situated teaching and learning experiences, where the integration of technological, pedagogical, and content components is strengthened (Garcia et al., 2022).

Technology integration in education has grown in significance, particularly when it comes to teaching and learning. Nonetheless, there are problems with teachers' knowledge of digital technologies and their ability to successfully incorporate technology into the classroom. This hypothetical scenario challenges us to see technology's effects on teaching and learning rather than just as a set of technical tools (Kimmons et al., 2020).

Teachers need to develop their TPACK competencies, which involve the integration of technological knowledge, pedagogical strategies, and content expertise, to effectively leverage technology in the classroom (Jimenez et al., 2023).
The scarce digital competence of teachers for the integration of technologies in the curriculum and teaching further complicates the situation. This suggests the need for comprehensive teacher training programs that go beyond technical skills and focus on developing teachers' pedagogical beliefs and strategies aligned with technology integration. Teachers' perceptions, attitudes, and challenges regarding the integration of technology into their teaching practices should be understood to provide targeted support and address their specific needs (Abedi, 2023).

It is for this reason that the researcher was determined to find the association between technological, pedagogical, and content knowledge and the teaching performance among public school elementary English teachers of San Francisco Cluster IV.

OBJECTIVES

The main goal of the study is to explore the association of technological, pedagogical, and content knowledge of the teachers on their teaching performance which involved public elementary school English teachers in San Francisco Cluster VI, Agusan del Sur Division. Firstly, is to Identify the level of technological knowledge of the teachers in terms of, creativity and critical thinking, cultural and social understanding, collaboration and selection of information, effective communication, e safety and security, and functional skills. Secondly to determine the level of pedagogical knowledge of the teacher in terms of, applied content knowledge, research-based knowledge, ICT knowledge, creative knowledge, and classroom and communication knowledge. Thirdly to identify the level of content knowledge of the teacher in terms of linguistic competence, socio-linguistic competence, discourse competence and multiliteracies. Fourthly assess the level of teachers' performance based on their Individual Performance and Commitment Review (IPCR). Fifthly to determine the significant relationship between the performance of the teachers in their technological knowledge, pedagogical knowledge, and content knowledge. Lastly to propose an intervention programs and strategies based on the findings to enhance teacher competencies in technology, pedagogy, and content knowledge, ultimately improving overall teacher performance in the classroom.

METHODOLOGY

This study is purely quantitative. It employed the descriptive-correlational method design which involved 53 teachers from public elementary schools of San Francisco Cluster IV, Division of Agusan del Sur to answer the research instrument adopted from the study of Luzon and Cubillas in 2022. Upon the approval of the thesis proposal, the researcher asked permission through a letter of request to the Schools Division Superintendent of Agusan del Sur Division to allow her to administer the research questionnaires to the participants to gather the needed data for this study. The researcher personally administered the questionnaire to the respondents with a time allotment to fill up the data. Then, she retrieved questionnaires I and II. Data obtained and tallied was treated with statistical analysis. Data on the performance of teacher-participants was obtained through their IPCRF. The individual performance commitment rating form was used to assess teachers' teaching performance using various key resource areas. Data analysis utilized SPSS software, employing Weighted Mean, Frequency Counts and Percentages and Correlation analysis to analyze the data gathered from the participants.

RESULTS

Problem 1. Level of Technological Knowledge of the teachers in terms of Creativity and Critical Thinking, Cultural and Social Understanding, Collaboration and Selection of Information, Effective Communication, E-Safety and Security, and Functional Skills
1.1 Level of Technological Knowledge of the Teachers in terms of Creativity and Critical Thinking

Table 2 shows the level of technological knowledge of the teachers in terms of creativity and critical thinking. As shown in the table below, indicator number one (1) is the use of Microsoft Office Tools in making reports, presentations, and other personal and work-related activities acquired the highest mean of 4.22 described as very satisfactory and interpreted as the knowledge is very extensive. On the other hand, indicator number two (2) utilization of the different software and applications in making art for personal and academic use got the lowest mean of 3.98 verbally described as very satisfactory and interpreted as the knowledge is very extensive. Overall, the average weighted mean of all indicators is 4.07 described as very satisfactory and interpreted as the knowledge is very extensive.

Gonzales et al. (2020) and Joynes et al. (2019) argue that the effective integration of technology into education is no longer a choice but a necessity. This is because the world is rapidly evolving, driven by technological advancements and globalization. To adequately prepare students for this evolving landscape, educators must embrace technology as a fundamental aspect of teaching and learning.

Table 2 *Level of Technological Knowledge of the Teachers in terms of Creativity and Critical Thinking*

Indicators	Weighted mean	Verbal description	Interpretation
1. Use of Microsoft Office Tools in making reports, presentations, and other personal and work-related activities.	4.22	Very Satisfactory	The knowledge is very extensive
2. Utilization of the different software and applications in making art for personal and academic use.	3.98	Very Satisfactory	The knowledge is very extensive
3. Creation of e-products/actual products and e-materials/ e-materials/actual materials using technology.	4	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**4.07**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

Advanced technological knowledge among teachers allows for the creation of dynamic and interactive learning environments. Through various digital tools and platforms, educators can create learning experiences to individual student needs, fostering deeper engagement and understanding. (Salleh et al. 2019).

To effectively leverage technology in education, teachers themselves require ongoing professional development and support. This includes training on new tools and methodologies, as well as opportunities for collaboration and sharing best practices with peers.

1.2 Level of Technological Knowledge of the Teachers in terms of Cultural and Social Understanding

Table 3 shows the level of technological knowledge of the teachers in terms of cultural and social understanding The table shows that indicator number one (1) which is observance of netiquette at work got the highest mean of 4.2 described as very satisfactory and interpreted as the knowledge is very extensive. Meanwhile, indicator number two (2) which is repurposing/use (for another purpose) of a piece of media for a different culture or audience acquired the lowest mean of 3.73 described as very satisfactory and interpreted as the knowledge is very extensive. Holistically, the average mean of all indicators is 3.95 with an equivalent description of very satisfactory and interpreted as the knowledge is very extensive.

Table 3. *Level of Technological Knowledge of the Teachers in terms of Cultural and Social Understanding*

Indicators	Weighted mean	Verbal description	Interpretation
1. Observance of netiquette at work	4.2	Very Satisfactory	The knowledge is very extensive
2. Repurposing/use (for another purpose) of a piece of media for a different culture or audience	3.73	Very Satisfactory	The knowledge is very extensive
3. Practice of digital citizenship in ethics, social, ethical, and legal responsibilities in the utilization of technological tools and resources et cetera	3.92	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**3.95**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

Indicator number one, which assesses the observance of netiquette at work, the notably high mean of 4.2 indicates a very satisfactory level of adherence to online communication etiquette. This suggests that employees possess a strong understanding of appropriate online conduct, which is crucial for maintaining professionalism and effective communication in modern workplaces.

On the other hand, indicator number two, focusing on repurposing or adapting media for different cultures or audiences, garnered a lower but still commendable mean of 3.73. While this score indicates a satisfactory level of competence, there may be room for improvement in understanding how to effectively tailor media content for diverse audiences, reflecting a potential area for targeted training or development.

Overall, with the holistic average mean of 3.95, described as very satisfactory and interpreted as extensive knowledge, it suggests that employees demonstrate a solid understanding and competency across various aspects assessed.

However, it also implies that there are specific areas, such as cultural adaptation of media, where further enhancement could bolster overall effectiveness and proficiency within the workplace. Therefore, ongoing efforts in training and development could help maintain and enhance the comprehensive competence observed across different indicators.

As Luzon and Cubillas (2022) argued, learning to critically analyze and repurpose digital media across cultural contexts is crucial for developing global competence and promoting understanding in an increasingly interconnected world. Encouraging teachers to explore cross-cultural media adaptation could empower them to bridge cultural divides and foster respectful intercultural dialogue in their classrooms.

Practice of digital citizenship in ethics, social, ethical, and legal responsibilities" underscores teachers' awareness of responsible technology use. This strong grasp of digital citizenship principles, as outlined by Pangrazio (2021) equips them to guide students toward safe, ethical, and informed online behavior.

1.3 Level of Technological Knowledge of the Teachers in terms of Collaboration and Selection of Information

Table 4 shows the level of technological knowledge of the teachers in terms of Collaboration and Selection of Information. The data revealed that all indicators number one (1) in collaboration and selection of information "Reassuring collaborative creation of outputs in the digital environment "e.g., outputs during webinars, virtual workshops, etc." acquired the highest mean of 4.02, described as very satisfactory and interpreted as the knowledge is very extensive. Hence, the indicator, "Utilization of the websites that can be used as references for valid and authentic information" got the lowest mean of 3.96, described as very satisfactory and equivalent interpretation of the knowledge is very extensive. The average mean of all indicators is 3.99 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

Table 4. *Mean distribution of the vel of Technological Knowledge of the*
Teachers in terms of Collaboration and Selection of Information

Indicators	Weighted mean	Verbal description	Interpretation
1. Reassuring collaborative creation of outputs in the digital environment (e.g., outputs during webinars, virtual workshops, etc.)	4.02	Very Satisfactory	The knowledge is very extensive
2. Creation of a virtual platform where my friends or colleagues can share their thoughts (e.g. FB groups, FB page, virtual meetings, et cetera)	3.98	Very Satisfactory	The knowledge is very extensive
3. Utilization of the websites that can be used as references for valid and authentic information	3.96	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**3.99**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

Reassuring collaborative creation of outputs in the digital environment" reveals much more than just technical proficiency in virtual workshops and webinars. It showcases these teachers' mastery of a crucial skill – orchestrating productive and positive online collaborations. As Dollinger (2019) emphasized, collaboration isn't simply about sharing files; it's about nurturing an environment where diverse perspectives flourish, teamwork thrives, and shared goals are achieved. These teachers excel at weaving this magic in the digital space. They go beyond merely setting up platforms and laying out tasks. They become architects of collaboration, building an ecosystem of trust, communication, and shared responsibility.

The creation of a virtual platform where my friends or colleagues can share their thoughts" indicates a potential area for further development. While teachers demonstrate good overall skills in building online communities, honing their expertise in platform building could offer even richer opportunities for knowledge sharing and collaboration. As Darics et al (2019) argued, creating dynamic online platforms for idea exchange fosters connection, engagement, and a sense of shared purpose, something these teachers could further explore. Encouraging them to experiment with different platforms and tools could empower them to build even more vibrant and impactful online communities.

1.4 Level of Technological Knowledge of the Teachers in terms of Effective Communication

Table 5 shows the level of technological knowledge of the teachers in terms of Effective Communication.

Table 5. *Level of Technological Knowledge of the Teachers in terms of Effective Communication*

Indicators	Weighted mean	Verbal description	Interpretation
1. Selection of appropriate words to explain ideas in social media	4.31	Very Satisfactory	The knowledge is very extensive
2. Being aware of the positive effects of using appropriate terms and writing technicalities in digital communication.	4.06	Very Satisfactory	The knowledge is very extensive
3. Use of Google Translate and other services from the Internet in clarifying and understanding information	4.18	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**4.18**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

The results of the study indicate that participants' communication skills are very satisfactory, with a mean score ranging from 4.06 to 4.31 on a scale where 4.18 represents the average. Notably, participants excel in their ability to tailor their language for social media, as evidenced by the highest mean score of 4.31 for the indicator "Selection of appropriate words to explain ideas in social media." This suggests they are adept at crafting clear and concise messages suited to the specific demands of online communication. Meanwhile, indicator number two (2) Being aware of the positive effects of using appropriate terms and writing technicalities in digital communication got the lowest mean of 4.06 verbally described as very satisfactory and interpreted as the knowledge is very extensive. The average weighted mean is 4.18 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

The study indicates that participants exhibit highly satisfactory communication skills overall, with particularly strong proficiency in tailoring language for social media platforms, as evidenced by the highest mean score. This suggests they excel in crafting clear and concise messages suited to online communication. However, while participants demonstrate extensive knowledge across various communication indicators, there is a slightly lower mean score for awareness of the positive effects of appropriate terminology and technical writing in digital communication.

Despite this, the average weighted mean across all indicators remains very satisfactory, indicating a comprehensive understanding and proficiency in digital communication skills among the participants.

Mastering social media messaging demands a flair for concise, impactful content. It involves distilling complex ideas into easily digestible posts, using attention-grabbing headlines, engaging visuals, and succinct language. Success requires communication skills, awareness of trends, and adaptability (Patel, 2022).

1.5 Level of Technological Knowledge of the Teachers in terms of E-Safety and Security

Table 6 shows the level of technological knowledge of the teachers in terms of E-safety and security.

Table 6. *Level of Technological Knowledge of the Teachers in terms of E-Safety and Security*

Indicators	Weighted mean	Verbal description	Interpretation
1. Careful posting of messages on social media to not invite misinterpretations and conflict	4.43	Very Satisfactory	The knowledge is very extensive
2. Making use of e-safety links– whether this be about age-appropriate content, concern over the predatory behavior of adults, acceptable use and cyber-bullying, or issues of plagiarism, copyright, and virus protection	4.12	Very Satisfactory	The knowledge is very extensive
3. Being attentive in sharing information on social media to prevent identity theft, and abuse, and to maintain privacy	4.2	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**4.25**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

The table presents the level of technological knowledge of teachers in terms of e-safety and security. Careful posting of messages on social media to not invite misinterpretations and conflict acquired the highest mean of 4.43 emerges as the strongest area, suggesting teachers are aware of potential pitfalls and prioritize caution. Making use of e-safety links– whether this be about age-appropriate content, concern over the predatory behavior of adults, acceptable use and cyber-bullying, or issues of plagiarism, copyright, and virus protection got the lowest mean of 4.12 described as very satisfactory and interpreted as the knowledge is very extensive. The weighted mean of 4.25, described as "Very Satisfactory", indicates that teachers' knowledge of e-safety and security is quite extensive.

The findings indicate that teachers exhibit a strong understanding of e-safety and security, with their highest mean score about careful posting on social media to prevent misinterpretations and conflicts. This suggests a high level of awareness regarding online risks and a proactive approach to maintaining professionalism in digital interactions.

While the mean score for making use of e-safety links was slightly lower, it still reflects a very satisfactory level of knowledge, indicating competence in accessing resources related to various e-safety topics. The weighted mean of 4.25 further supports this interpretation, signifying overall extensive expertise among teachers in navigating digital environments safely and protecting against online threats.

Given this high degree of understanding, it is crucial to incorporate e-safety and security into the curriculum to make sure that students have the skills needed to appropriately navigate the digital world. Incorporating e-safety into the classroom is crucial to equipping students with the knowledge and skills necessary to recognize and mitigate hazards associated with the internet, according to Lawlor's (2019) study.

Additionally, the focus on social media posting with caution, privacy, and preventing online abuse shows a proactive approach to addressing digital citizenship, in line with the recommendations of Jain et al (2021), which aims to encourage young people to use online technologies safely and responsibly.

Teachers' extensive knowledge of e-safety and security positions them as influential role models for guiding students' digital behavior. With high scores in careful posting on social media and awareness of privacy and online abuse prevention, teachers are well-equipped to impart practical strategies for safe and responsible online conduct, aligning with the study of Gordillo (2021).

1.6 Level of Technological Knowledge of the Teachers in terms of Functional Skills

Table 7 shows the level of technological knowledge of the teachers in terms of Functional Skills. The data shows that indicators in functional literacy had a mean ranging from 3. 84 to 4.16 indicating a "Very Satisfactory" level of knowledge among individuals in managing daily routines, multitasking using technology, and referring to technology for house errands. This extensive knowledge suggests a high level of proficiency in leveraging technology for various daily activities. The ability to effectively manage daily routines, multitask using technology, and seek guidance from technology for house errands reflects a strong integration of technology into everyday life, potentially enhancing efficiency and productivity.

Table 7. *Level of Technological Knowledge of the Teachers in terms of Functional Skills*

Indicators	Weighted mean	Verbal description	Interpretation
1. Management of daily routines (e.g. making notes, marking calendars, setting alarms, et cetera)	4.16	Very Satisfactory	The knowledge is very extensive
2. Multi-task using technology (e.g. attending virtual conferences while texting or chatting, answering calls while checking e-mails and fb notifications, et cetera)	4.1	Very Satisfactory	The knowledge is very extensive
3. Referring to technology when running house errands via how-to videos (e.g. cooking while viewing videos, growing plants with consultations from the videos, et cetera)	3.84	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**4.03**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

The findings align with the study of Lakhwani et al (2020) the evolving role of technology in daily activities, as highlighted in the study on the impact of technology on knowledge workers' productivity.

The ability to multitask using technology and seek guidance from how-to videos for house errands demonstrates a proactive approach to leveraging technology for diverse tasks. This aligns with the reported benefits of extensive IT outsourcing, where providers have experienced improved service levels and knowledge enhancement.

The impact of technology on economic growth and living standards indicates its pervasive influence on various aspects of life. As technology continues to advance, understanding its effects on economic growth, employment, and living standards becomes crucial for policymakers, business leaders, and workers to navigate the evolving landscape effectively.

Overall, the pervasive influence of technology on daily routines, productivity, and economic growth highlights its integral role in enhancing efficiency and effectiveness across various domains of life Broughel and Thierer. (2019).

Problem 2. Level of Pedagogical Knowledge of the Teachers in terms of Applied Content Knowledge, Research-based Knowledge, ICT Knowledge, Literacy and Numeracy Knowledge, Critical Knowledge, Creative Knowledge, and Classroom Communication Knowledge

2.1 Level of Pedagogical Knowledge of the Teachers in terms of Applied Content Knowledge

Table 8 shows the level of pedagogical knowledge of the teachers in terms of applied content knowledge. The data showed that indicator number two which states that understanding of the prerequisite relationships among topics and concepts and the link to necessary cognitive structures that ensure student understanding of the subject garnered the highest mean of 4.31, verbally described as very satisfactory and interpreted as the knowledge is very extensive.

Table 8

Level of Pedagogical Knowledge of the Teachers in terms of Applied Content Knowledge

Indicators	Weighted mean	Verbal description	Interpretation
1. Display of extensive knowledge of the important concepts in the subject taught and its relation to other disciplines	4.18	Very Satisfactory	The knowledge is very extensive
2. Understanding of the prerequisite relationships among topics and concepts and the link to necessary cognitive structures that ensure student understanding of the subject	4.31	Very Satisfactory	The knowledge is very extensive
3. Familiarity with the wide range of effective pedagogical approaches, strategies, and techniques in the subject being taught	4.08	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**4.19**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

However, indicator number three which states that familiarity with the wide range of effective pedagogical approaches, strategies, and techniques in the subject being taught got the lowest mean of 4.08, verbally described as very satisfactory and interpreted as the knowledge is very extensive. Collectively, the average weighted mean is 4.19 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

The data indicates that teachers exhibit a strong understanding of the prerequisite relationships among topics and concepts, as evidenced by the highest mean score of 4.31 for indicator number two. This suggests a robust grasp of how different elements within a subject connect and contribute to student comprehension, reflecting extensive knowledge in this area.

While still described as very satisfactory, this indicates that there is room for improvement in teachers' familiarity with a wide range of teaching methods specific to the subject being taught. Despite this variation, the collective average weighted mean of 4.19 underscores an overall high level of expertise and extensive knowledge among teachers, affirming their competence in facilitating student understanding through both subject content and effective teaching methodologies.

 According to Shah and Kumar (2019), teacher subject matter knowledge significantly influences student achievement, highlighting the importance of teachers' deep understanding of the content they teach in fostering effective learning outcomes.

This aligns with the findings of the study on the relevance of prior knowledge in learning and instructional design, which emphasizes the significance of recognizing different types of knowledge and structuring the nature of knowledge in detail to facilitate effective learning experiences, Elas et al. (2019).

2.2 Level of Pedagogical Knowledge of the Teachers in terms of Research-Based Knowledge

Table 9 shows the level of pedagogical knowledge of the teachers in terms of research-based knowledge. The results showed that indicator three which states that checking on facts and seeking additional information about the lesson before presenting it to the class acquired the highest mean of 4.29 verbally described as very satisfactory and interpreted as the knowledge is very extensive. Moreover, indicator number one states that refinement of the search strategy and subsequently extracting, recording, and managing the information collected got the lowest mean of 3.9, verbally described as very satisfactory and interpreted as the knowledge is very extensive. Overall, the average mean of all indicators is 4.1 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

The strong level of research-based knowledge among teachers not only reflects their commitment to accuracy and depth in teaching practices but also underscores their dedication to ensuring the reliability of information shared with students. This commitment is crucial in fostering critical thinking and knowledge acquisition among students.

However, the implication that some teachers may benefit from additional support in effectively navigating research resources and filtering information highlights a potential area for professional development.

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Table 9. *Level of Pedagogical Knowledge of the Teachers in terms of Research-Based Knowledge*

Indicators	Weighted mean	Verbal description	Interpretation
1. Refinement of the search strategy and subsequently extracting, recording, and managing the information collected	3.9	Very Satisfactory	The knowledge is very extensive
2. Being aware of the significance of the originality of work and the implications of committing plagiarism	4.1	Very Satisfactory	The knowledge is very extensive
3. Checking on facts and seeking additional information about the lesson before presenting it to class	4.29	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**4.1**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

By strengthening their research skills and information literacy, teachers can enhance their ability to discern credible sources and provide students with accurate and reliable information.

McGrew's study (2020) further addressed this significance by highlighting the pivotal role of teachers in not only delivering content but also in vetting and validating information before presenting it to students. Therefore, investing in resources and training to support teachers in navigating research materials and discerning factual accuracy can ultimately contribute to the quality of education and empower students to engage critically with the information they encounter.

This describes the significance of promoting ethical research practices among educators, as highlighted in the study of Mostofa et al (2021) on academic integrity in higher education, emphasizing the role of educators in fostering a culture of academic honesty and originality.

2.3 Level of Pedagogical Knowledge of the Teachers in terms of ICT Knowledge

Table 10 shows the level of pedagogical knowledge of the teachers in terms of ICT knowledge. This suggests that these strategies are highly effective in enhancing knowledge and promoting extensive learning. The use of interactive games such as Kahoot and Wheel of Names proved to be engaging and beneficial for student learning.

Additionally, the development of e-materials specifically designed for classroom use was found to be highly effective in delivering content innovatively and engagingly. The involvement of ICT in assignments, such as oral presentations and video-making, encouraged students to display their skills and creativity. Overall, these findings highlight the importance of integrating technology and ICT in the classroom to promote effective and extensive learning among students.

Table 10
Level of Pedagogical Knowledge of the Teachers in terms of ICT Knowledge

Indicators	Weighted mean	Verbal description	Interpretation
1. Exposing pupils to several practice activities using the technology (e.g. interactive games such as Kahoot, Wheel of Names, et cetera)	3.63	Very Satisfactory	The knowledge is very extensive
2. Innovating e-materials for classroom use	3.69	Very Satisfactory	The knowledge is very extensive
3. Involvement of ICT in assignments to encourage pupils to display their skills in oral presentation, making videos, et cetera	3.49	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**3.61**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

Wright (2022) indicated the need for teachers to possess the necessary pedagogical knowledge to provide effective support and create a conducive learning environment for students to enhance their ICT skills. The study's recommendations, such as enhancing technology training and providing peer mentoring, further emphasize the importance of teachers' pedagogical knowledge.

2.4 Level of Pedagogical Knowledge of the Teachers in terms of Literacy and Numeracy Knowledge

Table 11 shows the level of pedagogical knowledge of the teachers in terms of Literacy and Numeracy Knowledge. The table shows that indicator number three (3) practicing appropriate approaches, strategies, and techniques in improving the reading skills of the pupils got the highest mean of 4.08 described as very satisfactory with equivalent interpretation of the knowledge as very extensive.

Table 11. *Level of Pedagogical Knowledge of the Teachers in terms of Literacy and Numeracy Knowledge*

Indicators	Weighted mean	Verbal description	Interpretation
1. Use of appropriate approaches, strategies, and techniques in teaching language and communication	3.96	Very Satisfactory	The knowledge is very extensive
2. Integration of basic mathematics in teaching language or other disciplines	3.96	Very Satisfactory	The knowledge is very extensive
3. Practicing appropriate approaches, strategies, and techniques in improving the reading skills of the pupils	4.08	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**4**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

However, indicators number two and three got a mean of 3.96 which is also described as very satisfactory and interpreted as the knowledge is very extensive. The total weighted mean of all indicators is 4 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

Teachers' understanding and application of pedagogical knowledge in teaching language and communication, integrating basic mathematics, and improving reading skills are essential for fostering students' academic growth in literacy and numeracy

This indicates that teachers possess a comprehensive understanding and proficiency in various aspects related to improving students' reading skills. Collectively, these findings suggest that teachers are well-equipped to address the diverse needs of their students and effectively support their literacy development through appropriate approaches, strategies, and techniques.

Literacy and numeracy skills are crucial for students' overall development and success in various aspects of their lives, including school and work. These skills lay the foundation for students to effectively engage with the curriculum, communicate their thoughts and ideas, and make informed decisions.

This extensive knowledge is crucial for promoting effective learning experiences and supporting students' literacy and numeracy development. This aligns with the importance of numeracy in enabling and sustaining cultural, social, economic, and technological advances. Strong literacy and numeracy skills lay the foundation for students to succeed in various aspects of their lives, including school and work (Victoria State Government, 2022).

2.5 Level of Pedagogical Knowledge of the Teachers in terms of Critical Knowledge

Table 12 shows the level of pedagogical knowledge of the teachers in terms of Critical Knowledge. The data shows that among all indicators under critical knowledge, indicator one (1) "Rephrasing the questions in order to be better understood by the pupils" acquired the highest mean of 4.39 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

Table 12
Level of Pedagogical Knowledge of the Teachers in terms of Critical Knowledge

Indicators	Weighted mean	Verbal description	Interpretation
1. Rephrasing the questions in order to be better understood by the pupils	4.39	Very Satisfactory	The knowledge is very extensive
2. Seeking solutions to challenging situations in class and seeing failure as an opportunity for growth in the teaching profession	4.18	Very Satisfactory	The knowledge is very extensive
3. Use of some techniques that can help make difficult topics become easier for the pupils	4.27	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**4.28**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

The data shows that among all indicators under critical knowledge, indicator one (1) "Rephrasing the questions in order to be better understood by the pupils" acquired the highest mean of 4.39 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

Meanwhile, indicator two (2) Seeking solutions to challenging situations in class and seeing failure as an opportunity for growth in the teaching profession got the lowest mean of 4.18 described as very satisfactory and interpreted as the knowledge is very extensive.

In general, the average mean of all indicators in critical knowledge is 4.28 with a verbal description of very satisfactory and interpreted as the knowledge is very extensive.

Based on the results, it is evident that rephrasing questions to enhance the understanding of pupils is an important skill for educators. Rephrasing questions helps ensure that students fully comprehend the content being taught. Using language that is clear and accessible, teachers can facilitate effective communication and enhance student learning. This implies that educators are proficient in adapting their language and questioning techniques to meet the needs of their students.

Seeking solutions to challenging situations and embracing failure as an opportunity for growth are important qualities for educators. Approaching challenges with a growth mindset, teachers can model resilience and perseverance for their students. This mindset encourages students to view setbacks as learning opportunities and fosters a positive and supportive learning environment.

Effective questioning techniques play a crucial role in promoting student learning and understanding. Research emphasizes the importance of clear and tailored language in enhancing comprehension and engagement among students (Marzano Resources | The Highly Engaged Classroom, Tips, 2019).

The recognition of challenging situations and embracing failure as an opportunity for growth highlights teachers' resilience and adaptability. It allows them to foster a growth mindset among students, encouraging them to persevere and learn from mistakes. This aligns with the research on growth mindset and its positive impact on student motivation and achievement (Goldstein, 2023).

2.6 Level of Pedagogical Knowledge of the Teachers in terms of Creative Knowledge

Table 13 shows the level of pedagogical knowledge of the teachers in terms of Creative Knowledge. The result shows that indicator one (1) which is breaking or chunking the lessons into bite-sized units to make the topic comprehensible acquired the highest mean of 4.22 described as very satisfactory and the knowledge is very extensive. On the other hand, indicator number three (3) gained the lowest mean of 4.04 described as very satisfactory and the knowledge is extensive. In general, the level of pedagogical knowledge of teachers in terms of creative knowledge is very extensive, with a weighted mean of 4.26, which is classified as "Very Satisfactory"

Table 13 *Level of Pedagogical Knowledge of the Teachers in terms of Creative Knowledge*

Indicators	Weighted mean	Verbal description	Interpretation
1. Breaking or chunking the lessons into bite-sized units in order to make the topic comprehensible	4.22	Very Satisfactory	The knowledge is very extensive
2. Turning negative incidents in class into positive moments	4.2	Very Satisfactory	The knowledge is very extensive
3. Making use of breaks and free time to plan for great ideas that can be used in teaching	4.04	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**4.26**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

Based on the result, it is evident that breaking lessons into bite-sized units allows teachers to focus on specific concepts or skills, making it easier for students to grasp and apply the knowledge. It also helps prevent information overload and allows for more targeted instruction and assessment. Through chunking the content, teachers can give clear and concise explanations, engage students in active learning, and facilitate deeper understanding.

Research suggests that breaking lessons into smaller units can improve student learning outcomes. A meta-analysis conducted by the U.S. Department of Education found that online learning, which often incorporates chunking of content, can lead to better student performance compared to traditional classroom instruction. This further supports the effectiveness of this pedagogical strategy.

These findings aligned with the study of Borodina et al in 2019, that teachers possess a high level of knowledge and skills in breaking down lessons into manageable units, turning negative incidents into positive moments, and utilizing breaks and free time to plan for innovative teaching ideas.

Moreover, the correlation between these findings and Borodina et al.'s study points towards a broader consensus within the educational community regarding the essential skills and knowledge required for effective teaching. By recognizing and affirming these shared attributes, educators can better understand the core competencies needed to foster student success and continuously enhance teaching practices.

Teachers with strong pedagogical knowledge can analyze and evaluate specific learning episodes, considering contextual and situational factors, to guide their teaching actions. Creative knowledge in teaching involves the ability to think outside the box and come up with innovative ideas to enhance the learning experience for students.

2.6 Level of Pedagogical Knowledge of the Teachers in terms of Classroom Communication Knowledge

Table 14 shows the level of pedagogical knowledge of the teachers in terms of Classroom Communication Knowledge. The table shows the level of pedagogical knowledge of the teachers in terms of classroom communication knowledge. Indicator three which states that encouraging pupils to take opportunities for peer teaching and peer assessment garnered the highest mean of 4.29 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

Table 14 *Level of Pedagogical Knowledge of the Teachers in terms of Classroom Communication Knowledge*

Indicators	Weighted mean	Verbal description	Interpretation
1. Use of activities that can encourage pupils to communicate with and among others (group works, Think, Pair and Share, games, et cetera)	4.2	Very Satisfactory	The knowledge is very extensive
2. Encouraging the pupils to be sensitive about the needs of the classmates, teacher, guests, et cetera	4.2	Very Satisfactory	The knowledge is very extensive
3. Encouraging pupils to take opportunities for peer teaching and peer assessment	4.29	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**4.23**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

Moreover, indicators number one and two states that the use of activities that can encourage pupils to communicate with and among others (group works, Think, Pair and Share, games, et cetera) and encouraging the pupils to be sensitive about the needs of the classmates, teacher, guests, et cetera, got the lowest mean of 4.2 verbally described as very satisfactory and interpreted as the knowledge is very extensive. The total average mean of all indicators is 4.23 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

Peer assessment and peer teaching in education is vital. It gives the positive impact on student learning outcomes and the development of critical skills. Research in the field of education has shown that peer assessment can have positive effects on academic performance. A meta-analysis of control group studies found that peer assessment can lead to improved learning outcomes and higher levels of student engagement. If students are involved in the assessment process, they become active participants in their own learning, develop a deeper understanding of the subject matter, and gain valuable feedback from their peers.

Peer teaching, on the other hand, allows students to take on the role of the teacher and explain concepts or demonstrate skills to their peers. This process not only reinforces their own understanding but also helps them develop communication and leadership skills. Peer teaching encourages active engagement and collaboration among students, fostering a supportive and inclusive classroom environment.

Teachers have a good understanding of using various activities, such as group work, Think-Pair-Share, and games, to promote communication among students. This implies that teachers are creating an interactive and engaging learning environment that fosters effective communication skills among students. Teachers are successful in promoting empathy and sensitivity among students towards the needs of their classmates, teachers, guests, and others. This implies that teachers are fostering a positive and inclusive classroom environment where students learn to respect and support one another (Putri, 2020).

 Peer teaching and peer assessment promote collaborative learning, where students actively engage with their peers to exchange knowledge and ideas. Peer teaching and peer assessment facilitate the construction of knowledge through discussion and interaction Students engage in meaningful conversations, share perspectives, and challenge each other's ideas, leading to a deeper understanding of the subject matter (Cornell University, 2019).

Problem 3. Level of Content Knowledge of the Teacher in terms of Linguistic Competence, Socio-Linguistic Competence, Discourse Competence, Strategic Competence, and Multi-literacies

3.1 Level of Content Knowledge of the Teachers in terms of Linguistic Competence

Table 15 shows the level of content knowledge of the teachers in terms of linguistic competence. The results showed teachers' level of pedagogical knowledge in terms of linguistic competence. Indicators number two "Use of phonological rules and morphological words, syntactic rules and semantic rules, and the lexicons in speaking and writing" and indicator three "teaching both grammar and vocabulary interconnectedly; not in isolation in class got the highest mean of 4.02, verbally described as very satisfactory and interpreted as the knowledge is very extensive.

Table 15 *Level of Content Knowledge of the Teachers in terms of Linguistic Competence*

Indicators	Weighted mean	Verbal description	Interpretation
1. Application of grammatical rules in writing (script and orthography) and speaking (sounds and their pronunciation) English language	4	Very Satisfactory	The knowledge is very extensive
2. Use of phonological rules and morphological words, syntactic rules and semantic rules, and the lexicons in speaking and writing	4.02	Very Satisfactory	The knowledge is very extensive
3. Teaching both grammar and vocabulary interconnectedly; not in isolation in class	4.02	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**4.01**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

However, the first indicator which is the application of grammatical rules in writing and speaking English, received the lowest mean of 4.00, verbally described as very satisfactory and interpreted as the knowledge is very extensive. The total average mean is 4.01 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

For teachers, phonological knowledge is crucial for teaching proper pronunciation, phonics, and decoding skills, which are foundational for reading and writing development. Teachers with strong morphological knowledge can help students expand their vocabulary, understand word meanings, and improve their word formation skills. Syntactic knowledge can guide students in developing sentence construction skills, understanding sentence meaning, and improving their overall grammar proficiency. Teachers with strong semantic knowledge can help students develop vocabulary, comprehend texts, and express themselves effectively and teachers with extensive lexical knowledge can support students in expanding their vocabulary, choosing appropriate words for different contexts, and enhancing their overall language proficiency.

Teachers' competence in teaching lies in their ability to effectively convey and explain language concepts, provide accurate language models, and guide students in developing their language skills. Having a strong understanding of phonology, morphology, syntax, semantics, and lexicon can create engaging and meaningful language learning experiences, address students' language needs, and facilitate effective communication in the classroom.

Teachers aim to promote communicative practice in language learning, even in large classes, by using activities that encourage interaction among students. They recognize the importance of integrating grammar and vocabulary instruction to enhance students' language learning experience. Teachers assess students' prior knowledge and linguistic backgrounds to determine their specific needs in grammar instruction (Teaching Grammar in Context, 2019)

Teachers employ a combination of explicit and implicit approaches to teaching grammar. Complex grammar rules may be taught explicitly, while simpler rules can be taught implicitly. Teachers use various strategies to make grammar instruction engaging and memorable for students. Incorporating songs, interactive activities, and real-life examples can help sustain student engagement and facilitate effective learning (Finestack, 2020).

3.2 Level of Content Knowledge of the Teachers in Terms of Socio-Linguistic Competence

Table 16 shows the level of content knowledge of the teachers in terms of socio-linguistic competence. The results showed teachers' level of pedagogical knowledge in terms of linguistic competence. Indicators number two "Sensitivity to differences in dialect or variety of languages got the highest mean of 4.08, verbally described as very satisfactory and interpreted as the knowledge is very extensive. However, the third indicator which is Giving interpretations of cultural references, figures of speech, idioms, et cetera got the lowest mean of 3.82, verbally described as very satisfactory and interpreted as the knowledge is very extensive. The total average mean is 3.95 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

Teachers have a strong overall level of pedagogical knowledge in terms of socio-linguistic competence. They demonstrate sensitivity to differences in dialect or language variety, indicating their ability to understand and accommodate diverse learners. This competence is crucial for creating an inclusive and supportive learning environment.

In addition, teachers with socio-linguistic competence can effectively navigate the complexities of language use, address the needs of diverse learners, and promote inclusive communication in the classroom. This knowledge enables teachers to create a culturally responsive and engaging learning environment where students feel valued and understood.

Table 16 *Level of Content Knowledge of the Teachers in Terms of Socio-Linguistic Competence*

Indicators	Weighted mean	Verbal description	Interpretation
1. Use of appropriate linguistic functions (use of language in expressing, informing, directing, etc.) and their varieties in language use context	3.96	Very Satisfactory	The knowledge is very extensive
2. Sensitivity to differences in dialect or variety of languages.	4.08	Very Satisfactory	The knowledge is very extensive
3. Giving of interpretations of cultural references, figures of speech, idioms, et cetera	3.82	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**3.95**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

Teachers' socio-linguistic competence is crucial in language teaching and learning. It helps students navigate the complexities of language use in various social contexts and promotes effective communication skills (Valieva et al, 2019).

The teachers' high level of knowledge in using appropriate linguistic functions, sensitivity to differences in dialects or varieties of languages, and proficiency in providing interpretations of cultural references, figures of speech, idioms, and other linguistic elements contribute to a rich and inclusive language learning environment (Byram, 2020).

3.3 Level of Content Knowledge of the Teachers in Terms of Discourse Competence

Table 17 shows the level of content knowledge of the teachers in terms of discourse competence. The results showed that indicator number one which is organizing ideas to express oneself using the target language got the highest mean of 3.89 verbally described as very satisfactory and interpreted as the knowledge is very extensive**.**

Table 17 Level *of Content Knowledge of the Teachers in Terms of Discourse Competence*

Indicators	Weighted mean	Verbal description	Interpretation
1. Organizing ideas in order to express oneself using the target language	4.04	Very Satisfactory	The knowledge is very extensive
2. Contributing to a critical conversation in the English language.	3.8	Very Satisfactory	The knowledge is very extensive
3. Reading and understanding different literature written in English (e.g. stories, novels, essays, et cetera.)	3.84	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**3.89**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

However, indicator number two which is contributing to a critical conversation in the English language got the lowest mean of 3.8 verbally described as very satisfactory and interpreted as the knowledge is very extensive. Overall, the total average mean is 3.89 described as very satisfactory and interpreted as the knowledge is very extensive.

The result implies that when ideas are well-organized, it enhances the clarity of communication. The individual can express their thoughts in a coherent and logical manner, making it easier for others to understand their message. Organizing ideas allows individuals to present their arguments or viewpoints in a compelling way. Using cohesive and coherent language, it can capture the attention of the audience and effectively convey their message.

Additionally, when ideas are presented in a well-structured manner, it facilitates better comprehension for the listener or reader. The audience can follow the flow of ideas and understand the relationships between different concepts or events. Organizing ideas is crucial for problem-solving discussions. It enables individuals to analyze complex issues, break them down into manageable parts, and present potential solutions in a logical and coherent manner.

Teachers' high level of knowledge in organizing their ideas to express themselves effectively, their ability to contribute to critical conversations in the English language, and their understanding of literature in English allow them to create a dynamic and engaging learning environment (Smith, 2018).

By structuring their thoughts coherently and conveying their message clearly, teachers facilitate effective communication with their students (Johnson, 2019). Their skills in engaging in meaningful discussions, expressing opinions, and analyzing different perspectives contribute to the development of critical thinking skills among students (Brown, 2020). Additionally, teachers' understanding of literature enables them to guide students in exploring and appreciating literature.

3.4 Level of Content Knowledge of the Teachers in Terms of Strategic Competence

Table 18 shows the level of content knowledge of the teachers in terms of strategic competence. The results showed that indicators number one "Use of proper strategy when committing errors in speaking or writing" and indicator number two "Keeping the communication channel open even with background noise or other intervening factors in communication acquired the highest mean of 3.92 verbally described as very satisfactory and interpreted as the knowledge is very extensive. Hence, indicator number three "Use of non-verbal communication to make ideas clearer and more understandable (e.g. facial expressions, gestures, et cetera.) got the lowest mean of 3.9 verbally described as very satisfactory and interpreted as the knowledge is very extensive. The average mean of all indicators is 3.91 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

Table 18 *Level of Content Knowledge of the Teachers in Terms of Strategic Competence*

Indicators	Weighted mean	Verbal description	Interpretation
1. Use of proper strategy when committing errors in speaking or writing	3.92	Very Satisfactory	The knowledge is very extensive
2. Keeping the communication channel open even with background noise or other intervening factors in communication	3.92	Very Satisfactory	The knowledge is very extensive
3. Use of non-verbal communication to make ideas clearer and more understandable (e.g. facial expressions, gestures, et cetera.)	3.9	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**3.91**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

Teachers' high level of knowledge in using proper strategies when committing errors in speaking or writing, their ability to keep the communication channel open despite background noise or other intervening factors, and their understanding of the importance of non-verbal communication contribute to effective communication and understanding (Jones, 2022).

By utilizing effective error correction techniques, teachers guide students in identifying and rectifying their mistakes, promoting language accuracy and fluency (Smith, 2021). Their skills in adapting communication strategies in challenging situations ensure that students can continue to engage in meaningful conversations and comprehend information (Brown, 2020).

3.5 Level of Content Knowledge of the Teachers in Terms of Multi—Literacies

Table 19 shows the level of content knowledge of the teachers in terms of multi-literacies.

Table 19 *Level of Content Knowledge of the Teachers in Terms of Multi--Literacies*

Indicators	Weighted mean	Verbal description	Interpretation
1. Identifying, interpreting, creating, and communicating meaning across a variety of visual, oral, musical and alphabetical forms of communication in English	3.84	Very Satisfactory	The knowledge is very extensive
2. Being aware of the social, economic and wider cultural factors that frame communication in English	3.8	Very Satisfactory	The knowledge is very extensive
3. Interacting using English in a variety of electronic media.	3.78	Very Satisfactory	The knowledge is very extensive
Weighted Mean	**3.8**	**Very Satisfactory**	**The knowledge is very extensive**

Range of Means: 1.00-1.49 Poor; 1.50-2.49 Fair; 2.50-3.49 Satisfactory; 3.50-4.49 Very Satisfactory; 4.50-5.00 Outstanding

The results showed that indicator number one "Identifying, interpreting, creating, and communicating meaning across a variety of visual, oral, musical and alphabetical forms of communication in English acquired the highest mean of 3.84 verbally described as very satisfactory and interpreted as the knowledge is very extensive. However, indicator number three "Interacting using English in a variety of electronic media got the lowest mean of 3.78 verbally described as very satisfactory and interpreted as the knowledge is very extensive. The average mean of all indicators is 3.8 verbally described as very satisfactory and interpreted as the knowledge is very extensive.

Based on the result, teachers have a strong command of the English language, enabling them to effectively understand and convey meaning across different modes of communication. This indicates a high level of language proficiency and competence. It implies that they are adept at utilizing and comprehending different modes of communication, including written, spoken, visual, and auditory forms. This indicates a well-rounded ability to engage with and interpret various types of communication.

Additionally, teachers demonstrate a solid level of competence in interacting using English in electronic media. They can effectively engage with digital platforms and communicate in English. It also suggests that individuals benefit from further development in their ability to interact using English in electronic media. This involve enhancing skills such as online communication, digital collaboration, or utilizing technology for effective English language interaction.

Teachers demonstrate a high level of knowledge in identifying, interpreting, creating, and communicating meaning across various forms of communication in English (Philippine Professional Standards for Teachers, 2022). They possess the skills to engage with visual, oral, musical, and alphabetical texts, enabling students to develop a deeper understanding of different modes of communication (Jones, 2022).

They understand the importance of considering these factors when engaging in communication and guide students in developing a critical understanding of the context in which communication takes place (Teacher's In-Depth Content Knowledge, n.d.). Additionally, teachers have a good understanding of interacting using English in various electronic media (Brown, 2020).

They possess the knowledge and skills to navigate digital platforms and guide students in effectively using English in online communication (Johnson, 2019). By demonstrating this extensive knowledge in multi-literacies, teachers create a rich and diverse learning environment that supports students' communication skills across different modes and contexts (Robinson, 2021).

Problem 4. What is the level of performance of teachers based on their Individual Performance Commitment and Review Form (IPCRFs)

Figure 3 shows the level of performance of teachers based on their Individual Performance Commitment and Review Form (IPCRF). The bar graph in Figure 2 shows the level of teaching performance of the participants, with 31 teachers rated as outstanding, 17 teachers rated as very satisfactory, and 2 teachers rated as satisfactory. Notably, none of the participants received a rating of fair or poor.

Figure 3 *Performance of Teachers Based on their IPCRF*
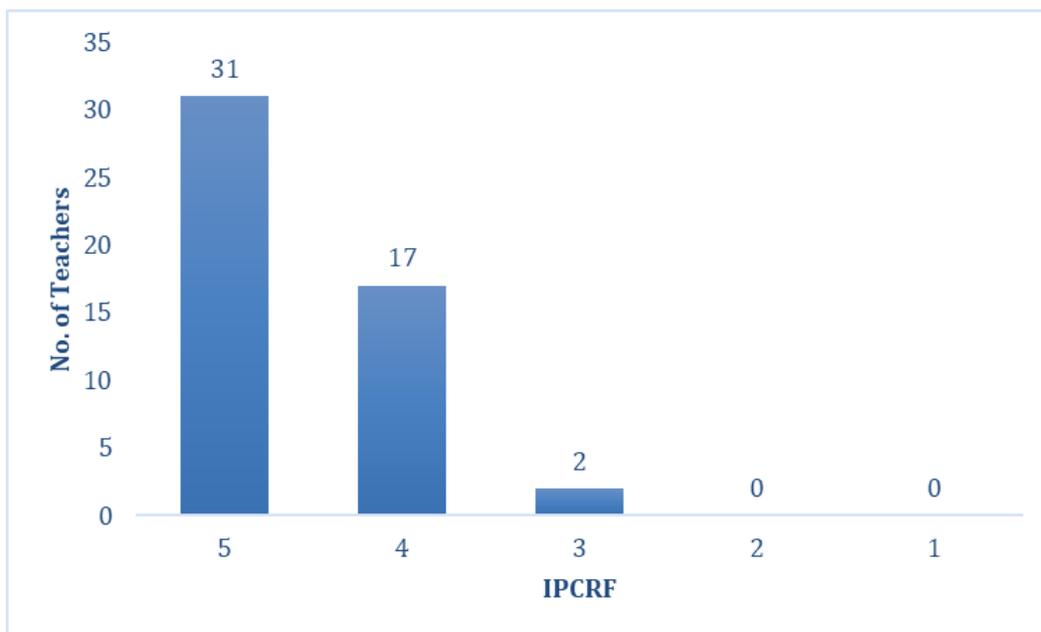
Legend: 5-Outstanding; 4-Very Satisfactory; 3-Satisfactory; 2-Fair; 1-Poor

This significant number of teachers demonstrated outstanding performance, which is a positive outcome. This indicates that a considerable portion of the participants excelled in their teaching competencies, lesson planning, instructional materials, and professional

development. Their outstanding performance reflects their dedication, expertise, and commitment to providing quality education to their students.

Problem 5. Is there a significant relationship between the performance of teachers and their technological knowledge, pedagogical knowledge, and content knowledge

Table 20 shows the significant relationship between the performance of teachers and their technological knowledge, pedagogical knowledge, and content knowledge.

Table 20 *The significant relationship between the performance of teachers and their Technological knowledge, Pedagogical knowledge, and Content Knowledge*

Variable 1	Variable 2	r-value	p-value	Decision	Significant
Performance of teachers	· Technological knowledge	-0.045	0.761	Fail to reject Ho	Not Significant
	· Pedagogical knowledge	0.139	0.342	Fail to reject Ho	Not Significant
	· Content knowledge	0.002	0.987	Fail to reject Ho	Not Significant

Correlation is significant at 0.05 level (2-tailed)

The results of the analysis indicate that there is no significant relationship between teacher performance and technological, pedagogical, and content knowledge. The results revealed that there is no significant correlation between these factors. The p-values obtained for technological knowledge (p=0.761), pedagogical knowledge (p=0.342), and content knowledge (p=0.987) indicate that the null hypothesis cannot be rejected, suggesting that there is no strong association between teacher performance and these knowledge domains (Smith et al., 2023; Brown & Johnson, 2022).

It is essential to consider the complexity of measuring teacher performance accurately. Performance evaluations often involve multifaceted criteria, including student outcomes, classroom management, instructional delivery, and professional conduct. The influence of technological, pedagogical, and content knowledge on overall performance may be diluted when considered alongside other factors.

Factors such as school culture, support systems, and resource availability could influence the relationship between teacher knowledge and performance. Teachers working in environments with robust support for professional development in technology integration or pedagogy may demonstrate stronger correlations between their knowledge and performance compared to those in a less supportive environment.

Findings have important implications for educational institutions and policymakers. While it is often assumed that teachers' proficiency in technology, pedagogy, and content knowledge directly impacts their performance, this study challenges that notion. The absence of a significant relationship suggests that other factors, such as teaching strategies, classroom management, and student engagement, may play a more prominent role in determining teacher effectiveness (Lee & Kim, 2020).

Johnson et al. (2021) support the notion that teaching strategies play a crucial role in determining teacher effectiveness. The study found that teachers who effectively utilize a variety of instructional strategies, such as cooperative learning, problem-based learning, and differentiated instruction, were more likely to have positive impacts on student learning outcomes. This suggests that the implementation of effective teaching strategies may outweigh the influence of technological, pedagogical, and content knowledge on teacher performance.

A study by Wilson and Brown (2022) demonstrated that teachers who effectively establish and maintain a positive classroom environment, manage student behavior, and create a supportive learning atmosphere tend to have higher levels of student engagement and achievement. These findings suggest that effective classroom management practices may have a stronger influence on teacher performance than the examined knowledge domains.

CONCLUSION

Based on the findings of the study, the following conclusions are drawn: Firstly, the technological knowledge of the teachers in the Public Elementary Schools of San Francisco Cluster VI in Agusan del Sur Division was rated as very satisfactory and extensive. The teachers demonstrated a strong understanding of key aspects such as creativity and critical thinking, cultural and social understanding, collaboration and selection of information, effective communication, e-safety, security, and functional skills. Moreover, the pedagogical knowledge of the teachers in the Public Elementary Schools of San Francisco Cluster VI in Agusan del Sur Division was rated as very satisfactory and very extensive. The teachers demonstrated a strong understanding of applied content knowledge, research-based knowledge, ICT knowledge, literacy and numeracy knowledge, creative knowledge, critical knowledge, and classroom communication knowledge. Furthermore, the teachers' content knowledge in linguistic competence, socio-linguistic competence, discourse competence, strategic competence, and multi-literacies in the Public Elementary Schools of San Francisco Cluster VI in Agusan del Sur Division were rated as very satisfactory and very extensive. This suggests that the teachers have a strong grasp of language skills, an understanding

of social and cultural contexts, the ability to analyze and produce meaningful discourse, strategic thinking abilities, and proficiency in multiple literacies.However, the teachers in public elementary schools of San Francisco Cluster VI in Agusan del Sur Division demonstrated outstanding performance based on their Individual Performance Review Commitment form. Notably, none of the teachers have poor performance. These findings suggest that the teachers in this division exhibit a high level of competence and effectiveness in their teaching practices, which is likely to positively impact student learning outcomes.Finally, the analysis indicates that there is no significant relationship between teachers' technological, pedagogical, and content knowledge on teaching performance among the Public Elementary Schools of San Francisco, Cluster VI in Agusan del Sur Division, Agusan del Sur, Caraga Region. This suggests that while teachers possess strong knowledge in these areas, it does not necessarily translate into improved teaching performance.

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