

Remote Instructional Delivery Competencies in Elementary Public Schools: A Tpack-Oriented Enhancement Plan

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1. The Problem and Its Scope

Introduction

Rationale of the Study

The emergence of the COVID-19 pandemic in early 2020 caused widespread disruption in education, leading to school closures in over 190 countries and affecting more than 1.6 billion learners globally (UNESCO, 2021). This abrupt transition to remote learning exposed significant inequalities in teacher readiness and access to professional development opportunities. Studies by the OECD (2022) and the World Bank (2023) indicated that fewer than half of educators in low- and middle-income nations had prior experience with digital or modular teaching methods, resulting in notable challenges in maintaining instructional quality. Research showed that successful remote teaching relied heavily on teachers' professional skills, nurtured through ongoing professional development, rather than solely on technological resources. According to UNESCO (2022), countries that implemented comprehensive training programs that combined pedagogy, technology, and assessment strategies were more successful in sustaining learning continuity and promoting student engagement.

Within Southeast Asia, countries including Indonesia, Malaysia, and Thailand encountered similar educational disruptions but demonstrated varying levels of institutional readiness. Reports by the Asian Development Bank (2022) and SEAMEO INNOTECH (2023) emphasized that teacher training and professional readiness were critical determinants of successful learning continuity. Nations with robust teacher training systems, such as Singapore, adapted more efficiently to blended learning approaches, while others struggled due to limited pedagogical preparation and underdeveloped digital competency frameworks.

In the Philippines, the ASEAN regional education monitoring report (SEAMEO, 2023) positioned the country below the ASEAN average for teacher preparedness in remote instruction, particularly in rural and island communities. Although DepEd's Learning Delivery Modalities (LDM) courses represented one of the largest teacher capacity-building programs in the region, district-level evaluations of their

implementation and impact remained limited. This highlighted the necessity of assessing how professional development and teaching experience translated into practical instructional delivery, particularly in geographically isolated areas like Bohol.

The Department of Education (DepEd) launched the Basic Education Learning Continuity Plan (BE-LCP) and, through the National Educators Academy of the Philippines (NEAP), offered Learning Delivery Modality (LDM) courses to prepare teachers for various flexible learning approaches (DepEd, 2020b). By 2022, data indicated that more than 94% of public school educators had completed at least one LDM training module (DepEd, 2022a). Despite this high completion rate, research conducted by RSIS International (2022) and the Philippine Institute for Development Studies (PIDS, 2023) found that only 58% of teachers regularly applied the LDM skills in their instructional practices, revealing a disconnect between training participation and actual classroom implementation.

While prior teaching experience had often been linked to instructional competence, limited research in the Philippine context examined its relevance to remote teaching, where traditional classroom expertise did not always translate to digital or modular modalities. Existing studies (e.g., Saro & Villamero, 2023) primarily focused on general student satisfaction rather than measurable remote instructional outcomes. Consequently, there remained a lack of empirical evidence evaluating how professional training and teaching experience interacted to affect teachers' performance in remote learning environments under DepEd's post-pandemic blended learning framework.

In Carmen 2 District, SDO Bohol, the primary mode of remote instruction had been Modular Distance Learning (MDL) using printed materials, necessitated by limited internet connectivity and ICT infrastructure (RDC Region VII, 2022). Teachers not only delivered lessons but also handled module reproduction, distribution, and feedback management—responsibilities that extended beyond conventional classroom roles. District reports (SDO Bohol, 2023) indicated that although 87% of elementary teachers completed NEAP-accredited professional development, only 46% felt confident designing and managing remote instruction independently. Variations in teaching experience appeared to influence teachers' adaptability, confidence, and instructional strategies, implying that experience may have moderated the effect of professional training on instructional quality.

This situation provided a valuable context for examining how professional development and teaching experience interacted to shape effective remote instructional practices. With DepEd Order No. 009 s. 2024 formalizing the use of remote and blended learning modalities during class suspensions, these skills became an essential professional expectation for teachers. While international and national research highlighted the importance of professional development for remote learning, there remained a shortage of localized, evidence-based studies that explored how targeted training and teaching experience together affected instructional effectiveness in rural Philippine schools.

In response, this study aimed to fill this research gap by investigating the impact of professional training and teaching experience on the remote instructional delivery practices of elementary school teachers in Carmen 2 District, SDO Bohol. The results were intended to guide improvements in NEAP training programs, enhance local teacher capacity-building efforts, and support DepEd's ongoing implementation of blended learning across varied educational contexts.

Theoretical Background

This study was guided by three interrelated theoretical frameworks—Technological Pedagogical Content Knowledge (TPACK), Bandura’s Social Cognitive Theory (SCT), and Kolb’s Experiential Learning Theory (ELT)—which together offered a comprehensive understanding of how professional development and teaching experience shaped Remote Instructional Delivery (RID) practices among elementary school teachers in Carmen 2 District, SDO Bohol.

The TPACK framework provided the foundational lens for examining RID practices. As described by Mishra and Koehler (as cited in DLSU, 2021), TPACK emphasized the integration of content knowledge, pedagogical strategies, and technology as critical for effective teaching. In the context of Carmen 2 District, where internet connectivity was often limited and educators frequently utilized printed learning modules, the concept of “technology” extended to both digital and traditional instructional tools. Effective remote teaching therefore involved aligning subject matter with appropriate teaching strategies and available delivery methods to maintain learning continuity. TPACK identified the essential competencies that teachers required to design, implement, and assess instruction successfully, even in settings with constrained resources.

Bandura’s Social Cognitive Theory (1977) illuminated how professional development enhanced teaching effectiveness by focusing on self-efficacy—the belief in one’s capacity to accomplish specific tasks. Training initiatives such as DepEd’s Learning Delivery Modality (LDM) courses strengthened teachers’ confidence through structured instruction, collaborative reflection, and hands-on practice (NEAP, 2020). Educators with higher self-efficacy demonstrated greater motivation, adaptability, and persistence, which supported effective instruction even under resource limitations. SCT therefore underscored the importance of well-structured professional development in improving teacher competence and, consequently, the quality of remote instruction.

Kolb’s Experiential Learning Theory (1984) highlighted the role of teaching experience in achieving effective remote instruction. ELT conceptualized learning as an ongoing cycle of concrete experience, reflective observation, abstract conceptualization, and active experimentation (Simply Psychology, 2024). Teachers leveraged their accumulated classroom experience to evaluate previous challenges, generate new strategies, and implement them in diverse instructional contexts. This iterative process enabled educators to adapt conventional teaching methods for modular, blended, or online learning environments, thereby enhancing instructional quality and student engagement.

Together, these frameworks provided a comprehensive foundation for the study: TPACK identified the skills necessary for effective remote teaching, SCT explained how professional development built teacher self-efficacy and instructional capability, and ELT demonstrated how experience nurtured adaptive and innovative teaching practices. Collectively, they offered a strong theoretical basis for exploring how professional development and teaching experience influenced the effectiveness of remote instructional delivery among elementary teachers in Carmen 2 District, SDO Bohol.

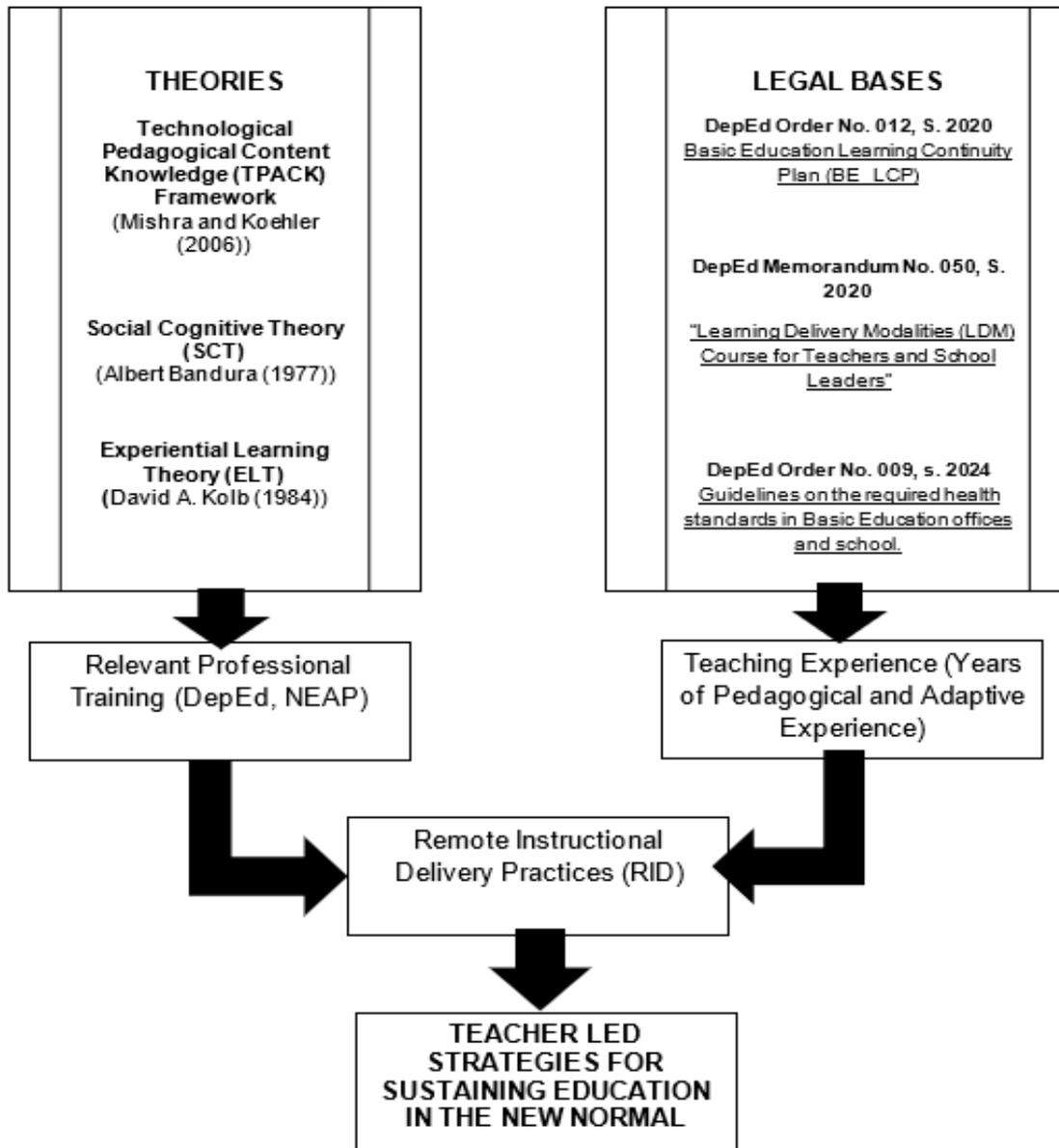


Figure 1.

Theoretical Background for the Influence of Teacher Attributes on Remote Instructional Delivery

The study’s theoretical framework integrated the TPACK, Social Cognitive Theory (SCT), and Experiential Learning Theory (ELT) to explain how teacher attributes influenced Remote Instructional Delivery (RID) in Carmen 2 District, Bohol. TPACK emphasized the integration of content knowledge, pedagogy, and technology, where technology included both digital tools and traditional learning resources such as printed modules. Professional development programs, such as DepEd’s Learning Delivery Modality (LDM) courses, enhanced teachers’ ability to plan lessons, engage students, and assess learning effectively across various modalities. SCT complemented this by highlighting the role of self-efficacy, showing that structured training, peer collaboration, and scaffolded support boosted teachers’ confidence in managing technology, engaging learners, and maintaining instructional quality, while collective

efficacy strengthened overall school performance. ELT emphasized experiential learning, demonstrating that teaching experience allowed educators to adapt lessons, assessments, and strategies to meet diverse student needs, even in resource-constrained settings.

The framework was reinforced by national DepEd policies that promoted learning continuity and professional growth. DepEd Order No. 012, s. 2020 (BE-LCP) mandated flexible delivery strategies during emergencies, while DepEd Memorandum No. 050, s. 2020 formalized structured LDM professional development. DepEd Order No. 009, s. 2024 (BLDM) provided guidelines for blended and remote learning as alternative modalities. Together, these policies and theories underscored the importance of continuous professional development, teaching experience, and adaptive instructional practices in ensuring effective remote and blended learning, offering a comprehensive basis for strengthening teacher readiness and sustaining educational quality in the district.

THE PROBLEM

Statement of the Problem

This study aimed to assess the Remote Instructional Delivery (RID) competencies of teachers in the public elementary schools in Carmen 2 District, Schools Division of Bohol, during School Year 2024–2025 toward the development of an enhancement plan.

Specifically, the study sought to answer the following questions:

1. **What was the profile of the elementary school teacher-respondents in terms of:**
 - a. age
 - b. gender
 - c. educational attainment
 - d. length of teaching experience
 - e. relevant professional training attended
2. **What was the extent of utilization of remote instructional delivery (RID) by the teachers?**
3. **What was the level of RID practices of the elementary school teachers based on the TPACK framework components in terms of:**
 - a. Content Knowledge (CK)
 - b. Pedagogical Knowledge (PK)
 - c. Technological Knowledge (TK)
4. **What was the influence of relevant professional training on the remote instructional delivery (RID) competencies of the teachers?**
5. **Based on the findings, what enhancement plan for remote instructional delivery implementation could be recommended?**

Significance of the Study

This study was significant as it provided essential data to guide the improvement of faculty development programs and supported teachers in enhancing their remote instructional delivery practices. Specifically, it aimed to benefit the following stakeholders:

Department of Education (DepEd). The findings enabled DepEd to better understand the professional development needs of elementary school teachers in remote teaching, helping the department implement effective programs that strengthened instructional quality in the new normal of education.

District Supervisors. The study guided district supervisors in providing focused support to teachers, particularly in addressing challenges related to technological proficiency, pedagogical strategies, and content delivery in blended and remote learning environments.

School Principals. The findings assisted school administrators in designing targeted faculty development initiatives, promoting collaborative work environments, and facilitating workshops or training sessions to enhance teachers' competencies in remote teaching.

Teachers. The research helped teachers identify areas of improvement in their instructional delivery, particularly in integrating technology, pedagogy, and content knowledge effectively. It also raised awareness about maintaining professional growth, adapting to blended learning modalities, and improving student engagement in remote settings.

Students. The study indirectly benefited students by ensuring that teachers were better equipped to deliver high-quality remote instruction, fostering improved learning outcomes and engagement across different learning modalities.

The Researcher. This study helped the researcher gain deeper insights into the factors that influenced the quality of remote teaching practices and served as a foundation for recommending practical strategies to enhance teacher competencies in Carmen 2 District.

Future Researchers. The results of this study served as a reference for future research on remote teaching, professional development, and blended learning practices, providing a basis for continuous improvement in instructional strategies and educational outcomes.

Research Methodology

This chapter presented the research methodology, including the study's design, procedural steps, research setting, participant profile, data collection instruments, methods for gathering information, statistical analysis techniques, scoring criteria, and definitions of key operational terms.

Design

The study employed a descriptive-correlational research design. A quantitative approach was used to investigate how relevant professional training and teaching experience affected the remote instructional delivery (RID) practices of elementary school teachers in the Carmen 2 District, Schools Division Office (SDO), Bohol. Structured questionnaires served as the primary instrument for data collection. This design was appropriate for describing the relationships among variables—specifically, professional training, teaching experience, and remote teaching practices—without implying direct causation.

Flow of the Study

This research followed the Input-Process-Output (IPO) framework as its guiding structure:

Input: This stage focused on collecting detailed information about the participating elementary teachers. Data included demographic and professional characteristics such as age, gender, educational background, years of teaching experience, and participation in relevant professional development programs. Information regarding teachers’ experiences with remote instruction, their adaptation to the Blended Learning Delivery Modality (BLDM), encountered challenges, and application of technological, pedagogical, and content knowledge—as conceptualized by the TPACK framework—was also documented.

Process: This phase involved the distribution and completion of questionnaires, followed by the collection, consolidation, and statistical analysis of responses. Analytical methods were employed to examine the relationships among professional training, teaching experience, and the effectiveness of remote instruction. Collaboration with school administrators and the Carmen 2 District SDO, including the issuance of transmittal letters, also took place during this stage.

Output: The study generated a Faculty Development Plan aimed at strengthening elementary teachers’ capabilities in delivering effective remote instruction within the Carmen 2 District, SDO Bohol.

Figure 1 on the following page illustrated the study’s flow based on the IPO framework.

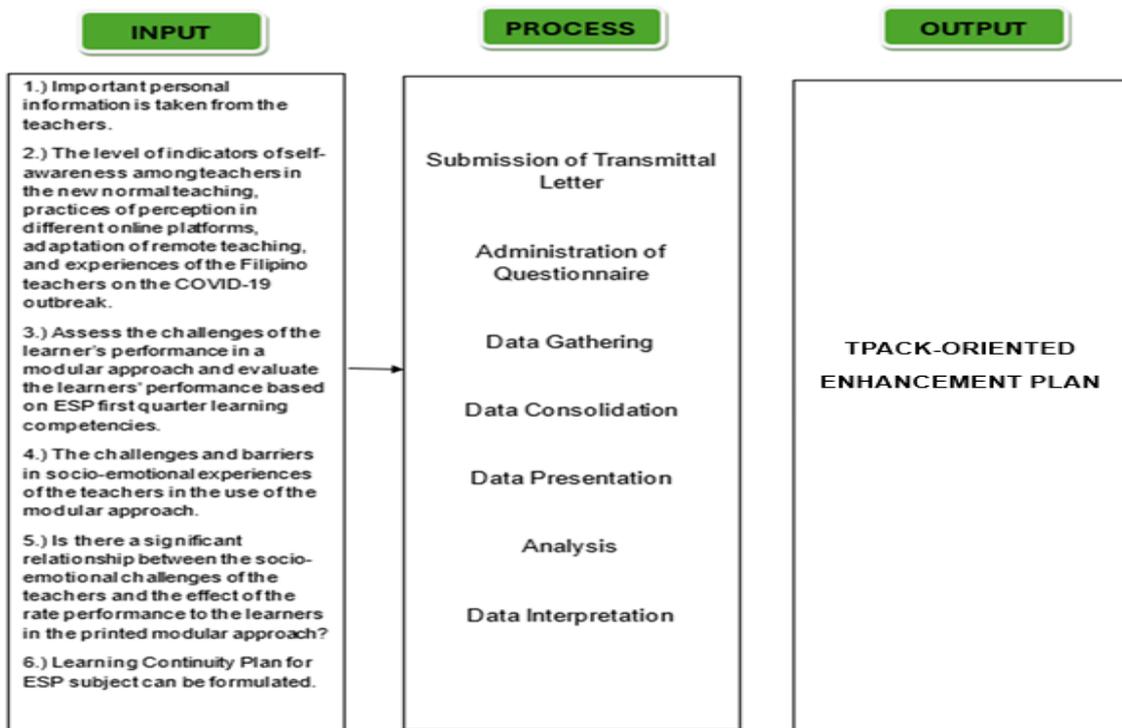


Figure 2 Flow of the Study



Figure 3. Location Map of the Study

Respondents

The respondents of this study were composed of 100 elementary school teachers from Carmen 2 District, Schools Division Office (SDO), Bohol, all of whom had engaged in remote or blended instructional delivery during the academic years 2020–2025 and had participated in relevant professional development or Learning Delivery Modality (LDM) training programs. These teachers were identified as suitable participants because they possessed first-hand experience and practical knowledge regarding the challenges, strategies, and effectiveness of remote and blended learning modalities implemented in the district.

The study utilized purposive sampling, a non-probability sampling technique wherein participants were intentionally selected based on specific criteria that aligned with the research objectives (Etikan, Musa, & Alkassim, 2016). The inclusion criteria for respondent selection included: (1) currently holding an active teaching position at the elementary level (Kindergarten to Grade 6), (2) having experience in remote or blended instruction within the specified period, and (3) completion of at least one professional training related to instructional technologies or the LDM courses.

This sampling approach ensured that all participants were directly involved in and knowledgeable about the study’s central focus—remote instructional delivery practices—thereby enhancing the credibility and relevance of the data collected. The 100 respondents were drawn from the five elementary schools in the district, with the distribution proportionally reflecting the teacher population of each school. Such distribution ensured adequate representation of teaching contexts within the district and supported a balanced interpretation of findings across varied instructional settings.

The total number of respondents was 100 elementary school teachers, distributed across the five schools in Carmen 2 District, as shown in Table 1. The distribution reflected the approximate population size of teachers in each school and ensured representativeness within the district, while remaining manageable for data collection and analysis.

Table 1

Distribution of Respondents

School	Respondents (f)	Percentage (%)
Buenos Aires Elementary School	20	20%

Nueva Vida Este Elementary School	20	20%
La Paz Elementary School	25	25%
Montevideo Elementary School	20	20%
Montesunting Elementary School	15	15%
TOTAL	100	100%

This sampling strategy aligned with best practices in educational research, where purposive sampling was used to target a specific subgroup of participants who possessed relevant experience related to the study’s research problem (Creswell & Creswell, 2018). The sample size of 100 respondents was sufficient to allow meaningful statistical analysis, including correlation and regression, while maintaining feasibility for data collection within the timeframe of the study.

Instruments

This study employed a structured questionnaire designed to gather both quantitative and qualitative data on how professional development and teaching experience affected remote instructional delivery (RID) practices among elementary teachers in Carmen 2 District, SDO Bohol. The questionnaire consisted of four sections. The first section collected demographic and professional information, such as age, gender, educational background, teaching assignment, years of service, employment status, and professional development participation. The second section assessed RID practices using the TPACK framework (Mishra & Koehler, 2006), covering Content Knowledge (CK), Pedagogical Knowledge (PK), and Technological Pedagogical Content Knowledge (TPACK), rated on a five-point Likert scale from “Not Competent at All” to “Extremely Competent.” The third section examined challenges in implementing the Blended Learning Delivery Modality (BLDM), including technological, pedagogical, and institutional barriers, rated by frequency from “Never Experienced” to “Always Experienced.” The final section featured open-ended questions for teachers to share experiences and suggestions for improving RID and professional development.

The questionnaire was validated against TPACK principles and existing remote learning instruments and was reviewed by experts for clarity and relevance. Data were analyzed using descriptive statistics, correlation, and regression to determine how professional training and teaching experience influenced RID, supporting the design of a Faculty Development Plan to enhance teaching effectiveness.

Data Gathering Procedure

The study began by submitting a transmittal letter to the Carmen 2 District SDO to obtain approval. Upon approval, the structured questionnaire was distributed to elementary school teachers via online platforms such as Gmail and Facebook Messenger, with respondents given 10–30 minutes to complete it. Collected data were compiled and analyzed with the guidance of the research adviser and a statistician. Analysis included simple percentages to describe teacher demographics and professional development

participation, weighted means to evaluate remote instructional delivery (RID) practices across Content Knowledge (CK), Pedagogical Knowledge (PK), and TPACK, and Pearson r correlation to determine the relationship between teachers’ professional training, teaching experience, and the quality of RID practices.

Scale for Likert Responses

Scale	Numerical Rating	Descriptive Rating	Verbal Interpretation
5	4.34 – 5.00	Extremely Competent	Respondents were highly competent in the given RID practice indicator.
4	3.34 – 4.33	Moderately Competent	Respondents were moderately competent in the given RID practice indicator.
3	2.34 – 3.33	Somewhat Competent	Respondents were somewhat competent in the given RID practice indicator.
2	1.34 – 2.33	Slightly Competent	Respondents were slightly competent in the given RID practice indicator.
1	1.00 – 1.33	Not Competent	Respondents were not competent in the given RID practice indicator.

DEFINITION OF TERMS

The following terms were defined as they were used in this study:

Action Plan: Referred to the set of improvement objectives established by a school, along with detailed strategies aimed at enhancing student outcomes or increasing graduation rates.

Adaptive Learning: A teaching approach that tailored learning experiences to individual student needs through personalized feedback, learning paths, and resources, rather than using uniform instruction.

Adaptive Learning in Remote Teaching: The application of adaptive learning strategies in the context of distance education, evaluated using a 3-point Likert scale.

Coping Mechanism and Emotional Safety: The extent to which teachers recognized and managed challenges associated with distance teaching, measured via a 3-point Likert scale.

Civil Status: The marital condition of respondents, such as single, married, widowed, or separated.

Dialogue: Interactive communication that went beyond simple exchanges, emphasizing cooperation, mutual understanding, and collaborative problem-solving to support learners’ needs.

Distance Learning Modalities: Instructional methods in which teachers and students were physically separated, requiring technology or alternative communication channels to facilitate learning.

Gender: The classification of teachers as male or female.

Learner Autonomy: The degree to which learners felt self-directed and independent in their studies, influenced by course structure, teacher interaction, and the level of control over learning activities.

Highest Educational Attainment: The most advanced academic qualification a teacher had earned, such as a Bachelor's, Master's, or Doctoral degree.

Isolation: The act of separating individuals who had contracted COVID-19 to prevent transmission.

Learning Continuity Plan (LCP): A framework developed in this study to support teachers' socio-emotional well-being and to monitor student performance during remote instruction.

Learning Opportunity: External conditions that affected the implementation of distance learning methods, assessed using a 3-point Likert scale.

Modular Learning: A teaching method in which printed modules or manuals were provided to students for self-directed study at home.

Online Learning: Education delivered through digital modules, whether in live online classes or through offline self-paced learning.

Pandemic: A widespread outbreak of a disease across countries or continents affecting large populations.

Profile of the Teachers: The demographic and professional characteristics of teachers, including gender, civil status, educational level, teaching experience, and participation in training activities.

Psychosocial: The interaction of social factors with an individual's psychological functioning and behavior.

Quarantine: A precautionary period of limiting contact with others following potential exposure to COVID-19, to observe for symptoms.

Relevant Seminars and Trainings: Workshops, courses, or educational programs designed to enhance teachers' knowledge, skills, and teaching competencies.

Remote Teaching: Instruction conducted when teachers and learners were not physically co-located, utilizing tools such as video conferencing, discussion boards, and virtual assessments.

Social Distancing: Maintaining a physical space of approximately six feet between individuals and avoiding crowded areas to minimize virus transmission.

2. Presentation of Data, Analysis and Interpretation

This chapter presented a detailed presentation of the data collected from the study’s participants, along with corresponding analysis and interpretations. The respondents consisted of one hundred (100) elementary school teachers from five (5) public elementary schools under the Carmen 2 District, Schools Division Office (SDO), Bohol. The primary objective of the study was to examine how relevant professional training and teaching experience affected teachers’ practices in remote instructional delivery (RID).

Relevant Information of the Respondent Groups

The first section focused on the demographic and professional characteristics of the teacher-respondents. This included information on their age, gender, highest educational attainment, total years of teaching experience, and the number of professional training hours they had completed.

Teachers’ Profile

This portion outlined the individual attributes of the respondents, highlighting key aspects such as age, gender, educational qualifications, teaching tenure, and participation in relevant professional development programs. These factors provided a context for understanding how professional training and teaching experience influenced the effectiveness of remote instructional delivery practices.

Table 2
Gender of the Respondents

Gender	Frequency (n=100)	Percentage (%)
Male	8	8
Female	92	92
Total	100	100

Table 2. Gender of the Respondents showed that the majority of the participants were female, comprising 92% of the total respondents, while male teachers accounted for only 8%. This distribution indicated that elementary education in the sampled schools had been predominantly female, reflecting the societal perception of teaching as a nurturing profession aligned with qualities traditionally associated with women. The marked gender imbalance underscored the need for promoting inclusivity and gender sensitivity within schools, ensuring that both male and female educators were equally supported and valued in their teaching roles.

Table 3. Age of the Respondents

Age	Frequency (n=100)	Percentage (%)
21–30 years old	22	22
31–40 years old	33	33
41 years old and above	45	45
Total	100	100

The data showed that the largest group of teacher-respondents were aged 41 years old and above, comprising 45% of the total population. Meanwhile, 33% were between 31 to 40 years old, and 22% were within the 21 to 30 years age bracket. This indicated that most of the respondents were seasoned teachers with long teaching experience, suggesting a strong foundation in instructional delivery practices. However, the presence of younger teachers signified a blend of traditional and modern teaching approaches within the district.

Table 4. Highest Educational Attainment

Educational Attainment	Frequency (n=100)	Percentage (%)
Doctorate Degree	2	2
With Units in Doctorate	8	8
Master’s Degree	18	18
With Units in Master’s	50	50
Bachelor’s Degree	22	22
Total	100	100

The majority of the teacher-respondents, or 50%, had earned units in a Master’s Degree, while 18% had completed their Master’s Degree. Twenty-two percent (22%) were bachelor’s degree holders, and 10% had pursued doctorate studies. This indicated that most teachers in Carmen 2 District had pursued higher education to enhance their professional competencies, demonstrating commitment to lifelong learning and readiness for more advanced instructional roles.

Table 5. Length of Teaching Experience

Length of Service	Frequency (n=100)	Percentage (%)
1–3 years	24	24
4–10 years	28	28
More than 10 years	48	48
Total	100	100

As shown in Table 5, nearly half (48%) of the respondents had been in service for more than 10 years, indicating a highly experienced teaching workforce. Twenty-eight percent (28%) had served between 4 to 10 years, while 24% had 1 to 3 years of experience. The data implied that most respondents had substantial experience in instructional delivery, which may have contributed positively to their effectiveness in remote and blended teaching modalities.

Table 6. Relevant Professional Training Hours Attended

Training Level	Frequency (n=100)	Percentage (%)
School Level	3	3
District Level	14	14
Division Level	23	23
Regional Level	18	18
National Level	42	42
Total	100	100

The table revealed that 42% of the respondents had attended national-level training programs related to remote and blended learning. This was followed by 23% at the division level, 18% at the regional level, and smaller percentages at the district and school levels. The results demonstrated that a significant number of teachers had been exposed to professional learning opportunities aligned with the Learning Delivery Modalities (LDM) and other educational technology programs, which likely enhanced their readiness for remote instruction.

EXTENT AND QUALITY OF REMOTE INSTRUCTIONAL DELIVERY (RID) PRACTICES

This section examined the scope and effectiveness of remote instructional delivery (RID) among elementary school teachers, focusing on the methods, frequency, and quality of their teaching practices in a distance learning setup.

Table 7 Extent of Utilization of Remote Instructional Delivery (RID)

Level of Utilization	Frequency (n=100)	Percentage (%)
Very High Extent	36	36
High Extent	44	44
Moderate Extent	18	18
Low Extent	2	2
Total	100	100

The data in Table 7 showed that 44% of the respondents reported a high extent of utilization of RID practices, while 36% reported a very high extent. Only 18% utilized RID practices at a moderate level, and 2% reported low utilization. This indicated that most teachers in Carmen 2 District were proficient in using remote learning platforms such as Google Classroom, MS Teams, and Zoom to deliver instruction effectively. Their participation in various training programs and workshops likely enhanced their familiarity with digital tools and online pedagogies.

Level of Quality of RID Practices Based on the TPACK Framework

The level of Remote Instructional Delivery (RID) practices, evaluated using the TPACK framework, reflected how effectively teachers integrated technological, pedagogical, and content knowledge to design and implement engaging and meaningful remote learning experiences.

Table 8 Content Knowledge (CK)

Description	Weighted Mean	Interpretation
Demonstrates mastery of subject matter	4.52	Extremely Competent
Organizes and presents lessons logically	4.48	Extremely Competent
Explains concepts using varied examples	4.46	Extremely Competent
Updates lessons with relevant information	4.50	Extremely Competent
Encourages critical and creative thinking	4.44	Extremely Competent
Overall Weighted Mean	4.48	Extremely Competent

Table 8 presented the Content Knowledge (CK) of teachers, focusing on their mastery of subject matter and ability to deliver knowledge effectively. All indicators were rated as extremely competent, with weighted means ranging from 4.44 to 4.52. Teachers demonstrated the highest competence in demonstrating mastery of subject matter (WM = 4.52) and updating lessons with relevant information (WM = 4.50), reflecting a strong commitment to ensuring that instruction was accurate, current, and academically rigorous (Abrasada, 2022).

The ability to organize and present lessons logically (WM = 4.48) and explain concepts using varied examples (WM = 4.46) indicated that teachers could structure learning experiences in a coherent and accessible manner, facilitating better understanding and retention among students. Additionally, teachers’ competence in encouraging critical and creative thinking (WM = 4.44) suggested that they actively promoted higher-order thinking skills, which were essential for fostering problem-solving, innovation, and learner autonomy (Bustillo Aguilos, 2022).

The overall weighted mean of 4.48, interpreted as extremely competent, underscored that teachers possessed deep subject matter expertise and were capable of translating this knowledge into meaningful learning experiences. This strong content knowledge served as the foundation for effective pedagogical practices (PK) and technological integration (TPACK), ensuring that instruction was not only engaging but also academically sound. Maintaining and updating CK was particularly important in the context of post-pandemic education, where teachers had to adapt to new learning modalities and overcome digital divide challenges in Philippine schools (Abrasada, 2022; Bustillo Aguilos, 2022).

Table 9 Pedagogical Knowledge (PK)

Description	Weighted Mean	Interpretation
Designs engaging and interactive lessons	4.35	Very Competent
Manages online class behavior effectively	4.28	Very Competent
Uses assessment tools to measure learning	4.32	Very Competent
Provides feedback promptly and constructively	4.40	Very Competent
Adapts teaching strategies to learners' needs	4.38	Very Competent
Overall Weighted Mean	4.35	Very Competent

Table 9 illustrated the Pedagogical Knowledge (PK) of teachers, highlighting their ability to plan, implement, and evaluate instruction effectively in both online and in-person learning environments. All indicators were rated as very competent, with weighted means ranging from 4.28 to 4.40. Specifically, teachers excelled in providing prompt and constructive feedback (WM = 4.40) and adapting teaching strategies to learners' needs (WM = 4.38), demonstrating strong responsiveness and learner-centered instructional approaches. This indicated that teachers were highly skilled in fostering engagement, monitoring learning, and adjusting pedagogy to meet diverse student needs (DepEd, 2022; DepEd, 2022a).

The ability to design engaging and interactive lessons (WM = 4.35) and use assessment tools effectively (WM = 4.32) underscored teachers' competence in integrating instructional design principles and assessment literacy into their practice. Effective online classroom management (WM = 4.28) further indicated that teachers could maintain productive learning environments, which was particularly important given the challenges of remote and blended learning modalities implemented in recent years (DepEd, 2022b; DepEd, 2023).

Table 10 Technological Pedagogical Content Knowledge (TPACK)

Description	Weighted Mean	Interpretation
Integrates digital tools to support instruction	4.25	Very Competent
Uses multimedia resources effectively	4.30	Very Competent
Designs technology-enhanced learning activities	4.27	Very Competent
Troubleshoots minor technical issues	4.15	Competent
Encourages learners to use technology responsibly	4.33	Very Competent
Overall Weighted Mean	4.26	Very Competent

Table 10 presented the level of Technological Pedagogical Content Knowledge (TPACK) among the teacher-respondents, illustrating their ability to integrate technology into instructional practices. Results showed that teachers exhibited very high proficiency across core TPACK dimensions. For example, they effectively used multimedia resources to enrich lessons (WM = 4.30), guided students in responsible technology use (WM = 4.33), designed learning activities enhanced by digital tools (WM = 4.27), and incorporated technology to support broader instructional objectives (WM = 4.25). These outcomes indicated that teachers were capable of leveraging digital resources to boost student engagement,

improve learning outcomes, and encourage meaningful technology use in the classroom, reflecting strong adherence to TPACK principles.

The indicator for troubleshooting minor technical issues showed a slightly lower mean (WM = 4.15), interpreted as competent, suggesting that while teachers could resolve basic technical problems, there was potential for further development in this area. This observation aligned with studies indicating that teachers often demonstrated stronger skills in pedagogical applications of technology than in technical problem-solving, which could affect the smooth implementation of technology in emergency remote teaching scenarios (Frontiers, 2024).

The overall weighted mean of 4.26, categorized as very competent, indicated that Filipino teachers had a solid foundation in TPACK, enabling them to plan, deliver, and manage technology-enhanced learning activities effectively. This expertise was especially critical in modern education, where digital literacy and multimedia integration were key to fostering student engagement and achieving learning goals in both remote and blended instruction. By engaging in ongoing professional development focused on advanced technical skills, digital tool mastery, and innovative teaching strategies, teachers could further strengthen their TPACK, promoting adaptable, resilient, and effective instructional practices that met the dynamic needs of contemporary classrooms.

CHALLENGES IN IMPLEMENTING BLENDED LEARNING DELIVERY MODALITY (BLDM)

Challenges in implementing the Blended Learning Delivery Modality (BLDM) refer to the various obstacles teachers and students encounter in combining traditional face-to-face instruction with online learning components effectively.

Table 11 Technological Challenges Encountered by Teachers

Indicators	Weighted Mean	Interpretation
Limited access to reliable internet connection	4.52	Very Often Experienced
Unstable power supply during online classes	4.48	Very Often Experienced
Lack of school-provided ICT equipment	4.41	Very Often Experienced
Difficulty in using advanced digital applications	4.22	Often Experienced
Inadequate technical support from the school	4.30	Often Experienced
Overall Weighted Mean	4.39	Very Often Experienced

Table 11 illustrated the technological challenges faced by teachers in delivering remote instruction. The most significant challenge reported was limited access to a stable internet connection (WM = 4.52), categorized as “very often experienced,” indicating that connectivity issues were a major barrier to effective online teaching. Close behind were interruptions due to unstable power supply during online classes (WM = 4.48) and insufficient ICT equipment provided by the school (WM = 4.41), also rated as “very often experienced,” emphasizing how infrastructure limitations disrupted teachers’ ability to conduct smooth and engaging remote learning sessions (Harris, 2023; IIARI, 2020).

Additional challenges included difficulties in using advanced digital applications (WM = 4.22) and limited technical support from the school (WM = 4.30), both interpreted as “often experienced.” These findings suggested that while teachers generally possessed basic digital competencies, they faced obstacles when navigating more complex tools and receiving prompt technical assistance. These challenges corresponded with the TPACK framework, which underscored the need to integrate technological proficiency with pedagogical and content knowledge to ensure effective digital instruction. Enhancing teachers’ skills through targeted professional development, alongside improvements in technical infrastructure, could strengthen the implementation of blended learning (IAFOR, 2024).

The overall weighted mean of 4.39, interpreted as “very often experienced,” indicated that technological challenges were frequent and significantly impacted the quality of instruction and student engagement in remote learning. From an experiential learning perspective, teachers’ professional growth depended heavily on hands-on experience and access to necessary resources (Kolb, 1984). By providing reliable internet connections, adequate ICT tools, technical support, and continuous digital skills training, schools could have improved teacher effectiveness and supported more successful remote and blended learning practices (Lawrent, 2024; Harris, 2023).

Table 12 Institutional Challenges Encountered by Teachers

Indicators	Weighted Mean	Interpretation
Heavy workload and administrative tasks	4.44	Very Often Experienced
Insufficient learning resources and materials	4.33	Very Often Experienced
Limited institutional support for professional development	4.26	Often Experienced
Difficulty in coordinating with parents and learners	4.31	Often Experienced
Lack of clear policies for blended learning implementation	4.22	Often Experienced
Overall Weighted Mean	4.31	Very Often Experienced

Table 12 presented the institutional challenges experienced by teachers during the implementation of remote and blended learning. The data indicated that heavy workload and administrative responsibilities received the highest weighted mean of 4.44, interpreted as “very often experienced,” reflecting the frequent burden of tasks beyond classroom instruction. Other significant challenges included insufficient learning resources and materials (WM = 4.33) and difficulties in coordinating with parents and learners (WM = 4.31), both also interpreted as “very often experienced.” These results suggested that limited access to teaching resources and communication barriers substantially affected the efficiency and effectiveness of instructional delivery. The findings were consistent with current research highlighting that Filipino teachers encountered high administrative demands while striving to maintain quality education in post-pandemic contexts, often contending with inadequate digital and physical teaching tools (Simbre & Ancho, 2023; Saro & Villamero, 2023).

Other institutional challenges, including limited institutional support for professional development (WM = 4.26) and lack of clear policies for blended learning implementation (WM = 4.22), were interpreted as “often experienced.” These results indicated that while professional development opportunities existed, they may have been insufficient or inconsistently offered, and institutional policies for blended learning were either unclear or inadequately communicated. This lack of structured guidance could lead to variations in instructional quality and hinder teachers’ ability to adapt to diverse student needs (Simbre & Ancho, 2023).

The overall weighted mean of 4.31, interpreted as “very often experienced,” underscored that institutional challenges were pervasive and significantly affected teachers’ ability to deliver effective remote instruction. Addressing these challenges required comprehensive institutional support, including manageable workloads, accessible learning resources, structured professional development programs, and clear, well-communicated policies for blended learning implementation. Strengthening these institutional supports was crucial to improving both teacher satisfaction and the quality of student learning outcomes in post-pandemic educational settings (Saro & Villamero, 2023).

Table 13 Pedagogical Challenges Encountered by Teachers

Indicators	Weighted Mean	Interpretation
Difficulty in assessing learners’ actual performance remotely	4.36	Very Often Experienced
Low learner participation and motivation	4.42	Very Often Experienced
Difficulty in managing learners’ behavior online	4.27	Often Experienced
Challenges in adapting lessons for diverse learning needs	4.31	Often Experienced
Limited opportunities for hands-on learning activities	4.38	Very Often Experienced
Overall Weighted Mean	4.35	Very Often Experienced

Table 13 presented the pedagogical challenges encountered by teachers in implementing remote instruction. Among the listed challenges, low learner participation and motivation recorded the highest weighted mean of 4.42, interpreted as “very often experienced,” indicating that teachers frequently struggled to engage students effectively in remote learning environments. Similarly, difficulty in assessing learners’ actual performance remotely (WM = 4.36) and limited opportunities for hands-on learning activities (WM = 4.38) were also “very often experienced,” reflecting significant obstacles in evaluating students’ understanding and providing experiential learning opportunities that were essential for skill development (Etikan, Musa, & Alkassim, 2016). These findings aligned with recent reports noting that the transition to remote learning in the Philippines had exacerbated gaps in student engagement and practical skill acquisition, as learners faced distractions at home and limited access to interactive learning tools (Aljazeera, 2025).

Other pedagogical challenges, such as difficulty in managing learners’ behavior online (WM = 4.27) and adapting lessons for diverse learning needs (WM = 4.31), were interpreted as “often

experienced,” indicating that while these issues were less frequent than engagement and assessment challenges, they remained considerable barriers to effective instruction. Teachers had to navigate classroom management virtually and modify lessons to accommodate students with varying abilities, which strained instructional time and reduced the effectiveness of learning activities (Department of Education [DepEd], 2024).

The overall weighted mean of 4.35, interpreted as “very often experienced,” underscored that pedagogical challenges were pervasive in remote instruction. These results highlighted the need for targeted support measures, including teacher training, interactive digital resources, and adaptive assessment strategies, to improve instructional effectiveness and student engagement in remote learning environments (ABS-CBN News, 2024).

CORRELATION ANALYSIS BETWEEN TEACHERS’ PROFILE AND REMOTE INSTRUCTIONAL DELIVERY (RID) PRACTICES

This section examines how teachers’ characteristics relate to their remote instructional delivery.

Table 14 Correlation between Teachers’ Profile and RID Practices

Profile Variables	r-value	p-value	Interpretation
Age	0.212	0.057	Not Significant
Sex	0.081	0.421	Not Significant
Highest Educational Attainment	0.328	0.012*	Significant, Positive
Length of Teaching Experience	0.394	0.003*	Significant, Positive
Training Attended on Remote Instruction	0.512	0.001*	Significant, Positive

***Significant at p < 0.05**

The correlation analysis presented in Table 14 revealed the relationships between teachers’ demographic and professional characteristics and their Remote Instructional Delivery (RID) practices. Age displayed a positive but non-significant correlation with RID practices ($r = 0.212$, $p = 0.057$), suggesting that older teachers performed slightly better in remote instruction; however, age alone did not significantly influence their ability to plan, deliver, or assess lessons online. Similarly, gender showed a very weak positive correlation ($r = 0.081$, $p = 0.421$), indicating that male and female teachers performed comparably in implementing remote instruction, and gender did not have a meaningful effect on RID effectiveness.

Conversely, teachers’ professional and educational characteristics displayed significant positive relationships with Remote Instructional Delivery (RID) practices. Specifically, higher educational attainment was positively and significantly associated with RID performance ($r = 0.328$, $p = 0.012$), indicating that educators with advanced degrees or specialized qualifications were better equipped to implement effective remote teaching strategies. This may have been attributed to their stronger skills in

instructional planning, mastery of subject content, and integration of technology into learning activities. Similarly, teaching experience was found to have a significant positive correlation with RID practices ($r = 0.394$, $p = 0.003$), suggesting that educators with more years of experience possessed greater competence in managing remote classrooms, reflecting both accumulated pedagogical expertise and the ability to adapt to various instructional modalities.

Notably, participation in training programs specifically focused on remote instruction exhibited the strongest significant positive relationship with Remote Instructional Delivery (RID) practices ($r = 0.512$, $p = 0.001$). This finding emphasized the essential role of targeted professional development—including workshops, seminars, and online courses—in providing teachers with practical skills for lesson planning, engaging students, and conducting assessments in online learning settings. The analysis further suggested that demographic characteristics, such as age and gender, had minimal impact, whereas teachers' educational qualifications, accumulated teaching experience, and involvement in specialized training served as crucial predictors of effective remote instructional delivery. These results underscored the importance of implementing continuous professional development programs to strengthen teachers' capacity and enhance the overall quality of remote education.

3. Summary of Findings, Conclusions and Recommendations

This chapter provided a detailed overview of the study, summarizing the main findings, drawing conclusions based on the results, and offering recommendations informed by the research outcomes. It integrated the critical insights gained from the investigation to guide future practices and decision-making related to remote instructional delivery.

Summary

The study investigated the demographic profiles, professional development participation, and Remote Instructional Delivery (RID) practices of 100 elementary teachers in Carmen 2 District, Bohol, for the 2025–2026 academic year. Using a descriptive-correlational design and the TPACK framework, it assessed teachers' content knowledge, pedagogical skills, and technological integration in remote instruction. Findings showed that the workforce was predominantly female, experienced, and well-educated, with active engagement in professional development programs for digital teaching. Overall, teachers demonstrated strong competencies and readiness to deliver quality remote instruction, providing insights for improving learning continuity and instructional support strategies.

Findings

The study found that most teachers in Carmen 2 District, Bohol, were female, aged 26–45, with 5–15 years of experience, and primarily held bachelor's degrees, with some pursuing master's studies, reflecting a skilled and experienced workforce. They actively engaged in professional development programs on digital literacy, online teaching strategies, and remote classroom management, which enhanced their readiness for effective instruction across digital platforms. Using the TPACK framework, teachers demonstrated strong competency in integrating technology with pedagogy and content knowledge, effectively employing digital tools for lesson planning, student engagement, assessment, and communication, while adapting strategies to diverse learner needs. A significant positive correlation between professional development and Remote Instructional Delivery proficiency underscored the value

of continuous training in strengthening teacher capacity, guiding policymakers and school leaders in supporting learning continuity initiatives.

Conclusion

The study concluded that elementary school teachers in Carmen 2 District, Bohol, possessed strong capabilities in implementing Remote Instructional Delivery (RID), supported by their professional experience, educational background, and active engagement in digital literacy programs. Their adaptability and willingness to integrate technology were key factors in maintaining high-quality education across modular and online learning environments. Moreover, the positive correlation between participation in professional development programs and RID proficiency underscored the importance of continuous, targeted training to enhance teacher skills and readiness. These findings offered valuable guidance for school leaders and policymakers in designing strategies that strengthened teacher preparedness, supported effective instructional practices, and improved student learning outcomes in an evolving educational landscape.

Recommendation

Based on the study's conclusions, the following recommendations were proposed:

1. Implement the proposed strategies for enhancing Remote Instructional Delivery (RID) within the research locale to further support teachers' instructional capacity.
2. Encourage teacher-respondents to participate in seminars, workshops, and training programs focused on modular and remote teaching techniques to continually strengthen their professional skills.
3. Conduct future research involving a larger and more diverse sample of respondents to obtain broader and more generalizable insights into remote instructional practices.
4. Advocate for the Department of Education to promote teacher engagement in action research or school-based studies aimed at addressing challenges encountered in modular and online learning.
5. Utilize this study as a reference framework for future researchers to explore and develop innovative approaches that improve educational practices in the new normal.

4. Teacher Led Strategies for Sustaining Education in The New Normal

Rationale

The quality of education largely depended on teachers' behavior, performance, and perseverance in teaching. Teachers played a pivotal role in ensuring holistic learning for their students, even amid a pandemic. They acted as catalysts for preserving educational standards through different distance learning modalities while facing the challenges of remote teaching, including high demands for paper-based outputs and consistent learner follow-ups. According to Obadara (2015), teachers were essential for the successful operation of the education system and served as key drivers of educational development. By reproducing printed self-learning modules and guiding learners despite the lack of face-to-face classes, teachers ensured the continuity of education.

The Plan served as a strategic framework to meet learners' educational needs during the pandemic. Teachers' efforts had to be supported by school heads and administrators to ensure effective

implementation. Research indicated that understanding instructors’ concerns and providing appropriate institutional support was critical during transitions to new teaching modalities (Evans & Myrick, 2015; Lochner, Conrad, & Graham, 2015; Menchaca & Bekele, 2008). Survey results revealed that teachers were aware of the socio-emotional challenges posed by the modular approach, highlighting their readiness to address learners’ needs. Implementing the LCP allowed teachers to address these needs effectively, maximize student engagement, and ensure the achievement of Most Essential Learning Competencies (MELCs) despite ongoing disruptions (Shittu & Oanite, 2015).

Objectives

This Learning Continuity Plan aimed to:

1. Implement seminars, trainings, and workshops on mental health awareness for all teachers, regardless of pandemic status, within the Department of Education, Lapu-Lapu City Division;
2. Equip teachers with action plans for emergency or calamity-driven class disruptions;
3. Strengthen teacher-parent collaboration to ensure learner success;
4. Utilize five key indicators—self-awareness in new normal teaching, perception of online learning platforms, adaptation in remote teaching, teachers’ experiences during COVID-19, and learner performance challenges—to achieve MELCs.

SCHEME OF IMPLEMENTATION

Area of Concern	Objectives	Strategies	Budget	Budget Source	Time Frame	Implementors	Evaluative Measures	Actual Accomplishments	Remarks
Adaptation in remote teaching	Strengthen teacher-parent collaboration to accomplish learning competencies	Purchase necessary resources (printing needs, vehicle allowance)	NA	DepEd & external stakeholders	One year	School heads & teachers	Teachers and parents work together to provide printed self-learning modules	-	-
Practices perception in different online platforms	Equip teachers to create emergency action plans	Webinars and seminars on online learning platforms	NA	NA	One year	School heads & teachers	Teachers become more knowledgeable in online modalities	-	-

Experiences of Filipino teachers during COVID-19	Conduct seminars and workshops on mental health awareness	Mental health consultations and process sessions with registered guidance counselors	NA	NA	One year	Division Training Team, School Heads, ESP Coordinators, Wellness Coordinator	Teachers develop self-awareness and recover from emotional stress	-	-
Challenges of learner performance in modular approach	Ensure achievement of MELCs through the five indicators	Remediation classes for learners struggling with modules	1000/mo						

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