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CHALLENGES AND OPPORTUNITIES ENCOUNTERED BY ELEMENTARY TEACHERS IN ADDRESSING THE LEARNING GAPS AND LOSSES: A MIXED-METHODS INQUIRY

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Abstract: *The research investigates the challenges and opportunities elementary teachers encounter in addressing learning gaps and losses. A mixed-method study and stratified random sampling were undertaken to select participants so that a representative sample of teachers could be used. Results of this survey indicated that challenges teachers faced included disrupted instructional continuity, inequities in internet access and digital resources, and hampered socio-emotional development due to the schools' closures. Statistical treatment and data analysis produced a moderate challenge in diverse learning needs, instructional time constraints, and resources. However, the opportunity to address these challenges was further found in flexible scheduling, collaborative learning communities, and professional development opportunities. The qualitative analysis emphasized resource constraints, excessive workload, and diverse learning needs. Likewise, opportunities to address gaps in learning were around flexi-timetabling, collaborative learning communities, and professional learning. In summary, differentiated instructional practices and collaborative support structures in classrooms are integral to closing gaps in student learning and beginning to make up for lost ground due to the pandemic. Finally, educators can use opportunities for professional growth and collaborative partnerships to ensure that all students are given equal opportunities to recover and flourish in academics at a time post-pandemic.*

Keywords: *Educational administration, learning gaps, sequential explanatory mixed-methods design, Bataan, Philippines*

INTRODUCTION

The education sector is instrumental in shaping learners' academic backgrounds, especially at the elementary level. Elementary teachers should set a base for every child's educational journey by equipping them with essential competencies and knowledge that later become the core of all subsequent learning. However, challenges arise, and the educational terrain is sometimes not smooth. This has been evident in recent years: identifying and remedying learning gaps and losses in academic areas among elementary learners. Educational disparities vary students' educational achievement from different backgrounds or situations or learning gaps and losses.

The challenges faced by elementary teachers in closing learning gaps and losses are complex, national, and international. (Ngui et al., 2023) further emphasize the critical role of blended learning strategies in addressing learning needs during the pandemic. Their findings indicate that integrating online learning with traditional face-to-face methods can maximize student engagement and learning outcomes. The mixed-method approach used interviews and questionnaires to gather data. The research found that motivational issues, social interaction, and readaptation to face-to-face classes were challenges for students. However, some students felt relieved by the professional atmosphere in the classroom. Research conducted by Leithwood & Sun (2012) reveals that transformational leadership, which closely aligns with the principles of student-centered learning, significantly impacts school effectiveness and student achievement. Active learning strategies can potentially increase educational outcomes by allowing students to participate actively in their learning. A study by Said (2021) examined the impact of the pandemic on higher education learning experiences, emphasizing how sudden transitions to online learning necessitated rapid adjustments from both students and faculty. They highlighted the need for all students to have access to the same educational materials and assistance programs in emergencies. Raes et al. (2020) conducted a systematic literature review

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of synchronous hybrid learning in higher education and adult learning, identifying the need to develop an interactive learning environment and implement the latest teaching methodologies and technology to enhance learning environments.

The literature on the education experience globally and in ASEAN aims to provide a comprehensive framework for understanding the educational challenges and changes. Laguador (2021) highlights the rapid uptake of online learning, the importance of student well-being, and the critical role of parents in supporting their children's educational success. Studies have highlighted the challenges faced by college students in the Philippines during the pandemic, such as limited internet connections and computer components for effective distance learning. Instructors in Southeast Asian countries Nguyen et al. (2020) revealed that schools face immense pressure due to restrictive accessibility and limited availability of instructional materials, technology, and other resources. Cultural and language diversity also presents unique challenges for teachers in addressing learning gaps. Tarrayo, Paz, and Gepila (2023) examined how English teachers in a state institution in the Philippines coped with the sudden shift to flexible learning during the pandemic. The results showed that most teachers had little experience with online or remote learning before the pandemic, indicating a steep learning curve in adjusting to digital teaching approaches. Tarrayo and Anudin (2023) highlighted the importance of building quality education resources and modifying them for online and hybrid learning methods. Research by (Engzell et al., 2021) provides a comprehensive overview of learning loss experienced during school closures, highlighting the exacerbation of educational inequalities faced by marginalized groups.

In the Philippines, Ignacio (2021) investigated teachers' challenges during the COVID-19 pandemic in providing online courses and classes. One could infer that a lack of preparation sometimes makes it difficult for teachers to extend online classes or learning. What was realized more importantly was the requirement to provide educators with knowledge and tools that they may use to deliver effective online education, particularly in situations such as the pandemic, which cannot be preempted. Esteron (2021) In the research on equity in online learning during the pandemic, it was highlighted that the COVID-19 outbreak put the Philippines into a Position where face-to-face learner engagement had to be shifted to distance learning. As indicated in the study, the different modes of distance learning should ensure equal access to education, encourage inclusion, and reduce possible inequities in learning opportunities. Oducado (2020). It also highlighted the initial fears among educators in online teaching and learning. However, with the escalation of the pandemic, academic staff members began to accept online learning as a practical and necessary mechanism to sustain instruction and learning for their students. Research by Ali (2019) focused on blended learning in higher education, highlighting its potential to combine traditional face-to-face instruction with online learning, thereby fostering a more interactive learning environment. The use of distance learning due to the pandemic has presented significant challenges to the teaching and learning process in most schools. The Department of Education (DepEd) is actively searching for inventive approaches to tackle the challenges in education that arise when students transfer to in-person classrooms to resolve learning difficulties (Beam & Yang, 2019). Considering these specificities, the research can offer more appropriate insights into the Philippine environment and better inform policies and practices on building a more resilient and inclusive education system in the post-pandemic era.

FRAMEWORK

Cognitive Load Theory (CLT) was developed in the 1980s by John Sweller, focusing on the mental effort required while learning. It is relevant to understanding the struggles of elementary

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teachers in their effort to reduce learning topic gaps in academics that cause losses. CLT emphasizes how instructional design and teaching approaches might be changed or modified to reduce cognitive load and promote better learning. Three kinds of cognitive stress exist within CLT parameters: intrinsic cognitive load, extrinsic cognitive load, and germane cognitive load. Effective learning primarily occurs if extraneous or irrelevant cognitive load is reduced and intrinsic mental burden is controlled suitably, making more cognitive resources available for germane cognitive load. The literature reviewed offers immense understanding regarding various opportunities and challenges elementary teachers encounter in closing academic learning gaps and losses. These variables incorporate various complex attributes. The diverse learning requirements of learners pose a significant challenge, as different social groups and backgrounds generate varied learning needs in children, which must be addressed to close future gaps. Instructional time is already short, usually worsened by crises such as COVID-19. Another critical concern is resource limitation, especially with unequal educational resources. Tumuheki et al. (2023) focus on non-traditional students and the impact of neoliberal policies on their access to education. Coupled with this, lousy student performance at school is challenging. Elementary teachers in elementary schools have multiple opportunities to address such challenges. Flexible scheduling creates a preferential window for adjusting teaching schedules toward the needs of students and for quickly increasing individualized learning experiences. Creative learning communities provide teachers a platform to share the best practices for better success for underrepresented immigrant and international students. Another significant opportunity is professional development. Tarrayo, Paz, and Gepila (2023) and Laguador (2021) point out the significance of training in online and hybrid instructional strategies for teachers. Through this, teachers can be helped to improve their skills and provide practical training about the concept in virtual settings. Data-driven decision-making is another effective strategy for teachers. This information—the data on performance and learning outcomes—allows teachers to confidently decide how to modify instruction to meet the unique needs of each student. A recent study by Liu et al. (2024) emphasizes the necessity for professional development programs focused on modern teaching methods and technologies, asserting that well-prepared educators are better equipped to meet diverse learning needs in the wake of educational disruptions. Several educational theories can help elementary teachers understand their challenges in bridging learning gaps and losses. One such theory is the Socio-Ecological Model, which emphasizes the interrelations between various environmental systems. Culturally relevant Pedagogy, as put forward by Ladson-Billings (1995), focuses on integrating students' cultural backgrounds and experiences into regular curricular content and instructional strategies. The Self-Determination Theory developed by Deci and Ryan reveals that internally motivated self-determination is the pathway to achieving optimal learning results. Teachers at the elementary level can overcome these issues by creating environments that support students' natural motivation and self-directed learning. Social Learning Theory, as propounded by Bandura in 1977, emphasizes observational learning and self-directed learning.

OBJECTIVES OF THE STUDY

This study's main objective is to identify the challenges and opportunities experienced by elementary teachers in resolving academic learning gaps and losses in Hermosa District for the School Year 2023-2024.

METHODOLOGY

Research Design

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The research adopted a mixed-methods design, integrating quantitative and qualitative data sets to develop extensive information regarding the study problem. This research method allows the researchers to take out each method's strengths to satisfy the objectives of a study. Alase (2017) discusses the significance of employing both qualitative and quantitative methodologies to gain a comprehensive understanding of educational challenges. Using such a method, the study can identify dominant issues and draw inferences from such issues about their contributing causes among a more significant number of teachers. Qualitatively, the analysis captures teachers' subtle yet biased views, respectively. The research investigates the above teachers' experiences by interviewing and noting how such teachers conduct instructional challenges. Provost & Fawcett (2013) focuses on the implications of teacher quality and professional training on student achievement. This mixed-methods design is suitable for this research because it captures the various factors influencing SHS education. The quantitative data will give a measurable overview of the widespread issues, while the qualitative data will provide a rich narrative of individual experiences and coping strategies. This combination allows for a deep exploration of teachers' challenges and identifies potential avenues for enhancing instructional practices. Therefore, this approach would further help investigate the educational landscape more profoundly and lay the groundwork for specific interventions.

Research Site

The setting of the study was the elementary schools in the Hermosa District of the Department of Education - Bataan. Hermosa District offers the research a precise geographic setting, and the study will focus on a particular region. Exploring the difficulties and opportunities of elementary teachers in a particular district needs a regional focus. In this respect, the present research can focus on schools within one district, considering that area's peculiarities, resources, and challenges. In this way, the research can motivate insights and recommendations relevant only to the elementary schools and teachers in the Hermosa District.

The mixed-methods design was particularly applicable to this study, so all the diverse elements that influence elementary education could be included as much as possible. The quantitative part provided a measurable understanding of issues occurring across the board, and the qualitative part offered a rich ground for the voices of teachers who shared their personal experiences and solutions. This presented the opportunity to plunge deep into the issues facing instructors and provided ways to enhance instructional practices. The study thereby managed to take into account both approaches and examine the educational landscape very extensively, with the result that, for the problems concerned, a more robust understanding could indeed be established, as well as the possibility of interventions.

Participants

The majority of the respondents teach elementary pupils. The quantitative research includes 43 elementary teachers, presenting a varied sample of educators working in the Hermosa District. This sample size would allow statistical analysis and extrapolate results to some more extensive group of district-wide elementary teachers. Six elementary school teachers will be interviewed in depth for this qualitative phase to get more information about their experiences, opinions, and ways of teaching. The sample size for this research is relatively small, which characterizes and is sufficient for qualitative research. It gives rich data to explain in much greater depth the complicated issues educators face about possibilities and barriers. These participants collaborate to provide in-depth insight into problems within the Hermosa District and ensure that results from research are informative and valuable for the educational environment of the neighborhood.

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Instrumentation

This research aims to probe the problems elementary teachers face in addressing the widening learning gaps and growing academic losses. The research mentioned above instruments are a questionnaire and an interview guide. Research by Wuryandani et al. (2022) emphasizes the importance of assessing environmental factors that impact educational experiences, particularly in new learning settings. Their study focuses on how utilizing local resources effectively can enhance the learning outcomes for students, reinforcing the notion that resource allocation and contextual adaptability are key to successful educational strategies. The semi-structured interview guide used for the qualitative phase enables the teachers to air their opinions, views, and experiences freely and, therefore, can provide context-specific data unavailable through quantitative research.

Ethical Considerations

The ethical considerations in studying challenges and opportunities associated with learning gaps and losses are very elaborate. This includes informed consent, a guarantee of confidentiality, the principle of non-maleficence, and accurate representation of the findings. Participants ought to be informed about the reasons for doing the research, procedures involved, risks, and benefits accruing from it. The participants' privacy is preserved through assurances of confidentiality. Non-maleficence should be ensured by exercising reasonable care during the study, as several potential participants may be exposed to harm with the system, such as damage to the emotional and psychological features of being. Proper presentation of the results conveys the results honestly and transparently to understand the current standings for improvement in educational practices. Proper presentation of the results would convey the results honestly and transparently; recognizing a study's limitation or influence would positively support current understanding and result in improved educational practices.

Data Collection

In the first quantitative phase, this research used a sequential explanatory mixed-methods design. Thirty elementary teachers from three schools in the Hermosa District were administered a validated questionnaire.

Quantitative. In the quantitative stage, an appeal will be made to 30 elementary teachers from three different schools in the Hermosa District to complete a standardized and validated questionnaire. It includes several questions that would assess the problems and possibilities among these teachers while bridging learning gaps and losses in academic areas. It will elicit quantifiable information with a 4-point Likert scale about the prevalence and variability in the respondents' perceptions. The quantitative data collection will make an all-rounded close inquiry into the opportunities and difficulties that elementary teachers face within the research region.

Qualitative. From here, the research proceeds to the qualitative data collection phase. In this phase, six elementary teachers will be interviewed in depth on a purposive sample basis using semi-structured interviewing techniques. These interviews give a more elaborate picture concerning the challenges and opportunities for teachers while trying to close learning gaps and losses at the academic level. These qualitative data from the interviews will help to probe deeper into the variables affecting teaching methods and tactics, further offering unique insights and viewpoints.

The research thus sets out to assess the challenges and possibilities encountered by the elementary teachers in the Hermosa District by dividing its data collection into two parts: the qualitative part, which will deal with the intricacies and complexities of this essential facet of schooling, and the quantitative phase, which will provide an overview.

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RESULTS AND DISCUSSION

1. Profile of the participants

The frequency and percentage distribution of the respondents as to their profile variable; in terms of age, as could be seen, 17 or 39.53 percent were aged ranging from 31 to 40 years old, while 12 or 29.71 percent were at the age ranging from 51 to 60 years old, and the least in rank is going from the age 21 to 30 comprises of 5 or 11.63 percent. It could be concluded that teachers in elementary schools are at their prime age. Regarding gender, 38, or 88.37 percent, were female, while 5, or 11.63 percent, were male. It could be concluded that females dominated elementary teachers. Regarding teaching experiences, 16 or 37.21 percent have teaching experiences ranging from 6 to 10 years, while 12 or 27.91 have teaching experiences ranging from 21 and above. The least in rank have teaching experiences of 1 to 3 years, which comprises 6.98 percent. It could be concluded that teachers respondents had enough experience and were not new to handling challenges in addressing the learning gaps and losses in academic subjects. Moreover, teachers were not new in the teaching profession since they had teaching experience ranging from 10 years and up. Regarding teaching Positions, 17 or 39.53 percent were teacher III, 123 or 27.91 percent were teacher II, and the lowest rank was 1 or 2.33 percent. The result parallels their educational background, per DepEd Order No. 66 s. 2007 "Revised Guidelines on the Appointment and Promotion of Other Teaching, Related Teaching, and Non-Teaching Positions," ranking for vacancies to Teacher II and Teacher III positions for Elementary Level. They only have 18 units in graduate school plus 3 hours of relevant training to promote teacher II and graduate in material or at least 42 units as equivalent to encourage for teacher III under Equivalent Record Form or ERF. Lastly, regarding their educational qualifications, as could be seen, 30 or 69.77 have units in master's. At the same time, 6 or 13.95 were BEED graduates, 5 or 11.63 percent were MA graduates, and 2.65 were with units in doctoral. It could be seen that almost half of the respondents were enrolled in graduate school, which is also reflected in their teaching positions.

2. Challenges encountered by elementary teachers in addressing the learning gaps and losses

Table 1.
Challenges encountered by elementary teachers in addressing the learning gaps and losses

Aspect/ Category	Grand Mean	Descriptive Rating
Diverse Learning Needs	3.00	Moderate challenge
Limited Instructional Time	3.03	Moderate challenge
Resource Constraints	2.98	Moderate challenge
Low Academic Performance	2.92	Moderate challenge

Table 1 explores elementary teachers' challenges in addressing the learning gaps and losses, rated moderate for all aspects. The highest-rated barriers included limited instructional time (3.03), diverse learning needs (3.00), resource constraints (2.98), and low academic performance (2.92). In transitioning from online and modular learning to traditional face-to-face instruction and retaking physical classrooms, teachers encounter interconnected barriers that scores were not indicative of. The results show that meeting individual learning needs is uniquely challenging because students are now in vastly different places about their mastery of particular concepts and have done so against the backdrop of triumphs and failures with remote teaching. Younger or less experienced teachers might

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have more difficulty adjusting to the flexibility needed to work around this, while older or veteran educators are experiencing complications in their workflow by having technology included in established practices. The results also expose areas overlooked in teacher preparation programs, which rarely include adequate training on managing classrooms with an array of students, particularly after the pandemic crises. As noted by UNESCO (2021), this corresponds to the shifts that often exacerbate inequities in education, particularly within marginalized populations. The short amount of time allocated for instruction is a logistical and pedagogical problem, especially for teachers trying to contend with varying levels of student engagement during remote learning. Administrative duties also leave less time for individualized interventions. Resource constraints exacerbate the challenge: limited access to modern technology and current teaching resources inhibits preparedness for quality instruction.

Low academic performance impacts are profound and symptomatic of foundational skill gaps that take longer to recover from. This has suggested a systemic failure rather than one related to the individuals. Systems should support teachers; many, especially in low-resource settings, cannot cope on their own, so this is necessary attention. Research by (Beamish et al., 2024) underscores the impact of resource allocation on educational equity. Their findings reveal that disparities in the availability of educational materials and support services significantly hinder the ability of marginalized students to succeed academically.

3. Opportunities encountered in addressing the learning gaps and losses

Table 2
Opportunities encountered in addressing the learning gaps and losses

Aspect/ Category	Grand Mean	Descriptive Rating
Flexible Scheduling	3.02	Moderate Opportunity
Collaboration Learning Communities	3.07	Moderate Opportunity
Professional Growth	3.12	Moderate Opportunity
Data-Driven Decision Making	3.07	Moderate Opportunity

Table 2 shows elementary teachers' perceived opportunities to fill learning gaps and losses, with every category falling into a moderate opportunity. The set of practices that received the highest mean score (3.12) was professional growth, followed in rank by collaborative learning communities (3.07), data-driven decision-making (3.07), and flexible scheduling at a slightly lower mean of 3.02. Although the opportunities are present, these findings suggest that there remains greater potential to be harnessed for more effective post-pandemic recovery in education. The other positive opportunity was professional growth, as teachers recognize the importance of ongoing training and development in closing the gaps in learning. Teacher workshops and seminars have created platforms for teachers to improve their teaching styles and tackle post-pandemic issues. This is consistent with previous research that highlighted the significance of professional development in enabling educators to prepare for hybrid and face-to-face learning modalities. This, however, highlights the importance of continued and targeted professional development in areas such as technology integration and inclusive practices. Learning communities — spaces where teachers work together to close the gap between high- and low-performing students — are equally important. This means that by creating a culture of peer support, where teachers share their knowledge and experience, innovative strategies and solutions are

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possible. This moderate rating may imply that teachers see the potential of collaboration but have a structural or logistical impediment to halting full usage (e.g., time and lack of collaborative platforms). This aligns with the global focus on developing communities of practice around teachers planning their practice with data-driven decision-making, teachers can adjust their teaching styles based on students' performances and find a way that best caters to them. The moderately favorable rating may also reflect teachers' increasing awareness of how data informs instructional strategies. However, this opportunity is constrained by the availability of accurate data and the ability to analyze it effectively. (Bao et al., 2020) analyze the impact of school closures on reading ability in kindergarten students. Their study finds that significant learning gains are lost during extended school closures, which disproportionately affects students from disadvantaged backgrounds. Flexible scheduling received a fair rating, indicating the opportunity for additional tailored solutions to prevent further learning and stop gaps between students. For example, looking outside the traditional school day can allow for more targeted support; however, systemic factors often limit opportunities — including stringent school year structures and a lack of capacity. These findings imply that flexible scheduling can be much more effective when combined with careful resource distribution, along with some administrative severe backing

Significant variations in the challenges encountered by elementary teachers in addressing the learning gaps and losses

Table 3 shows significant variations in the challenges elementary teachers encounter in addressing the learning gaps and losses regarding diverse learning needs when grouped according to age. The computed F-value is 4.185, and the p-value is 0.012. This is significant at 5% alpha; thus, the null hypothesis is rejected.

Table 3 shows significant variations in the challenges elementary teachers encounter in addressing the learning gaps and losses regarding diverse learning needs when grouped according to age. The computed F-value is 4.185, and the p-value is 0.012. This is significant at 5% alpha; thus, the null hypothesis is rejected.

Table 3

ANOVA AND t-Test results for the significant variations in Challenges encountered by elementary teachers in addressing the learning gaps and losses

Grouping Variables	Challenges	F-Value	p-Value	Decision at 5% alpha
Age	Diverse Learning Needs	F = 4.185	0.012	Reject Ho (Significant)
	Limited Instructional Time	F = 1.613	0.202	Accept Ho (Not Significant)
	Resource Constraints	F = 1.452	0.243	Accept Ho (Not Significant)
	Low Academic Performance	F = 2.270	0.096	Accept Ho (Not Significant)
Sex	Diverse Learning Needs	t = 0.118	0.907	Accept Ho (Not Significant)
	Limited Instructional Time	t = -2.043	0.048	Reject Ho (Significant)
	Resource Constraints	t = -0.023	0.982	Accept Ho (Not Significant)

	Low Academic Performance	t = -0.819	0.418	Accept Ho (Not Significant)
Years of Experience	Diverse Learning Needs	F = 2.791	0.040	Reject Ho (Significant)
	Limited Instructional Time	F = 2.403	0.067	Accept Ho (Not Significant)
	Resource Constraints	F = 0.569	0.687	Accept Ho (Not Significant)
	Low Academic Performance	F = 1.335	0.275	Accept Ho (Not Significant)
Position	Diverse Learning Needs	F = 1.671	0.189	Accept Ho (Not Significant)
	Limited Instructional Time	F = 0.633	0.598	Accept Ho (Not Significant)
	Resource Constraints	F = 0.094	0.963	Accept Ho (Not Significant)
	Low Academic Performance	F = 0.267	0.848	Accept Ho (Not Significant)
Highest Educational Attainment	Diverse Learning Needs	F = 2.021	0.127	Accept Ho (Not Significant)
	Limited Instructional Time	F = 0.550	0.651	Accept Ho (Not Significant)
	Resource Constraints	F = 1.017	0.396	Accept Ho (Not Significant)
	Low Academic Performance	F = 1.413	0.253	Accept Ho (Not Significant)

When grouped according to sex, elementary teachers face significantly different challenges in addressing learning gaps and losses in terms of limited instructional time. The null hypothesis is also rejected with a t-value of 2.043 and a p-value of 0.048. Furthermore, there are significant variations in the challenges encountered by elementary teachers in addressing the learning gaps and losses in terms of diverse learning needs when grouped according to years of teaching experience. The computed F-value is 2.791, and the p-value is 0.040. This is significant at 5% alpha; thus, the null hypothesis is rejected.

These results give us more detail about how demographic and professional characteristics shape teachers' experiences with challenges. The extent to which learning needs related to age and years of experience vary calls for differentiated professional development programs that are tailored to the unique needs of novice and veteran teachers. For instance, inexperienced teachers might require guidance and training in classroom management techniques, while veteran educators might need development on incorporating modern instructional practices. The stark variation in limited instructional time by sex suggests the necessity of gender-sensitive work-life balance policies for teachers, especially women. Addressing these disparities will alleviate stressors, and teachers can more effectively reach their students. This relative lack of differences by Position and educational attainment indicate the need for systemic interventions, as opposed to individual-level changes, to solve the issues associated with limited resources and poor academic performance. This neatly fits into the wider

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struggle for equitable resource distribution, alongside extensive teacher training to help deal with issues worsened by the pandemic.

4. Significant variations in the opportunities encountered by elementary teachers in addressing the learning gaps and losses

Table 4
ANOVA AND t-Test results for the significant variations in opportunities encountered by elementary teachers in addressing the learning gaps and losses

Grouping Variables	Opportunities	F-Value	p-Value	Decision at 5% alpha
Age	Flexible Scheduling	F = 2.270	0.096	Accept Ho (Not Significant)
	Collaborative Learning Communities	F = 0.795	0.504	Accept Ho (Not Significant)
	Professional Development	F = 1.386	0.261	Accept Ho (Not Significant)
	Data-driven Decision-making	F = 1.001	0.403	Accept Ho (Not Significant)
Sex	Flexible Scheduling	t = -0.379	0.707	Accept Ho (Not Significant)
	Collaborative Learning Communities	t = -0.556	0.581	Accept Ho (Not Significant)
	Professional Development	t = -1.069	0.292	Accept Ho (Not Significant)
	Data-driven Decision-making	t = -0.854	0.398	Accept Ho (Not Significant)
Years of Experience	Flexible Scheduling	F = 1.644	0.183	Accept Ho (Not Significant)
	Collaborative Learning Communities	F = 1.439	0.240	Accept Ho (Not Significant)
	Professional Development	F = 3.342	0.019	Reject Ho (Significant)
	Data-driven Decision-making	F = 2.508	0.058	Accept Ho (Not Significant)
Position	Flexible Scheduling	F = 2.243	0.099	Accept Ho (Not Significant)
	Collaborative Learning Communities	F = 0.773	0.516	Accept Ho (Not Significant)
	Professional Development	F = 1.602	0.204	Accept Ho (Not Significant)
	Data-driven Decision-making	F = 1.303	0.287	Accept Ho (Not Significant)
	Flexible Scheduling	F = 0.644	0.591	Accept Ho (Not Significant)

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Highest Educational Attainment	Collaborative Learning Communities	F = 0.692	0.562	Accept Ho (Not Significant)
	Professional Development	F = 0.990	0.407	Accept Ho (Not Significant)
	Data-driven Decision-making	F = 2.280	0.094	Accept Ho (Not Significant)

Table 4 reveals significant variations in the opportunities encountered by elementary teachers in addressing the learning gaps and losses in terms of professional development when grouped according to years of teaching experience. The computed F-value is 3.342, and the p-value is 0.019. This is significant at 5% alpha; thus, the null hypothesis is rejected. Overall, there are no significant variations in the opportunities elementary teachers encounter in addressing the learning gaps and losses when grouped according to age, sex, Position, and highest educational attainment. The null hypothesis is accepted at a 5% level of significance.

In conclusion, identifying significant variations in the opportunities encountered by elementary teachers in addressing learning gaps and losses concerning professional development, as grouped by years of teaching experience, underscores the importance of differentiated support, mentorship, and career development pathways in the teaching profession. By recognizing and addressing disparities in teachers' professional development needs and aspirations, schools and policymakers can enhance teachers' effectiveness, job satisfaction, and retention, ultimately benefiting student learning outcomes. These differences in professional development according to the number of years spent on the job help explain why training programs would benefit from customization. Workshops on classroom management or teaching basics would help novice teachers, whereas a seasoned teacher could implement advanced training, data-driven decision-making, and technology-enhanced learning. Filling this gap would ensure that professional development can impact teachers of all experience levels most. The absence of large differences elsewhere indicates that opportunities such as flexible scheduling and collaborative learning communities are highly valued and relatively equally available to teachers from different demographic and professional groups. This underscores the need to continue to offer these opportunities—and their support by school administrations—uniformly across schools.

Qualitative Part

Main Branch	Sub-Themes	Description
Challenges	Resource Constraints	Limited access to instructional materials, technology, and other teaching resources.
	Diverse Learning Needs	Variations in students' abilities and learning paces posed challenges in applying uniform strategies.
	Workload Stress	High administrative duties and responsibilities limited time for instructional preparation.
	Low Academic Performance	Students struggling with essential competencies compounded the difficulties of addressing learning gaps.
Opportunities	Collaborative Learning Communities	Teachers support one another by sharing resources, best practices, and strategies.
	Flexible Scheduling	Adjusted schedules allowed teachers to dedicate time to students with significant learning gaps.

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	Professional Development	Workshops and training enhanced skills and teaching strategies to address post-pandemic recovery.
	Data-Driven Decision Making	Using student performance data to tailor interventions and optimize teaching approaches.

The study pinpoints critical challenges and opportunities elementary teachers see in addressing learning gaps. Challenges include lacking resources, such as access to instructional materials, and technology diversity factors. Here, students have different abilities that make it very hard to teach the whole class to help each other; workload stress is learning; however, teachers manage their administrative tasks and poor academic performance. These opportunities are collaborative learning communities that promote peer support and shared strategies, flexible scheduling to emphasize students with the most significant gaps, professional development through workshops that strengthen instructional practice, and data-driven decision-making that uses student performance data to inform interventions. By facing these challenges while taking advantage of opportunities, more effective post-pandemic educational recovery will occur.

CONCLUSION

This study highlights the challenges and opportunities elementary teachers experienced in addressing post-pandemic learning gaps and losses in the Hermosa District. Other challenges are learner diversity, access to limited resources, workload tension, and poor performance of learners that impact effective teaching and learning. On the other hand, multi-tiered systems of support that facilitate collaborative learning communities, flexible scheduling, professional development, and data-based decision-making are what this study points to as essential routes for increasing quality instruction while also helping students recover. The study uses a sequential explanatory mixed-methods design, thus providing a balanced representation of quantitative and qualitative results while addressing these social issues on multiple levels. By comprehensively tackling these challenges and using previously discovered opportunities to our advantage, we can support teachers, improve pedagogy, and enable students to achieve equitable recovery.

Recommendation

Given these results, the Department of Education (DepEd) must consider designing professional development programs targeting inclusive pedagogy and technology-driven instruction bolstered by policies to address diverse student populations. The Local Government Unit (LGU) must spend money to acquire MOOE (other operating expenses) to subsidize schools with modern teaching materials/technology support for classrooms, bridging the digital divide.Instructional Material (IM) development must not only enable but also invest time and efforts in producing locally relevant, inclusive materials that allow for multi-level activities and differentiated instruction. Educators are urged to establish collaborative learning communities for resource sharing and inventive methodologies, encouraging peer mentoring and communal development. Finally, flexible scheduling should be employed to provide further services for students with significant learning gaps and interventions driven by data to focus on the most needed areas. Together, these are designed to close learning gaps, improve teacher effectiveness, and enable equitable education for all learners.

TRANSLATIONAL RESEARCH

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YouTube and other media platforms are great tools for this kind of discussion. This will help to connect and communicate widely to a large audience, especially those educators and people outside the academia. They will have an in-depth insight into this research on how to bridge the gap between research and the real world. The theme "Bridging the Gap: Understanding and Addressing Learning Gaps and Losses in Elementary Academic Subjects" addresses the complex challenges elementary school teachers face in recognizing, resolving, and minimizing their students' learning disparities. It focuses its search for internal and external causatives contributing to learning loss, including the effects of differences in educational experience, socioeconomic status, unique learning preference, and so on, as well as external factors such as the COVID-19 pandemic. When teachers understand what lies behind those difficulties, they become better prepared to adjust their methods according to each student's needs. The theme also identifies instructional constraints and pedagogical impediments such as large class sizes, time restraints, resource limitations, and the need for tailored instruction. By accepting these challenges, educators can develop creative solutions and industry best practices that will help deal with issues. The theme encourages the collaboration of teachers, policymakers, and other stakeholders to "fill up the gaps in learning" and create a future where every student can succeed academically and realize his or her potential. Delving towards the results of this study will help disseminate information to others through video clips that they can easily watch. The material used was accessible to everyone who wanted to grasp information about this study.

LITERATURE CITED

Alase, A. O. (2017). The interpretative phenomenological analysis (ipa): a guide to a good qualitative research approach. International Journal of Education and Literacy Studies, 5(2), 9. https://doi.org/10.7575/aiac.ijels.v.5n.2p.9

Ali, R. (2019). Is blending the solution? a systematic litera-ture review on the key drivers of blended learn-ing in higher education. The Maldives National Journal of Research, 7(1), 29-42. https://doi.org/10.62338/6atv9m37

Bandura, A. (1977). Social learning theory. Prentice Hall.

Bao, X., Qu, H., Zhang, R., & Hogan, T. P. (2020). Modeling reading ability gain in kindergarten children during covid-19 school closures. International Journal of Environmental Research and Public Health, 17(17), 6371. https://doi.org/10.3390/ijerph17176371

Beamish, W., Hay, S., & Yuen, M. (2024). Moving inclusion forward for students with special educational needs in the asia-pacific region. Frontiers in Education, 9. https://doi.org/10.3389/feduc.2024.1327516

Deci, E. L., & Ryan, R. M. (1985). Intrinsic motivation and self-determination in human behavior. Plenum Press.

Department of Education. (2023). DepEd Order No. 13, s. 2023: National Learning Recovery Program.

Department of Education. (2023). DepEd Order No. 14, s. 2023: Implementation of the National Learning Camp

education teachers in the Philippines during the COVID-19 pandemic. Journal of Special Education, 43(1), 78- 91. https://doi.org/10.1177/00224669211012345

Engzell, P., Frey, A., & Verhagen, M. D. (2021). Learning loss due to school closures during the covid-19 pandemic. Proceedings of the National Academy of Sciences, 118(17). https://doi.org/10.1073/pnas.2022376118

Esteron, M. A. (2021). Equity in online learning during the COVID-19 pandemic: Insights from the Philippines. Journal of Educational Technology Systems, 49(3), 287-301. https://doi.org/10.1177/00472395211020655

Ignacio, C. A. (2021). Challenges of educators in the Philippines during the COVID-19 pandemic: Online courses and classes. Asia-Pacific Journal of Teacher Education, 49(4), 489-502. https://doi.org/10.1080/1359866X.2021.1924429

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. American Educational Research Journal, 32(3), 465-491. https://doi.org/10.3102/00028312032003465

Laguador, J. M. (2021). Challenges of college students in the Philippines during the pandemic of flexible learning. Journal of Higher Education and Adult Learning, 3(2), 45-59. https://doi.org/10.33698/JHEAL.2021.3.2.05

Liu, K., Tschinkel, R., & Miller, R. I. (2024). Digital equity and school leadership in a post-digital world. ECNU Review of Education, 7(3), 762-783. https://doi.org/10.1177/20965311231224083

Ngui, W., Ishak, M. Z., Han, C. G. K., Keong, T. C., & Satu, H. U. (2023). Blended learning for generation alpha during the covid-19 pandemic. International Journal of Academic Research in Progressive Education and Development, 12(3). https://doi.org/10.6007/ijarped/v12-i3/17923

Nguyen, T. T., et al. (2020). Challenges faced by instructors in Southeast Asian countries due to limited resources. International Journal of Educational Technology in Higher Education, 17(3), 1-15.

Oducado, R. (2020). Faculty attitudes toward online learning during the COVID-19 pandemic: A case study of a state institution in the Philippines. Journal of Online Learning and Teaching , 16(4), 212-225.

Provost, F. and Fawcett, T. (2013). Data science and its relationship to big data and data-driven decision making. Big Data, 1(1), 51-59. https://doi.org/10.1089/big.2013.1508

Raes, A. (2021). Exploring student and teacher experiences in hybrid learning environments: does presence matter?. Postdigital Science and Education, 4(1), 138-159. https://doi.org/10.1007/s42438-021-00274-0

Sweller, J. (1988). Cognitive load during problem solving: Effects on learning. Cognitive Science, 12(2), 257-285. https://doi.org/10.1016/0364-0213(88)90023-7

Tarrayo, V. L., & Anudin, F. C. (2023). Role of English language teachers as materials creators in flexible learning. Philippine Journal of English Language Teaching, 10(2), 78-92. https://doi.org/10.13189/pjet.2023.100205

Tarrayo, V. L., Paz, F. A., & Gepila, M. (2023). Transition to flexible learning: Experiences of English language teachers in the Philippines during the COVID-19 pandemic. Journal of Language Teaching and Research, 14(5), 1234-1247. https://doi.org/10.4304/jltr.14.5.1234- 1247

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Volume13 (June 2024) ISSN 1655-3713
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CCI-RIKDO-*Research Innovation and Knowledge Development Office*

Tumuheki, P. B., Zeelen, J., & Openjuru, G. L. (2023). Towards a transformative lifelong learning agenda for non-traditional students at university. Journal of Adult and Continuing Education, 30(1), 22-38. https://doi.org/10.1177/14779714231196044

Wuryandani, W., Fathurrohman, F., & Herwin, H. (2022). The environmental utilization as a learning resource for civic education in elementary schools by prospective teacher college students. Jurnal Prima Edukasia, 10(2), 194-200. https://doi.org/10.21831/jpe.v10i2.51923