

Game-Changing Perspective on Pedagogical Strategies on Water, Sanitation and Hygiene in School (WinS) Concepts Through Lesson Integration in Teaching Science

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Introduction

The Department of Education (DepEd) is dedicated to safeguarding and advancing the rights of every Filipino to receive quality, equitable, culture-based, and comprehensive basic education. It requires that students engage in an environment that is supportive of children's needs, sensitive to gender issues, secure, and encouraging. Educators play a crucial role in fostering learning and supporting the well-being of each student by advocating for proper hygiene and sanitation within the school environment through the implementation of water, sanitation, and hygiene initiatives, projects, and activities. This is to guarantee the safety and protection of all learners. This action research seeks to assess the impact of innovative perspectives on teaching strategies to enhance the effective delivery of accurate knowledge and understanding among learners regarding hydration, hygiene, and sanitation practices. The findings will serve as a basis for an intervention program aimed at addressing health issues and concerns associated with the implementation of WinS.

This research utilized the descriptive-correlational design. It determined the significant impact of the game-changing perspective in pedagogical approaches to WinS competencies as an integral objective in teaching Science to enhance WinS competencies and reduce the cases of illness and disease related to hydration, sanitation, and hygiene malpractices in school. The research adhered to ethical standards in conducting research and upholding utmost honesty, integrity and authenticity of data.

Results and Discussion

The results reveal a statistically significant positive correlation between integrating WinS competencies and principles into science pedagogy and students' academic performance, environmental awareness, and disaster resilience.

Table 1. Mean Distribution on Diagnostic Test of the WinS Competencies

Average	59.79 % Did not meet expectations
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The initial assessment placed students' average mastery of WinS competencies at **59.79 percent**, classified as *Did Not Meet Expectations*. This score indicates that, before any instructional intervention, most learners lacked adequate knowledge and practice of water, sanitation, and hygiene standards underscoring the need for targeted teaching strategies.

Table 2. Mean Distribution on Post-Assessment of the WinS Competencies

Average	87.03 % Very satisfactory
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Following the integration of WinS concepts into Science lessons, the average score rose to **87.03 percent**, rated *Very Satisfactory*. This sharp increase corroborated by a highly significant t-test result ($t \approx 28.53$, $p < 0.05$) confirms that the pedagogical approach substantially improved students' understanding and application of WinS principles.

Reflection and Recommendation

These findings underscore the importance of adopting multidisciplinary and experiential learning in a spiral progression approach across grade levels that integrates real-world issues and contexts of WinS competencies into science education.

With proper reinforcement and sustainable programs, projects, and activities, the game-changing pedagogical approach could be a transformational strategy for the teaching-and-learning process of WinS competencies in school.

The Department of Education has released policies and guidelines pertaining to the Comprehensive Water, Sanitation and Hygiene in Schools (WinS) Program, as outlined in DepEd Order No. 10 s. 2016.

It recommended developing such a policy, integrating WASH into the curriculum, providing clear guidelines and resources, incorporating WASH into policy documents, conducting training and awareness programs, and establishing a strong monitoring and evaluation system.

This research contributes to the growing body of evidence supporting the integration of WinS into science education as a catalyst for transformative learning and sustainable development.

Actionable Recommendations

- Sustain monthly WinS advocacy and monitoring, evaluation, and assessment activities.
- Continue teacher re-tooling through Learning Action Cell sessions.
- Reproduce and disseminate validated lesson exemplars and IEC materials.
- Map and upgrade WinS physical facilities twice each semester.

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Assessing Educators' Preparedness and Resilience in Conflict-Affected Areas: A Study of R.T. Romualdez District, Agusan Del Norte

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Introduction

Educators in conflict-affected areas face not only the everyday challenges of teaching but also the dangers and stresses brought on by armed conflict. In the R.T. Romualdez District of Agusan del Norte, Philippines, teachers at Balangbalang Elementary, San Antonio Elementary, and Tagbongabong Elementary Schools operate in areas where security is often unstable. This study, involving 47 teachers from these schools, seeks to assess how prepared and resilient they are in facing the difficulties of working in conflict zones. The study aimed to assess the growing concern about the mental, emotional, and professional burdens placed on teachers in conflict-affected areas, with the objective of evaluating their preparedness and resilience to improve support systems and ensure teachers and learners can thrive in these harsh conditions.

The study employed a descriptive research design, utilizing a survey questionnaire to gather data from 47 teachers in the R.T. Romualdez District, specifically from Balangbalang Elementary, San Antonio Elementary, and Tagbongabong Elementary Schools, located in rural areas experiencing varying levels of armed conflict. The survey, administered anonymously to ensure confidentiality, used a 5-point Likert scale to collect data on five key areas: professional readiness, adaptive capacity, learner support, community engagement, and personal well-being.

Results and Discussion

The study assessed the preparedness and resilience of 47 teachers across five key areas, with findings presented below.

Area	Mean	Interpretation	Verbal Description
Professional Readiness	2.71	Neutral	Moderate Extent
Adaptive Capacity	3.51	Agree	High Extent
Learner Support	3.67	Agree	High Extent
Community Engagement	3.38	Agree	High Extent
Personal Well-being	3.61	Agree	High Extent

Professional Readiness: Teachers reported a moderate level of preparedness (mean = 2.71), with a significant gap in training for trauma-informed teaching practices (mean = 2.04).

Adaptive Capacity: Teachers demonstrated high resilience and adaptability (mean = 3.51), with strong commitment (mean = 4.00) and efforts to improve their teaching skills (mean = 4.13).

Learner Support: Teachers provided high levels of emotional and psychological support (mean = 3.67), particularly in listening to learners (mean = 4.30), though collaboration with counselors was moderate (mean = 2.94).

Community Engagement: Teachers showed high engagement with the community (mean = 3.38), especially with parents (mean = 3.85) and local authorities (mean = 3.43), but collaboration with local organizations was moderate (mean = 3.09).

Personal Well-being: Teachers prioritized self-care (mean = 3.70) and maintained a healthy work-life balance (mean = 3.77), but access to mental health support was limited (mean = 3.06).

Correlation analysis revealed significant relationships among the indicators. Notably, there was a strong negative correlation between Learner Support and Community Engagement ($r = -0.963$), suggesting that higher community engagement might be associated with lower learner support, or vice versa, requiring further investigation. Additionally, Professional Readiness showed a negative correlation with Adaptive Capacity ($r = -0.807$), indicating complex interplays that suggest improving one area could impact others.

Reflection and Recommendation

The study concluded that “while teachers in conflict-affected areas of the R.T. Romualdez District exhibit moderate to high resilience, there is a critical need for enhanced training in trauma-informed teaching practices to better support students affected by conflict-related trauma.” The findings highlight the importance of targeted interventions to address gaps in professional readiness and mental health support, ensuring teachers can effectively support their students.

The proposed intervention program includes:

Professional Development Workshops: “Conduct symposiums and workshops on trauma-sensitive strategies” to equip teachers with skills to support trauma-affected students.

Peer Mentoring and Resource Toolkits: “Establish a mentoring program where experienced teachers guide peers” to facilitate ongoing learning.

Ongoing Follow-up and Assessment: “Conduct classroom observations followed

by feedback sessions” to monitor progress and ensure effective integration of trauma-informed practices.

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Enhancing Anti-Bullying Strategies for Creating a Safer School Environment at Manoligao Elementary School

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Introduction

Bullying remains a pervasive issue in schools, adversely affecting students' emotional health and academic achievement. At Manoligao Elementary School in Carmen, Agusan del Norte, Philippines, bullying has been recognized as a significant concern that compromises the school's safety and inclusivity. This research study, was driven by the necessity to bolster anti-bullying strategies to foster a more secure school environment.

To achieve these goals, the study adopted a descriptive quantitative research design. Data collection involved administering a survey questionnaire to all teachers at Manoligao Elementary School, utilizing a Likert scale to gauge their perceptions on the five key domains. The research was conducted at Manoligao Elementary School, situated in a rural area of Agusan del Norte, under the jurisdiction of Agusan del Norte. Ethical considerations were meticulously observed, including securing informed consent from participants, ensuring data confidentiality, and upholding research integrity throughout the process.

Results and Discussion

The study evaluated the implementation of anti-bullying strategies at Manoligao Elementary School across five critical domains: awareness, prevention, intervention, integration, and resources and support. The findings, as detailed in the table, reveal varying degrees of effectiveness.

Indicator	Mean	Interpretation	Key Findings
Awareness	High	Generally strong	Effective efforts, but needs regular workshops
Prevention	4.27	Strongly Agree	Trust, confidentiality, prompt responses
Intervention	4.20	Strongly Agree	Adequate, but needs empathy-building
Integration	3.39	Neutral	Weakest area, partial integration
Resources and Support	4.03	Agree	Mostly secured, but needs more resources

Prevention strategies were highly effective, with a mean score of 4.27, indicating that teachers strongly agreed with the presence of trust, confidentiality, and prompt responses in handling bullying incidents. Intervention strategies also received a high rating of 4.20, though there is room for improvement in building empathy and fostering better student relationships. Integration of anti-bullying education into the curriculum emerged as the most challenging area, with a mean score of 3.39, suggesting only partial implementation.

This finding underscores the need for more comprehensive integration to ensure that anti-bullying education is a core component of the school's teaching and learning framework. Resources and support were generally adequate, with a mean score of 4.03, but teachers indicated a need for additional resources and better awareness of available support systems.

Correlation analysis revealed a strong positive relationship between integration and resources and support ($r = 0.69$), implying that enhancing resources could significantly improve the integration of anti-bullying education. Conversely, the negative correlation between intervention and awareness ($r = -0.64$) suggests that current intervention methods may not be effectively increasing awareness among students and staff, highlighting the importance of aligning these strategies more closely.

Reflection and Recommendation

The research underscores that while Manoligao Elementary School has made commendable progress in implementing anti-bullying strategies, particularly in prevention and intervention, there is a critical need to strengthen the integration of anti-bullying education into the curriculum. The study's findings indicate that a more integrated approach could enhance the overall efficacy of the school's anti-bullying initiatives, leading to a safer and more inclusive learning environment. To address the identified deficiencies, the study proposes "Project BRAVE" (Building Resilience and Advocating for a Violence-free Environment), which encompasses several key interventions: (1) Development of Curriculum Materials and Resources (January, budget: PHP 3,000): Creating comprehensive anti-bullying educational materials tailored to the school's needs; (2) Empathy-Building Workshops (February, budget: PHP 2,000): Conducting sessions to foster empathy and understanding among students and staff; (3) Professional Development for Teachers (March, budget: PHP 3,000): Providing training to equip teachers with the skills to effectively implement anti-bullying strategies; (4) Pre- and Post-Program Evaluations (April, budget: PHP 3,000): Assessing the impact of the interventions to ensure their effectiveness and make necessary adjustments. This research aligns with the Department of Education's (DepEd) commitment to creating safe and supportive schools, as outlined in policies

such as the Child Protection Policy (DepEd Order No. 40, s. 2012) and the National Safe Schools Program. By providing actionable recommendations and a model intervention plan, the study contributes to DepEd's broader goals of promoting student well-being and academic success through a secure learning environment. The findings from this study can serve as a blueprint for other schools facing similar challenges, demonstrating the importance of a whole-school approach that engages students, teachers, parents, and the community in creating a culture of respect and safety.

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Quantitative Analysis of English Learning Outcomes Among Grade 7 Learners Across Different Camp Structures in the National Learning Camp

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Introduction

This study evaluated the effectiveness of three National Learning Camp (NLC) structures—Intervention, Consolidation, and Enhancement—in improving English proficiency among Grade 7 learners at Magallanes National High School. The research investigates the effectiveness of the different camp structures implemented in the National Learning Camp in improving Grade 7 learners' English proficiency.

Utilizing pre- and post-camp assessments and Likert-scale surveys, data from 96 students revealed distinct learning gains across camps. The participants in this study were 96 Grade 7 learners from Magallanes National High School in Agusan del Norte, selected through convenience sampling from a total Grade 7 population of 359 learners. This research employed a descriptive quantitative design. This study adhered to strict ethical guidelines to ensure the privacy and confidentiality of all participants. Informed consent was obtained from the students and their parents before data collection.

Results and Discussion

Table 1 – Pre-Camp and Post-Camp Scores

Camp Type	No. Students	Pre-Camp Mean Score (Out of 50)	Post-Camp Mean Score (Out of 50)	Learning Gain (Score)
Enhancement Camp	25	35	48	13
Consolidation Camp	44	30	40	10
Intervention Camp	27	25	31	6

The Enhancement Camp demonstrated the greatest improvement, with students increasing their mean score from 35 to 48 out of 50, resulting in a 13-point gain. The Consolidation Camp showed moderate progress, with a 10-point gain, improving from 30 to 40. The Intervention Camp recorded the smallest improvement, with a 6-point gain, increasing from 25 to 31.

ANOVA Single Factor analysis results demonstrate significant differences in the mean scores across the three camp groups. The analysis produced an F-statistic of 79.48, which exceeds the critical F-value of 4.26, and a P-value of 1.91E-06, indicating that the differences in mean scores between camps are statistically significant. Post-hoc Tukey's HSD test results showed statistically significant differences between each pair of camp structures.

Table 2 – Mean Scores for the Three Learning Camps

Indicator	Enhancement Camp	Consolidation Camp	Intervention Camp
Self-Assessed Learning Outcomes	3.74	3.44	3.17
Engagement and Motivation	3.63	3.40	3.08
Teaching Effectiveness	3.80	3.53	3.20
Learning Environment	3.66	3.42	3.12

The Enhancement Camp consistently outperformed the other two camps across all indicators, with the highest mean scores in self-assessed learning outcomes (3.74), teaching effectiveness (3.80), engagement and motivation (3.63), and learning environment (3.66).

Reflection and Recommendation

1. **Enhance the Adoption of the Enhancement Camp Model.** The Enhancement Camp consistently showed the highest learning gains, including a 13-point English proficiency increase; expand and adapt its differentiated and advanced teaching methods across other camp structures.
2. **Refine and Strengthen the Intervention Camp** With only a 6-point improvement, incorporate one-on-one tutoring, individualized learning plans, and scaffolded lessons, and provide additional professional development for teachers to support struggling learners.
3. **Improve the Learning Environment Across All Camps** Reduce class sizes for individualized attention, provide adequate materials and resources, and develop a positive and supportive classroom atmosphere to boost student engagement and outcomes.
4. **Increase Student Engagement Through Technology Integration** Use interactive apps, videos, and gamified learning activities to maintain student interest and motivation—especially in the Consolidation Camp to bridge the gap between basic and advanced learners.
5. **Conduct Regular Teacher Training on Differentiated Instruction** Train all teachers in differentiated teaching techniques that cater to diverse student needs, actively engage learners, and offer personalized feedback.
6. **Periodic Assessment and Program Adjustments** Conduct regular assessments using pre- and post-camp tests to track learning gains, and make periodic program

adjustments to align instructional strategies with learner needs.

7. **Expand the Study to Other Subject Areas** Apply the differentiated camp model to Mathematics, Science, and other subjects; future research should examine whether similar camp structures yield comparable results across disciplines.

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Enhancing Reading Comprehension Through Interactive Materials for Grade 6 Pupils

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Introduction

Reading comprehension is foundational to educational success, yet challenges persist in achieving proficiency among all students, particularly Grade 6 pupils. This research study, conducted at Santa Ana Elementary School in the Tubay District, Philippines, was motivated by the need to address these challenges and improve reading skills through innovative educational tools. The primary objective is to develop and evaluate quality-assured, unified interactive reading materials designed to enhance comprehension, engagement, and learning outcomes for Grade 6 pupils.

The study employed a quantitative research design using descriptive and comparative methods. Data were collected through questionnaires, the Philippine Informal Reading Inventory (PHIL-IRI), and the Functional Literacy Assessment Tool (FLAT), with statistical analysis performed using ANOVA. The respondents were Grade 6 pupils, with additional feedback from teachers and educational stakeholders. The research was conducted at Santa Ana Elementary School, under the oversight of the Department of Education (DepEd) Philippines. Ethical considerations included obtaining informed consent, ensuring data privacy, prioritizing participants' well-being, and maintaining transparency and integrity throughout the research process.

Results and Discussion

The findings demonstrate the effectiveness of the interactive reading materials in enhancing reading comprehension and engagement among Grade 6 pupils. The validation results, presented in Table 4,

highlight the materials' strengths across several key aspects.

Aspect Evaluated	Mean	Interpretation
Content Relevance	4.6	Highly relevant content tailored to curriculum standards.
User Engagement	4.4	Engaging interactive features that captivate learners.
Accessibility	4.2	User-friendly design accessible to diverse learners.
Assessment	4.5	Effective assessment tools for evaluating comprehension.

Effectiveness of Interactive Features:

Animations and quizzes enhanced understanding (3.63) and sustained interest (4.1). Video clips encouraged active participation, also scoring 4.1, indicating their role in motivating students and supporting learning.

Impact of Video Clips and Quizzes:

These features positively impacted engagement and comprehension, with quizzes receiving strong positive feedback for assessing content understanding.

Alignment with Curriculum Standards:

The materials scored 4.6 for content relevance, confirming strong alignment with curriculum standards, and 4.3 for catering to diverse learning preferences, ensuring inclusivity.

Effectiveness of Assessment Tools:

Integrated assessment tools were highly effective (4.5), providing meaningful feedback and supporting students' reading progress. Despite these

strengths, navigation and comprehension clarity scored 3.36, suggesting areas for refinement to improve usability and clarity for students.

Reflection and Recommendation

The development of interactive reading materials has demonstrated significant potential in improving reading comprehension and engagement among Grade 6 pupils. The materials, incorporating animations, quizzes, and video clips, enhance understanding, sustain interest, and align well with curriculum standards. The integrated assessment tools effectively evaluate and support students' learning progress, fostering an inclusive learning environment.

This research directly supports DepEd's "Hamon: Bawat Bata Bumbabasa" (3Bs Initiative), as outlined in Department Memorandum No. 173, s. 2019, which aims to ensure every child becomes a proficient reader. By providing innovative, technology-enhanced reading materials, the study contributes to DepEd's goal of improving literacy skills across the Philippines, utilizing tools like PHIL-IRI and FLAT to monitor progress.

Recommendations for teachers include integrating these materials into lesson plans, participating in professional development to use them effectively, providing feedback for improvements, and collaborating to share best practices. For future researchers, conducting longitudinal studies to assess long-term impacts, exploring pedagogical approaches like inquiry-based learning, and investigating advanced technologies such as artificial intelligence and virtual reality are suggested to further enhance reading education.

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Enhancing Reading Comprehension Through Interactive Materials for Grade 6 Pupils

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Introduction

Agay National High School in Remedios T. Romualdez, Agusan del Norte, Philippines, has achieved School-Based Management (SBM) Level III accreditation, recognizing its advanced practices in educational management. However, Stakeholders still face several obstacles when putting SBM into practice, nevertheless. To maintain the school's Level III (accreditation) (Advanced Level of Practice), these issues must be resolved. This study aimed to assess SBM practices in four key areas: Leadership and Governance, Curriculum and Learning, Accountability and Continuous Improvement, and Management of Resources.

The study employed a descriptive research design, utilizing a 5-point Likert scale survey and a researcher-made questionnaire. Data were collected from 250 respondents, including the School Governing Council, administrators, parents, teachers, and students at Agay National High School in January 2024. Ethical considerations included acknowledging respondents' cooperation and ensuring research integrity, as noted: Respondents of this study are for being approachable and cooperative and for spending time answering the survey questionnaires.

Results and Discussion

The study found that SBM practices at Agay National High School are implemented effectively across all assessed areas, as shown in the table.

Area	Mean	Interpretation
Leadership and Governance	4.3	To a very great extent
Curriculum and Learning	3.93	To a great extent
Accountability and Continuous Improvement	4.07	To a great extent
Management of Resources	4.01	To a great extent

Leadership and Governance: The findings indicated that the school-based management at Agay National High School had a robust leadership and governance framework, with a mean of 4.3, reflecting strong collaboration among stakeholders.

Curriculum and Learning: Rated at 3.93, this area showed effective curriculum delivery and learning facilitation, interpreted as "To a great extent."

Accountability and Continuous Improvement: With a mean of 4.07, this area was effective but identified as the most challenging, as "The third principle of SBM, which pertains to accountability and continuous improvement, is regarded as the most challenging by the stakeholders."

Management of Resources: Scored 4.01, indicating efficient resource use, also interpreted as "To a great extent."

Challenges included increasing workloads, lack of role clarity, coordination issues, and insufficient stakeholder involvement, though most were manageable. The findings demonstrate that while SBM practices are robust, accountability remains a critical area for improvement.

Reflection and Recommendation

The evidence indicates that “School-based Management practices implemented at Agay National High School demonstrate efficacy,” particularly in leadership and governance, driven by collaboration among school heads and stakeholders. However, “principle 3, which deals with accountability and ongoing development, presents the biggest obstacle.” This suggests a need for targeted interventions to sustain the school’s SBM Level III status.

The study proposes an advocacy plan to promote the sustainability of SBM Level III accreditation: “This aims to promote the sustainability of SBM Level III Accreditation of Agay National High School. With this, the effective implementation of SBM practices will be sustained by the school's performance, school heads and administrators, and other stakeholders becoming more holistically competent.” Recommendations include enhancing stakeholder collaboration and capacity building through training. This research supports DepEd Order No. 83, s. 2012, which promotes SBM as a strategy to enhance educational outcomes by decentralizing decision-making, aligning with the Basic Education Sector Reform Agenda (BESRA) to improve school performance and student achievement.

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Enhancing ALS Teachers' Effectiveness Through Focused Training on EdTech Tools

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Introduction

Alternative Learning System (ALS) teachers in the Division of Agusan del Norte face challenges in effectively integrating educational technology (EdTech) into their teaching, highlighting a significant digital divide. This gap negatively impacts marginalized learners who depend heavily on ALS programs. The study titled "Enhancing ALS Teachers' Effectiveness Through Focused Training on EdTech Tools in the Division of Agusan del Norte" addresses this problem by providing targeted training to strengthen ALS teachers' proficiency in EdTech tools, aiming to enhance instructional practices and student outcomes. Specifically, the study assesses ALS teachers' knowledge, skills, attitudes, frequency of EdTech tool usage, and the perceived impact of training.

This research employs a descriptive quantitative design. All ALS teachers within Agusan del Norte participated in the study, providing data through structured online surveys featuring Likert scale questions. Ethical standards were strictly followed, including informed consent, confidentiality, non-maleficence, transparency, and honesty.

Results and Discussion

Knowledge of EdTech Tools: ALS teachers demonstrated confidence in their knowledge of EdTech tools (mean score of 3.85). However, integration into lesson plans was moderately rated (3.75), indicating room for practical improvement.

Skills in Implementing EdTech Tools: Teachers showed moderate proficiency (mean score of 3.74), expressing comfort in tool navigation (3.90) but limited troubleshooting abilities (3.62).

Attitudes Towards EdTech: Teachers maintained a highly positive attitude toward EdTech (mean score of 4.20), showing strong willingness for continuous learning (4.38) and recognition of EdTech's importance in ALS instruction (4.35).

Frequency of EdTech Tool Usage: Usage frequency was consistent but moderate (mean score of 3.74), suggesting the need for sustained encouragement and resources.

Perceived Impact of EdTech Training: Training was viewed positively overall (mean score of 3.86). Teachers believed ongoing training would significantly improve instructional effectiveness (4.13).

Reflection and Recommendations

The study concludes that targeted, hands-on EdTech training significantly improves ALS teachers' effectiveness, bridging the digital divide for marginalized learners. It underscores continuous professional development as essential for maximizing EdTech integration, fostering a supportive learning environment, and aligning ALS instruction with global educational trends.

The actionable recommendations derived from this research include implementing "Project TECH-UP," a focused training program involving:

- A 3-day practical EdTech workshop (January 2025).
- Weekly mentorship sessions to sustain regular EdTech integration (February 2025).
- Establishment of peer groups for collaborative problem-solving (March 2025).
- Conducting reflection sessions to evaluate EdTech's classroom impact (April 2025).

This initiative aligns with the DepEd's policy to reduce educational disparities, specifically contributing to the Alternative Learning System Program's enhancement by addressing EdTech competency gaps among ALS educators.

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Disaster Risk Reduction and Management Program Implementation in Carmen 2 District: An Assessment

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Introduction

Educators Disasters, often unexpected events, severely disrupt community functioning, including educational systems, posing risks to students, teachers, and school infrastructure. In Carmen 2 District, Division of Agusan del Norte, Philippines, the need to strengthen Disaster Risk Reduction and Management (DRRM) programs is critical due to the region's vulnerability to natural and human-induced hazards. This study aimed to assess the implementation of DRRM programs in Carmen 2 District schools for the School Year 2022-2023.

The study employed a descriptive research design, utilizing survey questionnaires adapted from the National Disaster Risk Reduction Management (NDRRM) Manual. Respondents included school heads, DRRM coordinators, and Physical Facilities coordinators from schools in Carmen 2 District. The research locale was selected for its relevance to rural educational settings prone to disasters. Ethical considerations included securing informed consent, ensuring confidentiality of responses, and transparently sharing findings with stakeholders to maintain trust and credibility.

Results and Discussion

The study evaluated DRRM implementation across four key areas, with findings summarized in the table below.

Indicator	Status	Interpretation	Key Findings
Prevention and Mitigation	Moderate	Partially Implemented	Risk assessments conducted, but limited resources
Preparedness	High	Well Implemented	Regular drills and awareness campaigns
Response	Moderate	Partially Implemented	Effective immediate actions, but coordination issues
Recovery and Rehabilitation	Moderate	Partially Implemented	Psychological support lacking

Prevention and Mitigation: Rated moderate, schools conducted risk assessments but faced constraints due to limited resources, impacting the ability to stop increasing poverty and spiraling vulnerability.

Preparedness: Rated high, with schools conducting fire and building evacuation drills annually, lead one full simulation drill annually, evaluate the results, and adjust the plan accordingly. Awareness campaigns were also effective.

Response: Moderately implemented, with effective immediate actions but challenges in coordination and communication during emergencies.

Recovery and Rehabilitation: Rated moderate, with efforts to assist in physical and psychological rehabilitation, but "one deterring factor that was often encountered was the lack of time to incorporate disaster-related subjects into classroom activities.

Reflection and Recommendation

The study reveals that the assessment of Disaster Risk Reduction and Management program implementation in Carmen 2 District, Division of Agusan del Norte for S.Y. 2022-2023 indicates moderate overall implementation, with preparedness being the strongest area. However, challenges such as limited resources and lack of parental engagement hinder comprehensive DRRM execution. These findings underscore the need for targeted interventions to enhance school resilience.

Recommendations include:

Intensify Implementation: “Intensify the implementation of DRRM and capacity building through orientations and training” to enhance stakeholder capabilities.

Partnerships for Resilience: Establish “needs-based support from partners through systematic exchange of information, resources, and expertise in DRRM, CCA, and EIE.”

DRRM Information System (DRRMIIS): Develop a system to provide “evidence-based research” for formulating policies and programs.

IEC and Advocacy: Promote a culture of safety and resilience through information, education, and communication campaigns.

Learning Continuity: Plan interventions to ensure “regions, divisions, and schools are planning to lead the recovery and rehabilitation after the disaster.

These recommendations align with DepEd Order No. 37, s. 2015, which establishes the Comprehensive School Safety Framework, aiming to create resilient schools capable of mitigating disaster impacts. By implementing these strategies, Carmen 2 District can enhance its DRRM programs, ensuring safer

learning environments and contributing to DepEd’s broader goal of disaster-resilient education systems.

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Strategic Teaching for Integer Operations: A Framework for Improved Numeracy and Retention

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Introduction

Educators In mathematics education, fostering a strong foundation in numerical proficiency, particularly in operations on integers, is fundamental to students' future success in more advanced mathematical concepts. At Carmen National High School in Carmen, Agusan del Norte, Philippines, many Grade 10 students struggle with integer operations, leading to low numeracy and retention rates. This action research, conducted in 2024, addresses this challenge by developing and implementing a strategic teaching framework that goes beyond conventional pedagogical approaches.

The study utilized a descriptive research design, employing quantitative methods to collect data from Grade 10 students at Carmen National High School. Data were gathered through pre- and post-assessments to measure academic performance, alongside surveys using a Likert scale to evaluate student perceptions across five indicators: teaching effectiveness, numeracy improvement, engagement, retention, and satisfaction. The research ensured ethical integrity by obtaining informed consent, maintaining confidentiality, and providing transparent reporting of findings. The study's focus on a specific grade level and school setting allowed for targeted insights into improving math education in a junior high school context.

Results and Discussion

The study assessed the impact of a strategic teaching framework on Grade 10 students' numeracy and retention in integer operations, with findings addressing each research question.

Indicator	Mean	Interpre-tation	Key Findings
Teaching Effectiveness	4.15	Highly Effective	Enhanced confidence and preparedness
Numeracy Improvement	4.10	Highly Effective	Improved fluency in integer operations
Student Engagement	4.05	Highly Effective	Increased interest and enjoyment
Retention of Concepts	4.03	Moderately Effective	Strong retention and application ability
Overall Satisfaction	3.94	Moderately Effective	Positive alignment with learning needs

Teaching Effectiveness: Rated highly effective (mean: 4.15), the framework enhanced students' preparedness for future mathematical challenges, aligning with innovative teaching strategies that incorporate real-world applications and technology.

Numeracy Improvement: With a mean score of 4.10, students reported increased confidence in performing integer operations, indicating that "the strategic teaching framework reflects a commendable impact on participants' numeracy improvement."

Student Engagement: Scored at 4.05, the framework fostered "increased interest and enjoyment in learning integer operations among students," driven by interactive and student-centric methods.

Retention of Concepts: Rated moderately effective (mean: 4.03), the framework supported students' ability to retain and

apply concepts, though further refinement could enhance long-term retention.

Overall Satisfaction: With a mean of 3.94, students expressed satisfaction, noting that “the teaching framework was perceived as positively influencing students’ attitudes toward learning mathematical concepts.”

Correlation analysis revealed strong positive associations, particularly between retention of concepts and other indicators, such as teaching effectiveness ($r = 0.75$) and engagement ($r = 0.80$), indicating that effective teaching and engagement significantly contribute to retention.

Reflection and Recommendation

The research demonstrates that the strategic teaching framework significantly enhances students’ numeracy, engagement, retention, and satisfaction in integer operations. “The mean percentage score surged from 8.33% to 62.50%,” underscoring the framework’s impact on academic performance. However, areas like retention and satisfaction, while moderately effective, suggest opportunities for further refinement to ensure sustained learning outcomes.

The study proposes “Project BANSAY (Building Advanced Numeracy Skills and Achieving Yearning)” to enhance the framework through:

- Structured activities incorporating real-world scenarios to bridge the gap in numeracy mastery.
- Continuous assessment and feedback to support personalized learning paths.
- Integration of technology to enhance engagement and retention.
- Collaborative learning environments to foster student interaction.

This initiative aligns with DepEd’s K to 12 Basic Education Curriculum, particularly the Mathematics Framework outlined in

DepEd Order No. 8, s. 2015, which emphasizes numeracy as a core competency for lifelong learning. By implementing Project BANSAY, schools can foster a dynamic, student-centric approach to mathematics education, ensuring students are better equipped for future academic challenges and contributing to DepEd’s goal of improving educational quality.

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Exploring the Impact of Vocabulary Proficiency in the Context of Matatag Curriculum on the Academic Performance of Grade 11 Learners

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Introduction

The Senior High School, like many educational institutions, faces the challenge of ensuring that students are well-equipped with the necessary language skills to excel academically. Vocabulary proficiency is a crucial aspect of language development and academic success. As students transition to grade 11, they encounter a more demanding curriculum that requires a higher level of language competence, particularly in terms of vocabulary. The study aims to understand students' perceptions regarding the relationship between vocabulary skills and various academic dimensions, including difficulty in word selection, reading comprehension, written communication skills, classroom participation, and motivation to learn vocabulary."

Numerous studies have emphasized the strong correlation between vocabulary proficiency and academic success. Researchers such as Marzano (2004) and Nagy (2005) have highlighted the importance of a rich vocabulary in comprehension, critical thinking, and overall academic achievement. McKeown and Beck (2004) argue that language is not just a means of expressing knowledge but also a tool for acquiring new knowledge. A limited vocabulary can act as a barrier to understanding complex concepts and engaging with academic content effectively.

Results and Discussion

The table shows the Impact of Vocabulary Proficiency on Academic Dimensions.

Academic Dimension	Overall Mean	Interpretation
Difficulty in word selection	3.64	Most Effective
Impact on reading comprehension	3.58	Most Effective
Written communication skills	3.58	Most Effective
Classroom participation and vocabulary	3.52	Most Effective
Motivation and willingness to learn vocabulary	3.48	Most Effective
Overall Mean	3.56	Most Effective

The data presented above showed that Vocabulary Proficiency and Academic Success with an overall mean of 3.56 suggests a general agreement among respondents that vocabulary proficiency is positively correlated with academic success. The consistent 'Strongly Agree' verbal description across all statements, with overall means ranging from 3.48 to 3.64, indicates that Grade 11 learners perceive vocabulary as having a significant and positive impact on various aspects of their academic performance. Vocabulary influences their ability to select words, understand reading materials, communicate effectively in writing, participate in class, and stay motivated to learn.

Reflection and Recommendations

The implementation of effective vocabulary-building strategies is crucial for enhancing students' academic success, particularly within the framework of the Matatag Curriculum. By strengthening their vocabulary foundation, learners can better comprehend and engage with content across various subjects. This reflection underscores the importance of structured vocabulary lessons, tiered instruction, peer learning, and the active involvement of parents and technology in creating a supportive learning environment. The recommendations provided aim to offer diverse, practical approaches that can foster lasting improvements in students' language proficiency and overall academic achievement.

Vocabulary Enrichment Programs

Structured Vocabulary Lessons: Implement dedicated vocabulary lessons that focus on word meaning, usage, synonyms, antonyms, and context. These lessons can be integrated into the existing curriculum or offered as supplementary classes.

Tiered Vocabulary Instruction: Use a tiered approach to vocabulary instruction that categorizes words into three levels: basic words, academic vocabulary, and domain-specific terminology. This allows students to build a robust vocabulary that is applicable across different subjects.

Peer Learning and Collaborative Activities: Organize classroom games and competitions, such as word searches, crossword puzzles, and spelling bees, to make vocabulary learning fun and competitive.

Parental Involvement and Support: Engage parents by providing vocabulary challenges or word-of-the-day activities that they can do with their children at home. This reinforces

vocabulary learning outside the classroom.

Technology-Enhanced Learning: Utilize educational apps and online platforms that are designed to enhance vocabulary through interactive games, quizzes, and flashcards. These tools can make vocabulary learning engaging and accessible.

Regular Assessment and Feedback: Implement regular vocabulary quizzes and tests to assess students' progress and retention. This helps identify areas where additional support may be needed.

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The Impact Of Water Sanitation And Hygiene (Wash) on Enhancing Basic Education Services and Facilities

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Introduction

Educators In many educational settings, particularly in rural and developing regions, the availability and quality of Water, Sanitation, and Hygiene (WASH) facilities are critical for ensuring student health, attendance, and academic performance. At Carmen Central Elementary School in Carmen, Agusan del Norte, Philippines, this issue is particularly significant due to the school's rural location and the potential challenges in providing adequate WASH services. This research study, conducted during the School Year 2023-2024, was motivated by the need to assess how WASH facilities influence educational outcomes in such contexts. The study aimed to evaluate the status of WASH facilities, assess the level of implementation of WASH initiatives, determine the relationship between WASH and basic education services, and propose sustainable projects to enhance these programs. By addressing these objectives, the research seeks to contribute to the improvement of educational environments in similar settings, aligning with the Department of Education's (DepEd) Comprehensive Water, Sanitation, and Hygiene in Schools (WinS) Program (DepEd Order No. 10, s. 2016).

The study utilized a descriptive-correlational research design to explore the relationships between WASH facilities and educational outcomes. Data were collected through surveys and structured interviews involving 30 teachers. The research locale was chosen for its representation of rural educational settings in the Philippines. Ethical considerations were strictly observed, ensuring informed consent, confidentiality, and anonymity of all participants. This approach allowed for a

comprehensive assessment of WASH facilities and their impact on the school community.

Results and Discussion

The findings revealed a generally positive assessment of WASH facilities at Carmen Central Elementary School, with specific insights addressing the research objectives:

Area	Mean	Interpretation	Verbal Description
Availability of Clean Water	4.15	High	Effective provision
Sanitation Facilities	4.4	Very High	Clean, functional
Personal Hygiene Education	4.22	Very High	Effective education
Health and Illness Reporting	4.14	High	Efficient system
Overall Impact on Health	4.31	High	Positive impact

Availability of Clean Water: Rated highly (mean: 4.15), with clean drinking water readily available (mean: 4.25) and accessible during school hours (mean: 4.80). These facilities positively impacted attendance (mean: 3.12) and academic performance (mean: 4.12), though maintenance and hygiene sufficiency showed room for improvement.

Sanitation Facilities: Received very high ratings (weighted mean: 4.4), with clean, functional toilets (mean: 4.72), regular maintenance (mean: 4.01), and gender-sensitive designs (mean: 4.12). These reduced absenteeism (mean: 3.56) and enhanced the learning environment.

Accessibility for students with disabilities (mean: 3.96) needed further improvement.

Personal Hygiene Education: Rated very high (mean: 4.22), fostering lifelong positive hygiene habits among students.

Health and Illness Reporting: Rated high (mean: 4.14), enabling prompt health issue management and reducing disease spread.

Overall Impact on Pupil Health: Rated high (mean: 4.31), demonstrating improvements in student health, attendance, and academic performance.

Level of Implementation: Very high ratings for access to facilities (mean: 4.45), integration into the curriculum (mean: 4.45), maintenance and sustainability (mean: 4.45), and impact on health and performance (mean: 4.31). Stakeholder support was strong (mean: 4.15), with effective collaboration.

Correlation analysis showed no significant negative correlation between WASH facilities and educational outcomes, suggesting that enhancing WASH initiatives could further improve student health and academic performance.

Reflection and Recommendation

The study underscores the critical role of WASH facilities in enhancing basic education services and facilities. At Carmen Central Elementary School, WASH programs have demonstrated effectiveness in improving student health, attendance, and academic performance. However, areas such as facility maintenance, accessibility for students with disabilities, and sustainability require attention.

- **Strengthening teacher training to improve hygiene education delivery.**
- **Increasing collaboration with local authorities and communities for**

resources and funding.

- **Conducting continuous evaluations to identify gaps and ensure facilities meet evolving needs.**
- **Encouraging student involvement in maintaining hygiene facilities.**
- **Promoting student-led hygiene campaigns to raise awareness.**
- **Enhancing communication with parents to reinforce WASH importance.**

By implementing these recommendations, Carmen Central Elementary School can further enhance its WASH facilities, contributing to better educational outcomes and a healthier school environment.

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Extent of Student Leadership among SSG Officers: Basis for a Leadership Training Program

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INTRODUCTION

This study examined the extent of student leadership among Student Supreme Government (SSG) officers in secondary schools of Siargao. It aimed to determine the significant differences in leadership skills based on profile variables and identify coping mechanisms to challenges encountered. The research emphasized the importance of enhancing student leadership to prepare youth for responsible citizenship and future leadership roles.

A descriptive quantitative research design was employed, complemented by Focused Group Discussions (FGD). Participants included 281 SSG officers selected from secondary schools in Siargao. Data were analyzed using statistical tools such as frequency, percentage, weighted mean, standard deviation, and ANOVA. Content analysis was applied to qualitative responses. Ethical standards were observed throughout the study.

DISCUSSION OF RESULTS

The study delved into investigating the demographic profiles of the respondents, leadership dimensions, and the challenges the respondents encountered in student leadership.

The discussions of the findings are presented in the following table presentations capturing significant insights

drawn from the data gathered:

Profile Variable	Summary
Gender	Majority male (69%)
Grade Level	Mostly Grade 12 and 10
Length of Service	Most served less than a year
Training Attended	82% had no leadership training

Table 1. Summary of Demographic Profile of the Respondents

The table below presents the profile of student leaders, revealing that the majority were male (69%) and predominantly from Grade 12 and Grade 10. Most had less than a year of leadership experience, and a significant portion (82%) had not attended any leadership training. These findings suggest that student leadership roles are often assumed by senior students with limited formal preparation, highlighting the need for structured training programs.

Leadership Dimension	Extent of Manifestation
Resource Provider	Extensive (Very Good)
Instructional Resource	Extensive (Very Good)
Communicator	Very Extensive (Very Good)
Visible Presence	Extensive (Very Good)

Table 2. Leadership Dimensions and the Respondents' Extent of Manifestation

Table 2 reveals that student leaders demonstrated extensive leadership as resource providers, with a mean score of 2.74. They effectively recognized team contributions, mobilized resources, and encouraged collaborative planning. These behaviors indicate a strong capacity to support and motivate peers, even in the absence of formal training.

In addition, the study highlights the role of student leaders as instructional resources, with a mean score of 2.87. Leaders were open to suggestions, consulted advisers, and communicated instructions clearly. This reflects their ability to facilitate learning and guide peers through collaborative and respectful interactions.

The study also indicates that student leaders excelled as communicators, scoring a mean of 2.79. They actively listened, encouraged idea sharing, and ensured clarity in communication. These skills are essential for effective leadership and contribute to a positive and inclusive school environment.

Further, the study shows that student leaders maintained a strong visible presence, with a mean score of 2.79. They participated actively in school activities, supported peers, and demonstrated teamwork. This visibility reinforces their leadership role and fosters a sense of community among students.

Challenges	Solutions
Lack of resources and support	Accountability, innovation, and optimism

Table 3. Challenges encountered in Student Leadership

Table 3 outlines the challenges faced by student leaders, including lack of resources, training, and administrative support. Despite these obstacles, leaders exhibited accountability, innovation, and optimism.

They leveraged available resources and collaborated with stakeholders to overcome difficulties, demonstrating resilience and commitment to their roles.

CONCLUSIONS AND RECOMMENDATIONS

Student leaders demonstrated extensive leadership competencies despite limited experience and training. They exhibited accountability, innovation, and positivity in overcoming challenges. The study concludes that student leadership is strong but requires continuous support and development.

It is recommended that schools implement annual Student Leadership Training Programs and operational planning for SSG coordinators. These initiatives will help sustain a culture of excellence and prepare students for future leadership roles.

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Proficiency Level of School Heads in The Philippine Professional Standards For School Heads (PPSSH)

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INTRODUCTION

This study was inspired by the persistent challenges faced by school heads in Bayugan City in implementing the Philippine Professional Standards for School Heads (PPSSH), particularly in the areas of financial management, collaborative planning, and research issues that have contributed to operational inefficiencies and stalled school improvement efforts (Delos Santos & Reyes, 2023).

To address these gaps, the study aims to identify specific deficiencies and use the results to inform targeted professional development programs tailored to school leaders' actual needs. A quantitative, descriptive research design will be employed, utilizing surveys to collect data from school heads within the division. Ethical considerations, including informed consent, confidentiality, and secure data handling, will be upheld throughout the research process to maintain participant integrity and ensure the responsible use of findings (Lorenzo & Cruz, 2024).

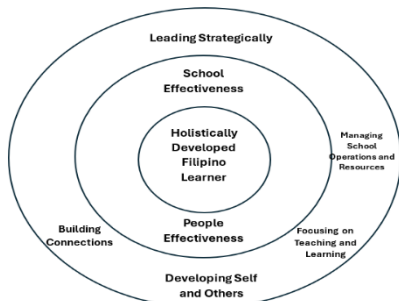


Figure 1. Conceptual Framework

The Philippine Professional Standards for School Heads (PPSSH), under DepEd Order No. 24, s. 2020, provides a clear framework that defines the roles, competencies, and values expected of school leaders. It supports their career progression and serves as the basis for recruitment, performance appraisal, professional development, and recognition. Centered on improving learner outcomes, the PPSSH emphasizes school and people effectiveness through five key leadership domains, highlighting the school head's vital role in leading both instructional and administrative functions.

RESULT & DISCUSSION

The study revealed noticeable differences in school heads' proficiency levels based on their position and years of service. Across all roles School Principals, Head Teachers, and Teachers-in-Charge "Research and Innovation" emerged as the weakest strand, with over 50% in each group rated at the *Beginning* career stage. Despite this, strengths were noted in other areas: School Principals excelled in "Policy Implementation and Review" (60.61% Highly Proficient), while Head Teachers performed well in "Program Design and Implementation" (55.17% Proficient).

Longer service generally correlated with higher proficiency, particularly in "Financial Management," where 35% of those with 16+

years were rated Highly Proficient. However, even experienced leaders showed low competency in research, with 65% still at the Beginning stage. These results emphasize the need for targeted, strand-specific professional development especially in research and innovation while building on the existing strengths of school heads.

Table 3

Proficiency Level of School Heads in the PPSSH as to Position/ Designation

Domain 1	Strands	Position/Designation	Career Stage							
			1		2		3		4	
			N o.	%	N o.	%	N o.	%	N o.	%
Leading Strategically	1. Vision, Mission and Core Values	School Principal	5	15.15	2	6.06	20	60.61	6	18.18
		Head Teacher	2	6.90	10	34.48	12	41.38	5	17.24
		Teacher In-Charge	2	25.00	4	50.00	2	25.00	0	0.00
	2. School Planning and Implementation	School Principal	3	9.09	6	18.18	18	54.55	6	18.18
		Head Teacher	1	3.49	12	41.38	14	48.28	2	6.90
		Teacher In-Charge	3	37.50	3	37.50	2	25.00	0	0.00
	3. Policy Implementation and Review	School Principal	5	15.15	7	21.21	20	60.61	1	3.03
		Head Teacher	9	31.03	10	34.48	10	34.48	0	0.00
		Teacher In-Charge	1	12.50	6	75.00	1	12.50	0	0.00
	4. Research and Innovation	School Principal	17	51.51	10	30.30	5	15.15	1	3.03
		Head Teacher	12	41.38	15	51.72	2	6.90	0	0.00
		Teacher In-Charge	4	50.00	2	25.00	2	25.00	0	0.00
	5. Program	School Principal	6	18.18	12	36.36	8	24.24	7	21.21
	and Implementation	Teacher In-Charge	3	37.50	3	37.50	2	25.00	0	0.00
	6. Learner Voice	School Principal	8	24.24	10	30.30	11	33.33	4	12.12
		Head Teacher	3	10.34	11	37.93	13	44.83	2	6.90
		Teacher In-Charge	2	25.00	4	50.00	1	12.50	1	12.50
	7. Monitoring and Evaluation Process and Tools	School Principal	8	24.24	15	45.45	6	18.18	4	12.12
		Head Teacher	5	17.24	15	51.72	6	20.69	3	10.34
		Teacher In-Charge	3	37.50	4	112.50	1	12.50	0	0.00

As shown in Table 3, under Domain 1 (Leading Strategically), school principals demonstrated their highest proficiency in Policy Implementation and Review, with 60.61%

rated as Highly Proficient, while their lowest was in Research and Innovation, where 51.51% were at the Beginning stage. Similarly, 55.17% of head teachers were Proficient in Program Design and Implementation, yet 41.38% were at the Beginning stage in Research and Innovation. Among Teachers-in-Charge, 75% reached Proficient levels overall, but 50% were also at the Beginning stage in Research and Innovation. These results highlight a consistent weakness in research-related competencies across all positions.

Priority training needs of school heads in the PPSSH Strands

1. Policy Implementation and Review
2. Research And Innovation
3. School Planning and Implementation
4. Monitoring And Evaluation Process and Tools
5. Financial Management
6. Management Of Staff
7. Emerging Opportunities and Challenges
8. School Based Review, Contextualization of Learning Standards
9. Features Performance Feedback
10. Learning Assessment
11. Professional Networks
12. Professional Development of School Personnel
13. Rewards And Recognition Mechanism
14. Management Of Diverse Relationships
15. Inclusive Practice
16. Community Engagement

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Strategic Teaching for Integer Operations: A Framework for Improved Numeracy and Retention

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Introduction

Educators In mathematics education, fostering a strong foundation in numerical proficiency, particularly in operations on integers, is fundamental to students' future success in more advanced mathematical concepts. At Carmen National High School in Carmen, Agusan del Norte, Philippines, many Grade 10 students struggle with integer operations, leading to low numeracy and retention rates. This action research, conducted in 2024, addresses this challenge by developing and implementing a strategic teaching framework that goes beyond conventional pedagogical approaches.

The study utilized a descriptive research design, employing quantitative methods to collect data from Grade 10 students at Carmen National High School. Data were gathered through pre- and post-assessments to measure academic performance, alongside surveys using a Likert scale to evaluate student perceptions across five indicators: teaching effectiveness, numeracy improvement, engagement, retention, and satisfaction. The research ensured ethical integrity by obtaining informed consent, maintaining confidentiality, and providing transparent reporting of findings. The study's focus on a specific grade level and school setting allowed for targeted insights into improving math education in a junior high school context.

Results and Discussion

The study assessed the impact of a strategic teaching framework on Grade 10 students' numeracy and retention in integer operations, with findings addressing each research question.

Indicator	Mean	Interpre-tation	Key Findings
Teaching Effectiveness	4.15	Highly Effective	Enhanced confidence and preparedness
Numeracy Improvement	4.10	Highly Effective	Improved fluency in integer operations
Student Engagement	4.05	Highly Effective	Increased interest and enjoyment
Retention of Concepts	4.03	Moderately Effective	Strong retention and application ability
Overall Satisfaction	3.94	Moderately Effective	Positive alignment with learning needs

Teaching Effectiveness: Rated highly effective (mean: 4.15), the framework enhanced students' preparedness for future mathematical challenges, aligning with innovative teaching strategies that incorporate real-world applications and technology.

Numeracy Improvement: With a mean score of 4.10, students reported increased confidence in performing integer operations, indicating that "the strategic teaching framework reflects a commendable impact on participants' numeracy improvement."

Student Engagement: Scored at 4.05, the framework fostered "increased interest and enjoyment in learning integer operations among students," driven by interactive and student-centric methods.

Retention of Concepts: Rated moderately effective (mean: 4.03), the framework supported students' ability to retain and

apply concepts, though further refinement could enhance long-term retention.

Overall Satisfaction: With a mean of 3.94, students expressed satisfaction, noting that “the teaching framework was perceived as positively influencing students’ attitudes toward learning mathematical concepts.”

Correlation analysis revealed strong positive associations, particularly between retention of concepts and other indicators, such as teaching effectiveness ($r = 0.75$) and engagement ($r = 0.80$), indicating that effective teaching and engagement significantly contribute to retention.

Reflection and Recommendation

The research demonstrates that the strategic teaching framework significantly enhances students’ numeracy, engagement, retention, and satisfaction in integer operations. “The mean percentage score surged from 8.33% to 62.50%,” underscoring the framework’s impact on academic performance. However, areas like retention and satisfaction, while moderately effective, suggest opportunities for further refinement to ensure sustained learning outcomes.

The study proposes “Project BANSAY (Building Advanced Numeracy Skills and Achieving Yearning)” to enhance the framework through:

- Structured activities incorporating real-world scenarios to bridge the gap in numeracy mastery.
- Continuous assessment and feedback to support personalized learning paths.
- Integration of technology to enhance engagement and retention.
- Collaborative learning environments to foster student interaction.

This initiative aligns with DepEd’s K to 12 Basic Education Curriculum, particularly the Mathematics Framework outlined in

DepEd Order No. 8, s. 2015, which emphasizes numeracy as a core competency for lifelong learning. By implementing Project BANSAY, schools can foster a dynamic, student-centric approach to mathematics education, ensuring students are better equipped for future academic challenges and contributing to DepEd’s goal of improving educational quality.

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Utilization of Jumpstart Materials: Intervention to Improve Reading Performance

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INTRODUCTION

The flagship program of the Department of Education is aligned to “Every Child A Reader Program,” which aims to make every Filipino learner a reader and a writer at his/her grade level. Thus, Bislig City Division initialized a contextualized reading materials “Jumpstart” intended for key stage 1 learners in teaching beginning reading. The set of modules were written in order to transform the learners from learning to read into reading to learn. It is ultimately written to provide the teachers, parents, and guardians a step-by-step process of teaching beginning reading using the fuller technique. However, the recent results of the national assessments revealed that there are still many grade learners struggling to meet the learning standards in early language, literacy and numeracy.. Providing an appropriate reading material combined with instruction from well-trained teachers developed and improved the academic performance of the learners as shown in this study using Jumpstart materials, an intervention to improve reading performance of Grade III learners in Maharlika Elementary School. The Philippine Informal Reading Inventory (Phil-IRI) Pre- Test was conducted this academic year 2021-2022 among 39 Grade III learners. Those identified as frustration level readers (n=13) were the respondents of the study, and was given the Jumpstart materials during the 23 days intervention period. The study sought to answer the following questions: What is the Pre-Test result of Grade Three in Phil-IRI?What is the Post Test result in Phil-IRI after the implementation of Jumpstart?

What is the implication of Jumpstart, Division Initiated Reading Material in the implementation of the reading program of Bislig City Division?What supplementary reading materials can be crafted from this study?

The study used descriptive statistics in the treatment of data based on Phil-IRI formula and standard in the over-all results of pre-test and posttest in the assessment in word reading and comprehension to determine the reading profile of respondents. During the conduct of the reading session, it was done three-hours from 8:00 a.m. – 11:00a.m. An introduction or review on the names of pictures was given. Also, a review on the consonant letters and their sounds were done in order to identify the prior knowledge of the pupils. Blending sounds of the onsets and target rime by using the flash cards. In addition, series of games are given for mastery in decoding words and enriching learner’s vocabulary. Worksheets were given to explicitly teach the learners how to perform the exercises by group, by pair or individually. Then, introduced the sight words using the flash cards in order to introduce writing of phrases to ensure that the learners observe correct spaces between words. Finally, the respondents read a story individually then answered the comprehension orally. Throughout the study, researchers ensured ethical compliance by obtaining permissions from school authorities, securing informed consent from parents and students, ensuring confidentiality and prioritizing the learners' well-being by providing a debriefing process.

DISCUSSION OF RESULTS

Before the administration of Jumpstart materials, there were 13 identified frustration level readers and after the implementation of the reading materials there were 8 out of 13 (62%) independent readers and 5 out of 13 (38%) are instructional level readers. It can be noted that respondent 7 is an instructional level reader in Word Reading but independent in Comprehension level. Hence, this respondent got least in Word Reading but still able to get perfect score in the Comprehension so the least level either in word reading or in comprehension will be the basis of the learners' reading profile. It is understood that in knowing the reading profile of the learner, their level in word reading and comprehension should both be evaluated. Using the Phil-IRI assessment the computation below was followed in determining the reading level.

Word Reading:

$$WR = M / N \times 100 = \% \text{ of miscues}$$
$$\% \text{ of correct} = 100\% - \% \text{ of miscues}$$

Where:

M= miscues

N = number of words

WR= word recognition

Comprehension:

$$C = NCA / NW \times 100\%$$

Where:

NCA= Number of Correct Answers

NW= Number of Words in the passage

C = Comprehension

After the conduct of the intervention, in Word Reading there are 8 independent level readers, 5 instructional level readers, and no frustration level readers; in terms of Comprehension, there are 9 independent readers while 4 are instructional level readers. The reading profile of the respondents after the conduct of the study using Jumpstart materials showed that there are 8 (62%) independent readers and 5 (38%) instructional level readers. The used of Jumpstart materials following all the series of activities indeed connected to the study

of Abeberese, Kumler, and Linden (2014) found that Filipino students fare well in their academic performance when given appropriate reading materials combined with instruction from well-trained teachers.

CONCLUSIONS AND RECOMMENDATIONS

The result showed that the used of intervention materials proved an increase in the reading performance of the respondents. Furthermore, it also showed that using Jumpstart materials effectively changed the conclusion that learning to read is difficult for the learners. Based on the result it is suggested to strengthen the division wide implementation using Jumpstart materials in order to cater the struggling readers' performance. Teachers' commitment in improving the reading performance of learners with the availability of appropriate intervention materials definitely will positively affect the academic performance across all learning areas.

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Project FRACTION: A Summer Bridging Intervention Program in Mathematics for Grade 7 Entrants of Tabon M. Estrella National High School

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INTRODUCTION

High school Mathematics readiness is significant to the achievement of higher mathematical skills. It needs a higher level of proficiency in Algebra, Pre-calculus, and Trigonometry. Consequently, a bridge program is considered a preparatory course for high school or college freshmen who require remediation or skill enhancement in specific subjects. Bridge programs can help at-risk students by mitigating summer learning loss, helping them to catch up on academics, and boosting their high school transition readiness (Hanover Research, 2018). Before entering high school, fractions is one of the most ubiquitous, difficult, and crucial analytic concepts that students encounter (Gabriel et al., 2013). The usage of fractions in everyday life is widespread, and students must master its essential ideas, from definition to word problem solution, as early as Grade 1. Mastering it is one of the most difficult aspects of learning Mathematics. According to the findings of researchers, students do poorly on fraction-based algebra assignments, and a fundamental grasp of fractions is essential for Algebra competence. Since fractions serve as a foundation for other mathematical skills, such as Algebra, it is crucial that students have a thorough understanding of the concept (Booth, Newton, and Twiss-Garrity, 2014).

This study implemented a summer bridging program called Project FRACTION (Focused Remediation Activities on Competencies through Instructional Opportunities in

Numeracy) for Grade 7 entrants at Tabon M. Estrella National High School. This was designed to reinforce the prerequisite fundamental skills for high school Mathematics. There were 20 incoming Grade 7 respondents in this study and completed a 14-day face-to-face bridging session program that focused solely on fundamental operations of fractions (addition, subtraction, multiplication, division), and solving word problems. The entire study was conducted in full compliance with the ethical standards required in research. This study secured an informed consent from school officials and parents of the minor participants. Respondents' privacy and data confidentiality were strictly protected, with the teacher required to uphold these standards. The study emphasized voluntary participation, honesty, and transparency, while also ensuring health protocols as this was conducted during the pandemic period.

DISCUSSION OF RESULTS

Paired t-test results of the mean scores of the pre-test and post-test was utilized to determine the effectiveness of Project FRACTION. The results reflected that the p-value, which is 0.000001, is less than the significance level of 0.05. Hence, there is enough evidence to claim that there is a significant difference between the pre-test and post-test scores of the Grade 7 entrants in their post-test in the fundamental operations of fractions. The significant claim of the results above was determined that the face-to-face intervention was beneficial to the implementation of the program. In addition,

this study was guided by the two constructivism principles: (1) learning is engaging and (2) learning builds on prior knowledge (Hein, 1991; Six Principles of Constructivist Learning, 2021). It is engaging due to the presence of ICT and group activities. Conversely, it is impossible to perform the fundamental operations of fractions without prior knowledge of the fundamental operations of whole numbers.

In addition, the Expectancy Theory of Victor Vroom in the context of education signifies that effort produces favorable outcomes. According to Samuel (2018), before considering exerting the necessary effort, the students should anticipate that the assignments and activities are realizable. Teachers who prioritize instruction and student learning are confident that their students can complete the assignment; if they cannot, it may be because they do not comprehend the activity or assignment. The respondents were given assessment to measure their understanding of the lesson. They were oriented that the assessments given were achievable because they were made at par with their level to make sure that they understand the fundamental operations of fractions.

CONCLUSIONS AND RECOMMENDATIONS

The study proved to be an effective bridging program for Grade 7 entrants, helping them strengthen and bridge their prerequisite competencies in high school Mathematics. The results significantly showed that the face-to-face intervention was beneficial to the program's implementation, especially since it was conducted during the pandemic when modular distance learning was in effect from 2020 to 2022. The intervention was also designed to address the learning loss in fractions experienced by students during this period.

To further improve this intervention program, it is recommended that the school administration of TMENHS include the bridging program as part of its annual

activities during school breaks. The project implementation may also be adapted by other learning areas and schools in the division, in line with DepEd Order No. 025, s. 2022. Furthermore, the selection process of participants should be improved by strictly following the mechanisms stipulated in the said DepEd Order. Finally, learners with very satisfactory and outstanding grades in Mathematics who wish to participate may be accommodated through separate sessions designed for advanced classes.

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Utilization of Project Increasing Higher Aptitude and Performance in Math (IHAP) as an Intervention Program in Addressing Operation-related Difficulties in Solving Integers

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INTRODUCTION

Solving operations on integers is one of the prerequisites in learning higher mathematics such as algebra, geometry, calculus and statistics (Nur, 2022). However, it has become a source of anxiety and struggle for some students. Studies have shown that misconceptions about negative numbers and the four fundamental operations often hinder students' mathematical growth (Hayes & Stacey, 1999; Kilhamn, 2008 as cited by Isik, 2018). Based on the Mean Percentage Score (MPS) results of Bislig City National High School in the past three years, one of the least learned competencies in Mathematics 7 is the topic on operations on integers, specifically to perform the four fundamental operations on integers (M7NS-Ic-d-1). To address this problem, the researchers introduced Project IHAP (Increasing Higher Aptitude and Performance in Math) – an intervention designed to improve the learner performance in the four fundamental operations on integers through the utilization of manipulative learning materials such as the Damath board and integer chips. The study sought to answer the following questions: What are the pre- and post-assessment performance of the Grade 7 students in solving integers? Is there a significant difference in the performance of the Grade 7 learners before and after the application of project IHAP? What implications can be drawn from the intervention? And what action plan can be developed from this study?

The study adopted a quantitative, pre-

experimental design using a one-group pre-test and post-test approach to measure the effectiveness of the intervention. The respondents were the twenty-nine Grade 7 learners of Bislig City National High School who were identified as “below basic numerates” and were selected through purposive sampling. The respondents were given four 60-minute sessions that focused on interactive lessons using hands-on materials to visualize and practice the four operations on integers. Data was gathered to track improvement via pre-tests and post-tests using a 20-item written test that was validated by three experts. Throughout the study, researchers ensured ethical compliance by obtaining permissions from school authorities, securing informed consent from parents and students, ensuring confidentiality and prioritizing the learners' well-being by providing a debriefing process.

DISCUSSION OF RESULTS

Table 1: Respondents' Pre- and Post Assessment Performance in Solving Integers

Scores	Pre-Assessment		Post-Assessment	
	%	Proficiency Level	%	Proficiency Level
1-14	100	Beginning	37.93	Beginning
15			17.24	Developing
16			13.79	Approaching Proficiency
17			17.24	Proficient
18-20			13.79	Advanced

**Based on Deped Order 31, s. 2012*

Based on Table 1 above, the results of the pre- and post-assessment clearly show the

impact of Project IHAP on the performance of the Grade 7 learners in solving operations on integers. Before the intervention, 29 or 100% of the respondents were at the *Beginning Proficiency* level.

After the conduct of the intervention, the number of students at the *Beginning* level significantly dropped to **37.93%**. The remaining **62.07%** on the other hand, progressed to higher proficiency levels with the following distribution: *Developing* (17.24%), *Approaching Proficiency* (13.79%), *Proficient* (17.24%), and *Advanced* (13.79%).

The results show that the Project IHAP intervention program is an effective method in improving the numeracy level of the learners. Furthermore, the use of manipulative materials could help students comprehend mathematical concepts and processes and engage in learning the subject without the feeling of anxiety (Bossé et al., 2016). The results also support that teaching discussions paired with concrete manipulatives, enable students to acquire conceptual comprehension and procedural fluency (Pratt, 2017). Thus, leads to the mastery of the competency.

CONCLUSIONS AND RECOMMENDATIONS

The study emphasized the use of innovative ways in teaching mathematics. It can be concluded that initiatives like Project IHAP are an effective tool in improving the numeracy level of the learners. It was proven that even in higher grades, students still prefer to learn through play and hands-on activities. In addition, teaching discussions when paired with concrete manipulatives leads to the mastery of the learning competency.

It is therefore recommended to incorporate more hands-on activities in teaching mathematics. Schools must also use other innovative approach in teaching the different learning competencies in math. Additionally, teachers must also be given

proper trainings in the utilization of various manipulative learning materials to ensure the attainment of meaningful learning in the classroom.

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Enhancing Science Literacy through AGHAM Read: A Comprehensive Approach to Mastering Basic Science Sight Words

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INTRODUCTION

Science literacy is viewed as essential activity to allow learners to easily understand the difficulties in the delivery of science lessons. According to Anderson et. al (2018), prompt exposure to science vocabulary results to academic success and comprehension of the lesson. However, on the study conducted by Sampson & Blanchard, 2012 one of the challenges in science literacy is mostly in the attainment of scientific vocabulary. Based on the division mean percentage score (MPS) of learners in science for the school year 2023-2024, elementary learners have a mean percentage score (MPS) of 75.35%, while secondary learners score even lower at 54.19%. Beyond science proficiency, literacy remains a critical concern, with more than 800 elementary pupils classified as frustrated readers in the school year 2023-2024. Thus, the study emphasized utilizing the AGHAM-Read (Academic Achievement Generated Through Holistic Acquisition of Mastery in Reading) project, which aimed to bridge this gap by enhancing literacy and Science learning through engaging, student-centered approaches that make scientific concepts more accessible and meaningful. It has three sub-projects: Basic Science Sight Words (BSSW), Learning Activity Kit Edition (LAKE), and Audio-video Kit Edition (AVKE). The study sought to answer the following questions: What impact does the AGHAM-Read program have on students' acquisition and retention of basic science sight words? How do audio-video kits contribute to students' pronunciation and comprehension of science sight words? And to what extent do

learning activity kits engage students and reinforce science vocabulary?

The study adopted a mixed-method research design. It combines quantitative analysis of pre-and post-test scores and pre-and post-pronunciation assessments with a qualitative examination of observational data, surveys, and interviews. Through purposive sampling technique, a total of 241 respondents participated in the study. In addition, teachers handling the selected classes were included as research participants. These teachers were interviewed to assess how the learning activity kits engaged students and enhanced their science vocabulary. Ethical considerations were also observed by obtaining necessary permissions for school authorities, securing informed consent from the respondents and their parents, and ensuring confidentiality all throughout the conduct of the study.

DISCUSSION OF RESULTS

Table 1: Pre- and Post Test and Pronunciation Assessment Results

	p-value	Remarks
Pre- and Post Test	<.001	There is a significant difference in the pre- and post-test results
Pre- and Post Pronunciation Assessment	<.001	There is a significant difference in the pre- and post-pronunciation assessment

The p value <0.001, which is less than the alpha value of 0.05 signifies that there is a significant difference between the pre-test

and post test assessments of the respondents, as well as in their pre-and post-pronunciation assessment. It can be deduced that the implementation of the AGHAM-Read project significantly impacts the respondents' acquisition and retention of science concepts as well as how the basic science sight words are properly pronounced.

A survey was conducted to gauge how the AGHAM-Read program affects the engagement and participation of learners. It was found that 57.26% of the respondents strongly agree that AGHAM-Read activities make learning science vocabulary more interesting. Similarly, 47.72% of the respondents strongly agree that the audio-video kits helped them better remember science vocabulary. In addition, the overall mean response of 4.33 indicates that the majority of students strongly agree that the AGHAM-Read program has significantly enhanced their learning experience in science. This high rating suggests that students found the program highly beneficial in reinforcing scientific vocabulary, improving comprehension, and increasing engagement in science lessons.

CONCLUSIONS AND RECOMMENDATIONS

The study emphasizes the importance of providing fun and innovative ways of learning basic sight words to reinforce learning scientific concepts. It is therefore recommended to incorporate AGHAM-Read activities in crafting teachers' Daily Lesson Logs and to provide additional app or gamified tools in teaching science concepts.

Teachers must also be given trainings on the proper implementation of the program and on the use of innovative tools and modern technology in contextualizing science lessons.

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ALS More Learning Activity Sheets: An Intervention Tool for Reading Comprehension Skills in Learning Strand 1-English

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INTRODUCTION

To determine the learner's progress in the learning process, an assessment will be done. The Department of Education releases a Joint Memorandum DM-OUCI-2021- 316 dated August 12, 2021, with the subject "Presentation Portfolio Assessment for ALS Elementary and Junior High School Program Completers of SY 2020-2021 and Previous Years. Per the Bureau of Education Assessment (BEA), the administration of the Accreditation and Equivalency (A&E) Test for School Year (SY 2020-2021) Alternative Learning System (ALS) Program Completers will not be possible due to the restrictions imposed by the government because of the COVID-19 epidemic. Instead of administering the aforesaid test, the Department of Education (DepEd), through the Curriculum and Instruction strand and the ALS Task Force (ATF), informed that the result of the Presentation Portfolio Assessment for ALS Elementary Level and Junior High School Level Completers of School Year 2020-2021 and previous years in the Learner Information System (LIS) shall be used as a basis for the granting of an EL or JHSL Certificate

To make sure that the presentation portfolios are original outputs, there will be an inter-district revalidation with ALS program completers. Furthermore, a reading and writing proficiency test (English) shall be part of the revalida to ensure that ALS program completers are ready for the next level of learning. The District or Division Office shall make its assessment tool in conducting the reading and writing proficiency test according to the level of the ALS program completer.

During the conduct of the Inter-district Presentation Portfolio last September 27, 2021, some learners were struggling to understand some words in the conduct of reading and writing Tests in the Inter-District Presentation Portfolio Assessment. Reading comprehension is one of the problems encountered by ALS Learners in the field of reading in Bislig City Division, Bislig 2 District particularly Ser-Fel Mone Elementary School Learning Center and San Isidro Community Learning Center at the secondary level. Learners encountered problems and difficulty in identifying the main idea of a selection, resulting in poor reading comprehension.

As an action, the development of Learning Activity Sheets (LAS) for Reading Remediation and Enhancement Activities Across the 6 Learning Strands for the implementation of ALS- MORE (Meaningful Opportunities through relevant Reading Experiences) was initiated. As such, this study aims to determine the development of the reading comprehension skills of the 10 ALS Secondary Qualifiers of Ser-Fel Mone ES LC and San Isidro CLC to provide substantial preparation among the learners for the forthcoming A & E Test.

DISCUSSION OF RESULTS

The implementation of ALS-MORE Learning Strand 1: English Activity Sheets significantly improved the literacy performance of ALS learners in modular distance learning.

Initial assessment showed low proficiency, with an average score of 46%. Ninety percent (90%) of learners were at the Beginning level

(≤74%), indicating difficulty in reading comprehension and overall literacy skills. Only one learner reached Approaching Proficiency (80–84%).

After the intervention, the average score rose to 66%, reflecting a 20% improvement. Proficiency levels shifted:

- Beginning: 60% (down from 90%)
- Developing: 10%
- Approaching Proficiency: 20%
- Advanced: 10%

All participants improved their scores, with the highest reaching 97%. These results confirm that ALS-MORE materials effectively enhanced reading comprehension and literacy, even in the absence of face-to-face guidance. Learners faced barriers such as limited resources, unstable internet, competing work and family duties, and minimal parental support. Dropouts occurred due to work and childcare responsibilities, reducing the initial 15 respondents to 10 who completed the intervention. Despite obstacles, learners showed strong motivation, enthusiasm, and commitment. They valued intervention as an opportunity for personal growth, recognizing the importance of reading as a tool for communication and learning across subjects.

The reading intervention using ALS-MORE Activity Sheets proved to be an effective strategy for improving literacy skills among ALS learners in modular distance learning, preparing them for higher levels of learning.

CONCLUSIONS AND RECOMMENDATIONS

Reading enhances the mind to think critically. Reading helps you advance to a higher platform of learning. Reading also enables you to understand other subjects. It also emerged that learning to read independently is difficult. One of the reasons that emerged is the availability of resources. They have limited access to technology as they were at their homes and

without help from parents and family members. Reading is also made difficult because of the limited use of the language in the community.

It is further recommended that the learning facilitator provide appropriate intervention to the learners by developing learning activity sheets suitable for comprehension. The Individual Learning Agreement (ILA) will be utilized during the conduct of the intervention. It is a plan that will be developed by the Learning Facilitator and each Learner. The plan records what the learner wants to learn (learning goals) and how (learning activities and strategies), and when (timeline) the learner wants to achieve the learning goals. Furthermore, this form guides the Learning Facilitator in the review of the learning goals of the Learner—whether these were achieved, not achieved, or modified. It also helps the Learning Facilitator provide appropriate learning interventions to the Learner.

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Readiness and Proficiency of Bislig VII District ALS A & E Secondary Learners for Learning Strand 6: Digital Citizenship

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INTRODUCTION

Pursuant to Republic Act 9155 or the Enhanced Basic Education Act, the Alternative Learning System (ALS) is an analogous instruction process that allows each learner to be an out-of-school youth or adult (OSYA) with novice and enhanced primary and active learning skills, as well as related and aligned educational trails to complete the learning requirements of education. One way of assessing the learners' performance under this system is through Accreditation and Equivalency (A&E) Assessment and Certification which comprises an exam and other appropriate assessments to measure the competencies acquired by ALS learners based on the ALS K to 12 Basic Education Curriculum (BEC).

Based on the PPAs conducted over the previous four years, Bislig-7 District ALS teachers discovered that learners were having difficulty with Learning Strand 6: Digital Citizenship. As a result, the researchers are encouraged to evaluate and take appropriate actions if there is a recurrent issue in teaching or comprehension of this specific strand that requires attention and action to improve learning outcomes. The respondents of the study are the 10 ALS A & E Secondary Learners in Caramcam Central Elementary School Learning Center and Olayvar Elementary School Learning Center for the School Year 2023 – 2024. In data gathering, the researchers will conduct an orientation on the conduct of the study to familiarize themselves with the activities during the intervention. A functional literacy test and survey questionnaire will follow. The

results and scores will be analyzed to determine the readiness and proficiency level of ALS Learners of Bislig VII District before the conduct of the intervention.

DISCUSSION OF RESULTS

Table 1. Level of Proficiency of ALS Learners (PRE-TEST)

RESPONDENTS	PRE-TEST	PERCENTAGE (%)	LEVEL OF PROFICIENCY
R1	22	37%	Beginning
R2	26	43%	Beginning
R3	20	33%	Beginning
R4	22	37%	Beginning
R5	10	17%	Beginning
R6	33	55%	Beginning
R7	24	40%	Beginning
R8	19	32%	Beginning
R9	21	35%	Beginning
R10	14	23%	Beginning

Table 1 shows a comprehensive overview of the participants' proficiency levels as determined by the pre-test assessment using the test questionnaire, with all 10 respondents initially categorized as beginners in a specific skill. The classification aligns with the criteria outlined in D.O.31, s.2012, which designates the proficiency level of these individuals as "Beginning." This observation underscores a uniform starting point for the participants, indicating a collective baseline of introductory expertise in the targeted skill. As the study progresses, tracking the participants' advancement from this initial stage will be crucial in evaluating the effectiveness of any interventions or educational strategies implemented to enhance their skill development.

Table 2. Mean Percentage of Proficiency Level

	MEAN	PERCENTAGE (%)	LEVEL OF PROFICIENCY
PRE-TEST	21.1	35.2%	Low Proficient

Table 2 presents critical statistical insights into the participants' performance, revealing a mean percentage score of 35.2% and a mean value of 21.1. These metrics serve as pivotal indicators of the participants' average performance in the pre-test assessment, demonstrating a concerning level of proficiency. The mean percentage score, a reliable gauge of the participants' collective achievement, stands at a relatively low 35.2%, highlighting a significant gap between their current performance and optimal proficiency. Additionally, the mean value of 21.1 further underscores the overall subpar performance, emphasizing that the participants, on average, scored below the midpoint. This comprehensive assessment suggests a notable deficiency in the participants' initial grasp of the tested skills, setting the stage for targeted interventions and improvements in subsequent phases of the study to enhance their proficiency levels.

CONCLUSIONS AND RECOMMENDATIONS

In gauging the learners' capabilities, we utilized a comprehensive set of 60 test questions derived from the curriculum guide, specifically focusing on learning strand six. The results revealed a prevalent trend of low scores among many learners, indicating a need for additional support and resources. In response to this identified gap, we developed a targeted learning resource named "ABANTE" (Advancing Basic Approaches in Nurturing Technical and Digital Education). Despite the initial challenges reflected in the assessment scores, there was a notable eagerness among the students to delve deeper into the subject matter.

The two-week intervention proved to be an engaging and inclusive initiative, involving active participation from all participants.

The researchers observed their enthusiasm to learn, even though some found it difficult due to their lack of familiarity with ICT. Others faced time constraints due to their hectic schedules as workers with children, yet they still managed to respond enthusiastically. This collective determination and passion for learning not only facilitated their progression through the program but also highlighted the resilience and motivation of the participants, showcasing their commitment to enhancing their knowledge until the last week of the intervention.

It is further recommended to conduct a second phase of research on readiness and proficiency among Alternative Learning System (ALS) secondary learners in digital citizenship is imperative for several reasons. The initial phase may have unveiled baseline information, but a follow-up investigation is essential to track changes over time and evaluate the effectiveness of interventions or educational strategies implemented based on the initial findings. A second phase of research allows for a deeper exploration of specific aspects identified in the initial phase, enabling researchers to gain a more nuanced understanding of the factors influencing readiness and proficiency. This iterative approach is fundamental in refining educational practices and policies to meet the evolving needs of ALS secondary learners, ultimately contributing to the development of a robust and adaptable digital citizenship curriculum.

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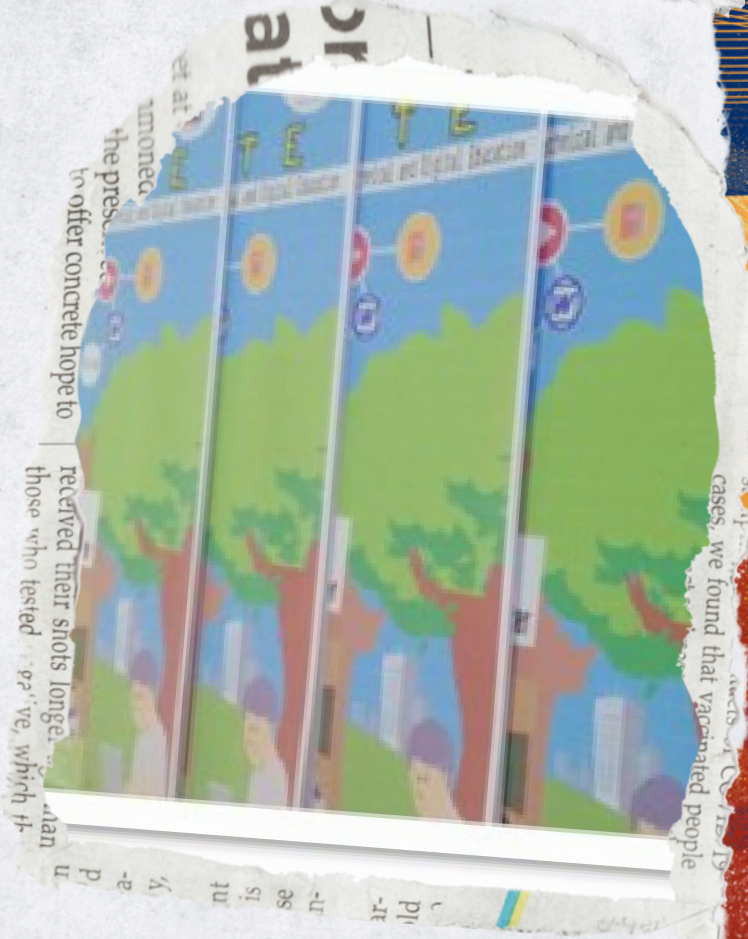
CY 2023

Volume 01

Readiness and Proficiency of Bislig VII District ALS A&E Secondary Learners for Learning Strand 6: Digital Citizenship

**“Advancing Basic Approaches in
Nurturing Technical & Digital
Education” (ABANTE)**

The purpose of this study is to measure the readiness and proficiency level of Bislig VII District ALS A & E Secondary Learners, School Year 2023-2024 for Learning Strand 6: Digital Citizenship. One way of assessing the learners' performance under this system is through Accreditation and Equivalency (A&E) Assessment and Certification which comprises an exam and other appropriate assessments to measure the competencies acquired by ALS learners based on the ALS K to 12 Basic Education Curriculum (BEC).



Based on the PPAs conducted over the previous four years, Bislig-7 District ALS teachers discovered that learners were having difficulty with Learning Strand 6: Digital Citizenship. As a result, the researchers are encouraged to evaluate and take appropriate actions if there is a recurrent issue in teaching or comprehension of this specific strand that requires attention and action to improve learning outcomes. The respondents of the study are the 10 ALS A & E Secondary Learners in Caramcam Central Elementary School Learning Center and Olayvar Elementary School Learning Center for the School Year 2023 – 2024. In data gathering, the researchers will conduct an orientation on the conduct of the study to familiarize themselves with the activities during the intervention. A functional literacy test and survey questionnaire will follow. The results and scores will be analyzed to determine the readiness and proficiency level of ALS Learners of Bislig VII District before the conduct of the intervention.



"ADVANCING BASIC APPROACHES IN NURTURING TECHNICAL & DIGITAL EDUCATION"

The 2-week bridging program for the A & E Secondary of Alternative Learning System learners focusing on the review and introduction to the basics of computers and differentiated hands-on activities (i.e., encoding) will be conducted that will lead to the readiness and test the proficiency level of the learners.

Differentiated activities focusing on the hands-on exercises in Microsoft Word will be performed using the developed Learning Activity Sheets which is the "ABANTE" - ADVANCING BASIC APPROACHES in NURTURING TECHNICAL and DIGITAL EDUCATION. This will ensure that learners will be given a chance to use the computers by themselves while performing hands-on activities on different topics in word processing.

The utilization of the developed Learning Activity Sheet (LAS) is intended to assess the proficiency of learners, focusing on addressing the least mastered competencies. The initiative is designed to target and master the competencies that were identified as the least learned among the learners.



Parent-Assisted Reading Sessions with JUMPSTART: A Strategy to Improve Reading Skills of Burboanan Elementary School's Struggling Grade 2 Pupils

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INTRODUCTION

Reading is found to be one of the strongest predictors of success. It is an integral part of learning. It is a fundamental requirement in any learning area- from language to science. Children who struggle with reading generally struggle in many other subject areas. Moreover, during pandemic children's reading ability was worsened where teachers could not teach the skills firsthand. As such, it was found out during the conduct of Philippine Informal Reading Inventory (PHIL-IRI) Pre- test as assessment tool in reading conducted by the adviser, showed that there are 10 grade 2 pupils struggle in reading the text. The aforementioned results prompted the researchers to carry out a study aimed at enhancing the reading abilities of grade 2 learners through parent-assisted reading sessions with Jumpstart. The reading intervention consists of a five-module Division initiated material, and contextualized material in which it provides the parents and guardians with a step-by-step process of teaching beginning reading using the Fuller Technique. The study answers the following questions:

1. What is the reading level of grade 2 pupils before the intervention?
2. What is the reading level of grade 2 pupils after the intervention?
3. Is there a significant difference in the reading level before and after the conduct of parent-assisted reading sessions with the use of Jumpstart?
4. What are the challenges in the implementation of parent-assisted reading sessions?

5. What action plan can be developed to intensify the parent-assisted reading sessions in Burboanan Elementary School?

The adviser's ORPT Post-test, administered in May 2022, provided the researchers with data. To apply the intervention, researchers first selected active parents based on their participation in school events, including meetings and programs, and then used survey questionnaires to profile the parents. The researchers hold a three-day training workshop on strategies and tactics for teaching beginning reading using JUMPSTART capacitating parents volunteers. The chosen parent volunteers were put through a simulation of how parent-assisted reading sessions are run using JUMPSTART to gauge their preparedness. During the actual implementation phase, one participant was assigned to one parent. Each assigned parent offered consistent support and attention to their designated participant throughout the intervention period. The same parent volunteer continued assisting the same child until the program concluded. Since the participants will be entering Grade III in the 2022-2023 school year, the researchers will administer the ORTPT Grade III pre-test passage to evaluate their performance after the intervention. This evaluation seeks to measure the effectiveness of JUMPSTART's parent-assisted reading sessions in enhancing the reading skills of struggling Grade II pupils. The pre-test and post-test data on comprehension scores will be analyzed using the paired t-test to compare the mean scores before and after the intervention.

DISCUSSION OF RESULTS

This section provides a comprehensive presentation and analysis of the results of the implementation of the Parent- Assisted Reading Session. The findings are presented through tabular presentation along with the statistical tools used for easy comprehension in determining the effectiveness of the reading intervention program based on the pre-test and post-test word reading scores of the Grade 2 learners of Burboanan Elementary School.

Table 2.
Frequency distribution of the Reading level of the respondents before the intervention Parent-assisted Session with Jumpstart

Oral Reading Level	Pre-test	Percentage
Independent	0	0%
Instructional	0	0%
Frustration	10	100%
	N = 10	

Table 2 shows the reading level of Grade 2 pupils in their pre-test before the implementation of Parent-Assisted Reading Sessions with Jumpstart. Based on the table above, 0% of the respondents classified under the independent level reader and 0% percent of the respondents under the instructional level. Further, 100% or 10 out of 10 of the respondents classified under frustration level reader in the pre-test.

Table 2.1
Frequency distribution of the Reading level of the respondents after the intervention Parent-assisted Session with Jumpstart.

Oral Reading Level	Post-test	Percentage
Independent	5	55%
Instructional	3	34%
Frustration	1	11%
	N = 9	

Table 2.1 shows the reading level of the Grade 2 pupils in their post-test. Based on the table above, after the conduct of Parent-Assisted Reading Sessions with Jumpstart, from 10 frustration readers, 5 participants were classified to independent level, 3

participants classified to instructional level and 1 participant is still in frustration level.

Table 3.
Paired t-test result of Pre-test and Post-test Mean Scores

Indicator	Mean	p-value	Remarks
Pre-test	32	$p \leq 0.05$	There is a significant difference between the pre-test and post-test scores
Post-test	69		

Table 3 shows the paired t-test results of the mean scores of the pre-test and post-test in comprehension score. The results above reflect the p-value, which is 0.000457, is less than the significant level of 0.05. Hence, there is enough evidence to claim that there is a significant difference between the pre-test and post-test comprehension scores of Grade 2 pupils.

CONCLUSIONS AND RECOMMENDATIONS

This study showed the effectiveness of Parent-assisted reading sessions with Jumpstart. JUMPSTART, a division-initiated material, contextualized material provided the teachers, parents and guardians with a step-by-step process of teaching beginning reading is highly recommended in teaching beginning reading. Thus, parental involvement is crucial in teaching children how to read.

With the positive effect of Parent-Assisted Reading Session with Jumpstart, the school administration of Burboanan Elementary School could include in its reading interventions. This study could be patterned by other grade levels and schools in the division. It is commendable that the Jumpstart materials must be utilized as division-wide instrument in teaching beginning reading.

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Science Unleashed: Teachers' Journeys with Learning Activity Kit Edition (LAKE) and Audio-Visual Kit Edition (AVKE) Tools in Elevating Science Literacy

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INTRODUCTION

The Philippines continues to grapple with significant literacy challenges, as evidenced by its low ranking in the 2018 Programme for International Student Assessment (PISA), where it placed second to the last among 79 participating countries in reading comprehension. This poor performance reflects a critical gap in students' foundational skills, which directly impacts their ability to understand complex subjects like Science. Recognizing the urgent need for intervention, the Department of Education-Bislig City Division, under the leadership of Dr. Nonita C. Patalinghug, has developed two innovative tools — the Learning Activity Kit Edition (LAKE) and the Audio-Visual Kit Edition (AVKE) — to strengthen students' reading, comprehension, and pronunciation skills.

This study will evaluate the effectiveness of LAKE and AVKE by examining the experiences, strategies, and practices of teachers integrating these tools into their Science instruction. By exploring the benefits and challenges encountered during implementation, the research aims to provide evidence-based recommendations for improving the design and application of these materials. The findings are expected to inform future educational strategies and contribute to nationwide efforts to improve literacy, comprehension, and academic achievement, particularly in Science, where strong reading skills are essential for understanding and applying key concepts.

DISCUSSION OF RESULTS

The study found that the Learning Activity Kit Edition (LAKE) and Audio-Visual Kit Edition (AVKE) significantly improved classroom engagement, student participation, and the overall learning atmosphere in Science classes within the Bislig City Division. Teachers reported that these tools made lessons more interactive and enjoyable, particularly benefiting students with different learning preferences. The multimedia and activity-based design helped bridge gaps for learners struggling with literacy and comprehension, making scientific concepts more accessible and fostering equity in the classroom. The tools also allowed for independent and self-paced learning, which proved valuable in both regular and teacher-absent scenarios.

In terms of teacher efficiency, LAKE and AVKE greatly streamlined lesson planning and preparation. With ready-made, curriculum-aligned materials, teachers saved time and could focus more on delivering engaging lessons. This efficiency was particularly advantageous for educators in small schools handling multiple subjects. However, the study also identified resource-related challenges, such as shortages of printing materials, ink, and paper, which limited full implementation. Teachers sometimes had to cover these costs personally or adapt activities to work around shortages, highlighting the need for better institutional support.

The study also showed that these tools positively impacted professional development. Teachers gained skills in instructional material creation, learned to

integrate multimedia effectively, and enhanced their capacity to align resources with curriculum competencies. The collaborative development and quality assurance processes further improved their proficiency and confidence in teaching science. By encouraging experimentation with innovative teaching strategies, LAKE and AVKE fostered a culture of creativity and professional growth.

Strategically, teachers integrated LAKE and AVKE at different stages of their lessons—particularly in the engagement and discussion phases—often incorporating higher-order thinking skills (HOTS) questions, real-world problem-solving activities, and reflective feedback sessions. They adapted the use of the materials to time constraints, diverse learner needs, and sequential learning goals. This flexibility enabled teachers to tailor the tools for specific student groups, such as non-readers, students in competitions, or those needing remedial instruction.

Overall, LAKE and AVKE had far-reaching implications: enhancing cognitive processing and retention, promoting inclusivity, developing communication and teamwork skills, and improving classroom management. They simplified abstract concepts, encouraged active learning, and addressed literacy barriers while boosting teacher morale and job satisfaction. The study concludes that with sustained resource provision, institutional backing, and iterative improvements, these tools have strong potential to transform science instruction and contribute meaningfully to raising science literacy levels in the Philippines.

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that the Learning Activity Kit Edition (LAKE) and Audio-Visual Kit Edition (AVKE) are effective tools for enhancing science instruction in the Bislig City Division. They significantly improved student engagement, vocabulary acquisition, and conceptual understanding, while also promoting equity by addressing the needs of diverse learners, including non-readers and those struggling with comprehension. For

teachers, these tools streamlined lesson planning, reduced workload, and provided opportunities for professional growth through material development and innovative teaching strategies. However, practical challenges such as resource shortages, limited applicability in some contexts, and time constraints were identified as barriers to maximizing their potential.

Based on these findings, the study recommends strengthening resource provision to ensure the sustainability of LAKE and AVKE implementation. This includes allocating sufficient funds for printing and reproducing materials, as well as providing necessary equipment and supplies to schools. Continuous professional development should be offered to teachers to enhance their skills in integrating these tools effectively and adapting them to varied classroom contexts.

Furthermore, the study advises refining and updating the content and design of LAKE and AVKE to better match the needs of different learning environments and student abilities. Incorporating feedback from teachers and learners can help make the materials more adaptable, relevant, and engaging. Institutional support from the Department of Education and school administrators is essential for addressing logistical challenges and sustaining the positive impacts of these tools on both teaching and learning.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Mr. Ga and Mrs. Celedio and supplements his research presentation during the Research Colloquium last March 18, 2025 under the topic, "Assessing Learners in Distance Education". To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.

Quick Response (QR) Code-Based Attendance Monitoring System with SMS Notification and Automatic SF2 Report Generation

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Don Ruben E. Ecleo Sr. Memorial National High School, Dinagat Islands Division

2. Acceptability Among Teachers (SF2 Generation)

INTRODUCTION

One of the persistent challenges in public schools is the manual and time-consuming process of checking student attendance, which detracts from valuable instructional time. In the Philippines, this issue is particularly pronounced, affecting both student performance and administrative efficiency. Don Ruben E. Ecleo Sr. Memorial National High School (DREESMNHS) continued to rely on traditional attendance methods, prompting the need for a more efficient and secure system. Inspired by global trends and technological advancements, the researchers developed a QR code-based attendance monitoring system integrated with SMS notifications and automatic School Form 2 (SF2) report generation.

The study employed a descriptive-survey research design, targeting 320 students with their parents and 79 teachers. Stratified random sampling ensured representative data across grade levels and departments. Data were collected through standardized evaluation forms and analyzed using descriptive statistics. Ethical standards were upheld, including confidentiality and voluntary participation. The system was developed using the System Development Life Cycle (SDLC) and AGILE methodologies.

Findings / Results and Discussion

1. Acceptability Among Students and Parents

Component	Parents (Mean)	Interpretation	Students (Mean)	Interpretation
Efficiency	4.33	Very Highly Acceptable	4.76	Very Highly Acceptable
Accuracy	4.44	Very Highly Acceptable	4.61	Very Highly Acceptable
Usability	4.43	Very Highly Acceptable	4.70	Very Highly Acceptable
Security	3.98	Highly Acceptable	4.00	Highly Acceptable
Usability		4.52		Very Highly Acceptable
Security		4.27		Very Highly Acceptable

3. Comparative Analysis of SF2 Reporting

Indicator	Before Implementation	After Implementation
SF2 Completion Time	10-15 minutes	30 seconds
On-Time Submission Rate	47% (1st Quarter)	95% (3rd Quarter)

The system significantly improved attendance tracking, reduced administrative workload, and enhanced communication between school and home. While security was rated slightly lower, it remained within acceptable standards.

Achievement) was conceptualized and developed. This approach to assessment integrated the different competencies and skills from different learning areas through a theme for learners to produce a single

output.

The thematic approach to assessment supported effective learning in the distance education context. It also offered references for teachers who are engaged in an integrative thematic approach to provide assessment in the new normal education.

Conclusion and Recommendation

The QR Code-Based Attendance Monitoring System proved to be a highly effective innovation, streamlining attendance processes and SF2 report generation. It received strong support from students, parents, and teachers, particularly for its usability, efficiency, and accuracy. The system aligns with DepEd's thrust toward digital transformation and supports the **DepEd ICT Programs and School-Based Management (SBM)** initiatives.

Recommendations:

- Enhance security features to address user concerns.
- Scale the system across the Dinagat Islands Division.
- Provide training for stakeholders to ensure smooth adoption.
- Conduct follow-up studies to assess long-term impact and scalability.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Dr. Ecle, et al. and supplements their research presentation in the Research Information System of DepEd Caraga. To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.

Human Resource Management Practices and Employees' Performance: Basis for Competency-Based HRD Plans and Programs for Sustainable Basic Education Services in Dinagat Islands

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INTRODUCTION

The Department of Education (DepEd), as the largest government agency in the Philippines, faces complex challenges in managing its vast workforce. These include issues related to recruitment transparency, professional development, equitable recognition, and performance management.

In the Dinagat Islands Division, these challenges are compounded by limited resources and administrative constraints, which can affect employee morale and the quality of basic education services.

Recognizing the strategic importance of human resource management (HRM) in public education, this study was initiated to examine how HRM practices influence employee performance and contribute to sustainable education outcomes.

Dr. Roxanne Mae Grefiel Daz conducted this research to provide evidence-based insights into the HRM landscape of the Schools Division Office of Dinagat Islands.

The study focused on four key HRM areas – recruitment and placement, learning and development, rewards and recognition, and performance management – and assessed their impact on employee performance using both quantitative and qualitative methods.

By analyzing data from 321 personnel across ten districts, the research aimed to inform the development of competency-based HRD plans and programs that align with DepEd's goals for improved service delivery and workforce engagement.

Findings / Results and Discussion

1. Employee Performance Ratings (IPCRF)

Rating	Frequency	Percentage
Very Satisfactory	286	89%
Outstanding	31	10%
Satisfactory	4	1%
Unsatisfactory/ Poor	0	0%

Most employees received "Very Satisfactory" ratings, indicating strong performance across the division.

2. HRM Practices Perception

HRM Area	Mean Score	Interpretation
Recruitment & Placement	3.2	Moderately Practiced
Learning & Development	3.1	Moderately Practiced
Rewards & Recognition	3.1	Moderately Practiced
Performance Management	3.2	Moderately Practiced

While generally positive, areas such as support for advanced studies and equitable recognition require improvement.

3. Statistical Analysis

- **ANOVA Results:** No significant difference in performance across job types ($p = 0.213$).
- **Significant Difference:** Found between HRM areas and performance ($p = 0.038$).

- **Scheffé Test:** Performance Management and Learning & Development had the strongest positive impact on perceived performance.

4. Opportunities and Challenges

HRM Area	Opportunities	Challenges
Recruitment	Wider reach, better candidate matching	Lengthy process, lack of transparency
Learning & Development	Skill enhancement, motivation	Time constraints, limited resources
Rewards & Recognition	Improved morale, motivation	Inconsistent application, lack of recognition
Performance Management	Clear expectations, constructive feedback	Time constraints, lack of training

Conclusion and Recommendation

The study concludes that while HRM practices in the Dinagat Islands Division are generally effective, targeted improvements are needed to fully realize their potential in enhancing employee performance and engagement. Among the four HRM pillars examined, Performance Management and Learning & Development emerged as the most influential drivers of employee performance.

However, the study also identified persistent challenges that hinder the optimal implementation of these practices. Time constraints remain a significant barrier, particularly in conducting thorough performance reviews and facilitating training sessions. Employees and managers struggle to allocate sufficient time for meaningful feedback and development planning.

To address these challenges, the study recommends the following actionable steps:

- Enhance transparency in recruitment processes to build trust and attract qualified candidates.
- Expand support for professional development, including access to postgraduate studies and specialized training programs.
- Improve equity in rewards and recognition systems to ensure fair acknowledgment of employee contributions.
- Strengthen performance management through targeted training for evaluators and clearer linkages between performance outcomes and compensation.
- Allocate dedicated time and resources for Learning & Development initiatives to ensure consistent and impactful training delivery.

These recommendations align with the Department of Education's Human Resource Development Agenda. By prioritizing strategic enhancements in Performance Management and Learning & Development, the Dinagat Islands Division can cultivate a high-performing workforce capable of delivering sustainable and quality basic education services.

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Using GAMI Communicative Teaching Strategy in Oral Communication in Context

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INTRODUCTION

Oral Communication in Context is a core subject in the Senior High School curriculum in the Philippines, designed to develop students' listening and speaking skills for effective communication.

However, many students experience anxiety and lack confidence in public speaking, which negatively affects their performance and attitude towards the subject.

This challenge prompted the implementation of the GAMI Communicative Teaching Strategy, which integrates Gamification, Authentic learning experiences, Multimedia integration, and ICT utilization to enhance student engagement and learning outcomes.

The study was conducted at Don Ruben E. Ecleo Sr. Memorial National High School with 66 Grade 11-HUMSS students during the first semester of SY 2017-2018.

A researcher-made questionnaire was used to assess students' content knowledge and attitude before and after the intervention. Statistical tools such as mean, standard deviation, Wilcoxon Signed Rank test, and Pearson correlation were employed to analyze the data and determine the effectiveness of the GAMI strategy.

Findings / Results and Discussion

The implementation of the GAMI strategy resulted in significant improvements in both content knowledge and attitude towards Oral Communication in Context.

Before the intervention, students' content knowledge was rated as 'Did Not Meet Expectations' with a mean score of 18.47 (TV=69). After the intervention, the mean score increased to 34.09 (TV=80), qualifying as 'Satisfactory'.

Students' attitude also improved from 'Positive' (M=3.03) to 'Very Positive' (M=3.31). Indicators such as pride in public speaking and enjoyment of speaking activities showed the highest gains.

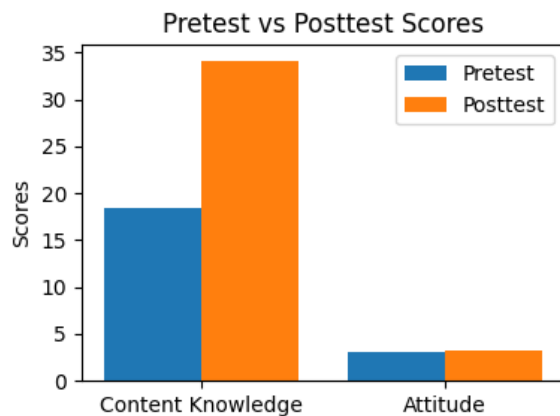
The Wilcoxon Signed Rank test confirmed significant differences in both content knowledge ($p=0.000$) and attitude ($p=0.000$) before and after the intervention.

Furthermore, a Pearson correlation analysis revealed a significant relationship between students' content knowledge and attitude ($r=0.397$, $p=0.001$), indicating that a positive attitude contributes to better learning outcomes.

Table: Pretest and Posttest Scores

Assessment	Pretest Mean	Posttest Mean
Content Knowledge	18.47	34.09
Attitude	3.03	3.31

Graph: Improvement in Scores



Conclusion and Recommendation

The GAMI Communicative Teaching Strategy significantly enhanced students' content knowledge and attitude towards Oral Communication in Context.

The integration of gamification, authentic experiences, multimedia, and ICT tools created an engaging learning environment that addressed students' fear of public speaking and improved their communicative competence.

It is recommended that Oral Communication teachers adopt the GAMI strategy to improve instruction and student outcomes.

DepEd should support this initiative by providing ICT resources such as microphones, speakers, and projectors. Further research is encouraged to explore the strategy's effectiveness in other English subjects and educational contexts.

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ALS Learners in the Paradigm Shift: Exploring Predictors of Scientific Literacy among Senior High School Students from Alternative Learning System

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INTRODUCTION

The Alternative Learning System (ALS) in the Philippines serves as a vital educational lifeline for out-of-school youth and adults who are unable to access formal schooling due to various socio-economic, geographic, or personal circumstances.

As a non-formal education program under the Department of Education (DepEd), ALS offers flexible learning options that aim to provide learners with basic and functional literacy, as well as opportunities to complete elementary and secondary education through the Accreditation and Equivalency (A&E) program.

With the full implementation of the K-12 curriculum, particularly the Senior High School (SHS) program, ALS learners are now expected to transition into a more structured and academically demanding environment. This shift has raised concerns about their preparedness, especially in core subjects like science, which require critical thinking, problem-solving, and conceptual understanding.

Despite the growing number of ALS A&E test takers, the passing rate remains a challenge. In the Dinagat Islands Division, only 45% of ALS learners passed the A&E exam in 2016–2017, highlighting a significant gap in academic readiness.

Previous studies have indicated that ALS learners often struggle with scientific literacy, which encompasses the ability to understand and apply scientific concepts in real-life contexts.

This study was designed to assess the scientific literacy levels of ALS learners

currently enrolled in SHS and to identify key predictors that influence their performance. Using a mixed-methods approach, the research involved 117 ALS SHS learners and 30 ALS teachers from San Jose District. Quantitative data were analyzed through multiple regression to determine statistical relationships, while qualitative data from interviews provided insights into the challenges faced in delivering the science curriculum.

The findings aim to inform policy and program improvements that will better support ALS learners in their academic journey.

Findings / Results and Discussion

The study found that most ALS SHS learners were male and had not completed Grade 9 in formal education. Teachers were predominantly female, with limited science specialization and no recent science training.

The average scientific literacy score was 14.75 out of 50, transmuted to 67%, categorized as 'Did Not Meet Expectations'.

Regression analysis revealed that student age and highest formal education, as well as teacher age and educational attainment, significantly predicted scientific literacy.

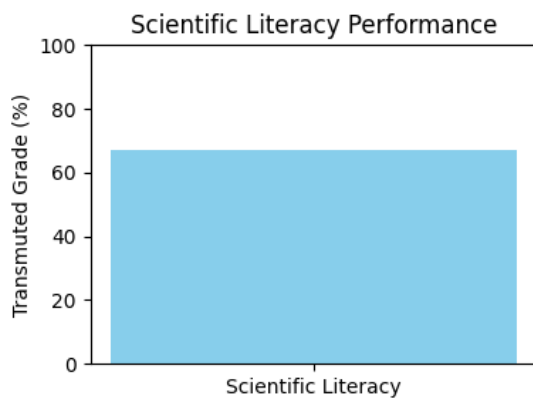
Qualitative findings highlighted challenges in resource management, curriculum delivery, and learner retention. Teachers reported inadequate and outdated materials, lack of science training, and

difficulties teaching diverse learners with varying readiness levels.

Table: Scientific Literacy Scores of ALS SHS Learners

Assessment Area	Mean Score	Transmuted Grade (%)
Scientific Literacy	14.75	67

Graph: Scientific Literacy Performance



Conclusion and Recommendation

The study concludes that ALS learners face significant challenges in scientific literacy due to limited resources and teacher preparation. Age and educational background of both learners and teachers influence performance. To address these issues, the following recommendations are proposed:

- Provide targeted science training for ALS teachers.
- Establish district learning resource centers with updated science materials.
- Implement bridging programs for ALS learners entering SHS.
- Strengthen learner retention strategies through community support.

These recommendations align with the Department of Education's commitment to inclusive education and support the goals of the ALS K to 12 Basic Education Curriculum under DepEd Order No. 13, s. 2019.

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Analysis of Teacher's English Proficiency Test and Process Skills Test in Science and Math (TEPT-PSTSM) Results: Basis for Teachers Enhancement Program

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INTRODUCTION

Teachers play a pivotal role in shaping the quality of education and student achievement. Their ability to deliver effective instruction, especially in core subjects like Science and Mathematics, is closely tied to their mastery of content and communication skills. In the Philippine education system, where English is the primary medium of instruction for these subjects, teacher proficiency in the language becomes a critical factor. Recognizing this, the Department of Education (DepEd) developed the Teacher's English Proficiency Test and Process Skills Test in Science and Mathematics (TEPT-PSTSM) to assess teachers' competence in both language and subject-specific process skills. These assessments serve as diagnostic tools to identify gaps in teacher performance and inform targeted professional development programs that align with the goals of the K to 12 curriculum and the MATATAG agenda.

This study focused on analyzing the TEPT-PSTSM results of 33 Grades 11 and 12 Science and Mathematics teachers in the Schools Division of Dinagat Islands. The English Proficiency Test evaluated three key areas: structure, written expression, and reading comprehension, while the Process Skills Test measured 13 essential skills such as observing, classifying, inferring, predicting, and evaluating. Using a mixed-methods approach, the study employed descriptive statistics and correlation analysis to determine performance levels and relationships between English

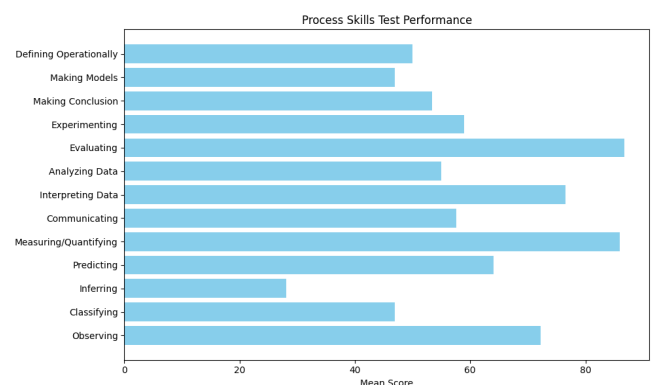
proficiency and process skills. The findings offer valuable insights into the strengths and weaknesses of teachers in these domains and serve as the foundation for designing a responsive enhancement program aimed at improving instructional quality and learner outcomes.

Findings / Results and Discussion

Table 1. Teachers' Performance in English Proficiency Test

Subtest	Mean	Standard Deviation	Interpretation
Structure	61.88	12.35	Satisfactory
Written Expression	45.63	16.25	Fair
Reading Comprehension	76.0	14.89	Very Satisfactory

Figure 1. Mean Scores in Process Skills Test



Conclusion and Recommendation

The findings of this study underscore the critical link between teachers' English proficiency and their ability to effectively deliver science and mathematics instruction. While teachers demonstrated satisfactory performance in English structure and reading comprehension, their lower proficiency in written expression suggests a need for targeted support in academic writing and communication.

In terms of science and math process skills, strengths were evident in areas such as measuring, interpreting data, and evaluating—skills essential for inquiry-based learning and scientific reasoning.

However, notable weaknesses in classifying, inferring, and modeling indicate gaps in foundational and integrative thinking that are vital for conceptual understanding and problem-solving.

These results highlight the importance of language competence as a foundational tool for teaching complex subjects. The significant correlations between English proficiency and specific process skills suggest that improving teachers' command of the language can directly enhance their instructional effectiveness in science and math.

This is particularly relevant in the context of the K to 12 curriculum, where higher-order thinking and performance-based assessments are emphasized.

To address these challenges, it is recommended that the Department of Education (DepEd) implement a comprehensive professional development program tailored to the needs of science and math teachers.

This program should include intensive training in English grammar and composition, as well as workshops focused on developing and applying science and math process skills. Integration of English, science, and math in instructional design

and delivery should be promoted to foster interdisciplinary competence. Moreover, regular assessments such as the TEPT-PSTSM should be institutionalized to monitor progress and inform continuous improvement efforts.

These initiatives align with DepEd's Human Resource Development Agenda and support the MATATAG Program's commitment to strengthening teacher quality and enhancing student learning outcomes.

Collaborative learning sessions, mentoring, and School Learning Action Cells (SLACs) should be leveraged to build a culture of reflective practice and peer support.

By investing in teacher capacity, the education system can ensure that learners receive high-quality instruction that prepares them for academic success and lifelong learning.

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Using Localized Stories to Improve Reading Literacy Skills of Grade One Learners

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INTRODUCTION

Reading literacy is a foundational skill that significantly influences a child's academic success and lifelong learning. In early education, the ability to recognize words and comprehend text is crucial for developing fluency and confidence in reading.

However, many young learners struggle with reading when instructional materials are not aligned with their linguistic and cultural context.

In the municipality of Libjo, Dinagat Islands, Grade One learners face challenges in reading due to the dialectal differences between the regional lingua franca, Sinugbuanong Binisaya, and their native Libjoanon dialect.

Recognizing this gap, the researchers initiated a study to explore the effectiveness of localized short stories written in Libjoanon as a tool to enhance reading literacy.

The intervention was designed using the ADDIE Instructional Design Framework and aligned with DepEd Order No. 74, s. 2009, which institutionalizes Mother Tongue-Based Multilingual Education (MTB-MLE) in Philippine schools.

The study involved fifty Grade One pupils from Albor Central Elementary School, divided into three groups based on their reading levels: frustration, instructional, and independent.

The researchers developed and validated seven localized storybooks tailored to the

learners' cultural and linguistic background. These materials were implemented over a six-month period, with reading instruction integrated into the regular classroom schedule. The Early Grade Reading Assessment (EGRA) was administered before and after the intervention to measure improvements in word recognition and reading comprehension.

Statistical analysis using t-tests revealed significant gains across all reading levels, demonstrating the effectiveness of localized stories in enhancing early grade reading skills.

Ethical considerations were observed throughout the study, including informed consent from parents and confidentiality of pupil data.

Findings / Results and Discussion

The effectiveness of the localized storybooks was evaluated through a comparative analysis of the pupils' performance in the Early Grade Reading Assessment (EGRA) before and after the intervention.

The results were grouped according to the learners' initial reading levels—Frustration, Instructional, and Independent—and assessed in two key areas: word recognition and reading comprehension. Statistical analysis using t-tests was conducted to determine whether the observed improvements were significant.

The following tables and graph summarize the results of the intervention and highlight the measurable gains in reading literacy among Grade One learners.

Reading Level	Pretest Mean	Posttest Mean	t-value
Frustration	Low	Improved	0.000
Instructional	Moderate	Improved	0.000
Independent	High	Improved	0.000

Table 1 shows the significant improvement in word recognition across all reading levels after using localized stories. The t-values are all below 0.05, indicating statistical significance.

Reading Level	Pretest Mean	Posttest Mean	t-value
Frustration	Low	Improved	0.000
Instructional	Moderate	Improved	0.005
Independent	High	Improved	0.015

Table 2 presents the improvement in reading comprehension. All groups showed statistically significant gains, validating the effectiveness of the localized storybooks.

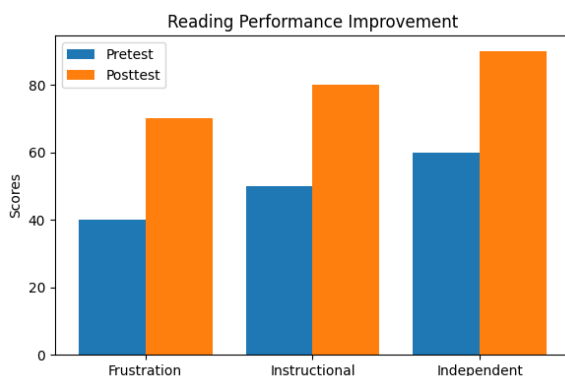


Figure: Comparison of Pretest and Posttest Scores in Reading Performance

Conclusion and Recommendation

The use of localized stories in the Libjoanon dialect significantly improved the reading literacy of Grade One learners. The intervention enhanced both word recognition and reading comprehension, as evidenced by the statistical results.

This supports the implementation of MTB-MLE under DepEd Order No. 74, s. 2009, and aligns with the goals of the Basic Education Sector Reform Agenda (BESRA).

It is recommended that schools develop more localized materials to support early grade reading. Teachers should be trained in using these materials effectively, and funding should be allocated for reproduction and distribution.

The success of this intervention suggests its potential for replication in other districts.

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Understanding The Plight of Multi- Grade Teachers: A Phenomenological Study

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INTRODUCTION

In the Schools Division Office of Dinagat Islands, 50% of elementary schools are multi-grade due to geographic isolation and limited resources. Teachers face the challenge of instructing learners of varying ages and grade levels simultaneously.

This study aimed to understand the lived experiences of multi-grade teachers, focusing on their motivations, challenges, and aspirations. The research sought to answer: Why do teachers choose the teaching profession? How has teaching multi-grade classes shaped their life perspectives? What challenges do they face and how do they cope? What are their aspirations?

Using a hermeneutic phenomenological approach, the study involved ten purposively selected teachers from ten districts. Data were collected through interviews and focus group discussions. Ethical standards were upheld, including informed consent and confidentiality.

Findings / Results and Discussion

The study uncovered a multifaceted view of the experiences of multi-grade (MG) teachers in Dinagat Islands. Teachers shared deeply personal motivations for entering the profession, ranging from a love for teaching and caring for children to family influence and religious inspiration. These reasons reflect both intrinsic passion and practical considerations.

Their journey as MG teachers is marked by resilience and creativity. Despite facing logistical challenges such as long travel, inadequate facilities, and the complexity of managing diverse learners, they developed coping strategies including collaboration, time management, and personalized instruction. These experiences not only tested their endurance but also strengthened their professional capabilities.

Teaching in MG settings significantly transformed their perspectives. Many teachers reported becoming more flexible, goal-oriented, and humble. These life-changing experiences shaped their approach to education and deepened their commitment to their students.

Teachers also expressed aspirations for professional growth, leadership roles, and advocacy for better support. Their desire to improve their teaching practices and contribute to school development highlights the need for systemic support and recognition of their efforts.

Theme	Examples
Personal Drive	"I love teaching children."
Family Influence	"My mother chose this for me."
Religious Inspiration	"I want to follow Jesus' mission as a teacher."
Practicality	"It was affordable and accessible."

Challenges	Coping Strategies
Long travel, poor facilities	Creativity, collaboration
Multi-tasking roles	Time management
Student diversity	Personalized teaching

Theme	Impact
Flexibility	"I became more adaptable."
Goal-Oriented	"I want my students to succeed."
Humility	"I learned to be patient and grateful."

Aspirations	Examples
Professional Growth	"I want to attend more MG trainings."
Leadership	"I hope to become a school head."
Advocacy	"MG schools need more budget and resources."

Conclusion and Recommendation

Multi-grade teachers in the Dinagat Islands exemplify dedication, adaptability, and a profound sense of purpose. Despite working in remote and resource-limited environments, they continue to deliver quality education through innovative and compassionate teaching practices. Their lived experiences reflect the broader realities of educators in geographically isolated and disadvantaged areas, underscoring the urgent need for systemic support.

The findings of this study emphasize the importance of recognizing the unique contributions of MG teachers. Their resilience and commitment not only benefit their students but also strengthen the educational system's reach and inclusivity. By addressing their challenges and supporting their aspirations, we can foster a more equitable and responsive education landscape.

Recommendations:

- Enhance the Teacher Induction Program with modules specific to multi-grade teaching.

- Allocate targeted funding for MG schools under DepEd's Last Mile Schools Program.
- Provide regular professional development focused on differentiated instruction and classroom management.
- Establish mentorship and peer support networks among MG teachers.
- Offer incentives such as hazard pay, housing allowances, and monetization benefits to attract and retain teachers in remote areas.
- Promote community involvement and partnerships to support school improvement initiatives.
- Integrate flexible curriculum models that accommodate the diverse needs of MG learners.
- Ensure access to teaching and learning materials that are contextualized and culturally relevant.

These recommendations aim to inform and strengthen DepEd policies and programs, particularly those related to inclusive education, teacher development, and support for last-mile schools.

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Challenges and Experiences of Teacher Encountered in Modular Distance Learning: Basis for Intervention Program

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INTRODUCTION

This study aimed to evaluate and develop an intervention plan addressing teachers' pedagogical challenges in implementing Modular Distance Learning (MDL) during the New Normal in education. It explored the relationship between these challenges and teachers' and school preparedness, and examined how these challenges vary based on teachers' profiles.

Using a descriptive quantitative research design, the study involved secondary teachers from the Schools Division of Siargao. Data were collected through validated questionnaires and analyzed using statistical tools including frequency, percentage, mean, standard deviation, ANOVA, and Pearson correlation. Ethical standards were strictly observed throughout the research process.

DISCUSSION OF RESULTS

The investigated the demographic profiles of the respondents, preparedness for MDL, and the pedagogical challenges encountered the teachers in the implementation of MDL.

Profile	Category	Frequency	Percentage
Sex	Female	205	78.2%
Sex	Male	57	21.8%
Years in Teaching	10 years and above	101	38.5%
MDL Training Hours	0-8 hours	120	45.8%

Table 1. Profile of the Respondents

This table presents demographic data of the

respondents, showing that the majority are female (78.2%) and have over 10 years of teaching experience (38.5%). Additionally, 45.8% of teachers have attended only 0–8 hours of training related to Modular Distance Learning (MDL), indicating a need for more extensive professional development.

Preparedness	Mean	SD	Interpretation
Teacher's Preparedness	3.12	0.758	Fairly Manifested
School Preparedness	3.28	0.746	Highly Manifested

Table 2. Respondents' Preparedness for MDL Implementation

This table summarizes the preparedness levels of teachers and schools for MDL. Teachers' preparedness is rated as "Fairly Manifested" with a mean of 3.12, while school preparedness is "Highly Manifested" with a mean of 3.28. This suggests that schools are generally more ready than individual teachers, highlighting the importance of targeted teacher support.

Challenge Area	Mean	SD	Interpretation
Instructional Delivery	3.26	0.637	Highly Evident
Complexity of Assessment	3.25	0.559	Highly Evident
Teaching and Learning Materials	3.15	0.466	Fairly Evident

Table 3. Respondents' Pedagogical Challenges encountered

This table outlines the challenges faced by teachers in MDL. Instructional delivery and complexity of assessment are both rated as "Highly Evident" with means of 3.26 and 3.25

respectively, while challenges related to teaching and learning materials are "Fairly Evident" with a mean of 3.15. These findings emphasize the need for improved instructional strategies and resource support.

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that while teachers and schools in Siargao are generally prepared for MDL, challenges in instructional delivery and assessment remain highly evident. Teachers demonstrated resilience and adaptability despite limited training and resources.

It is recommended to strengthen school preparations for safety and well-being, provide targeted training for teachers on MDL implementation, and promote collaboration among stakeholders to enhance the effectiveness of modular distance learning.

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Using Dynamic Learning Program (DLP) In the English Academic Performance of Anomar National High School Students S.Y. 2017-2018

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Program is one of the learning

INTRODUCTION

Teaching in the rural areas seems so very challenging yet rewarding, for it is a vocation and a mission at the same time. It encompasses the role of attending to and catering to the learning needs of various students with different lifestyles and living conditions, which includes the eagerness of an educator to bequeath the knowledge, skills, abilities, and competence to the learners that serves as a driving force to strive hard in eliminating the predicaments and barriers in learning.

Rainfalls and typhoons were experienced during the second and third quarters of the school year, which caused massive flooding, muddy, slippery, and hazardous roads, broken bridges, and even fallen trees that affected the attendance of the learners in the school. With this kind of weather condition, the Department of Education has set the rules on the suspension of classes to keep parents aware and students danger-free in cases of typhoons and other calamities anchored in the DepEd Order 43, series of 2012, which states the Guidelines on the Implementation of Executive Order No. 66 (Prescribing Rules on the Cancellation or Suspension of Classes and Work in Government Offices Due to Typhoons, Flooding, Other Weather Disturbances, and Calamities).

In this case, the school administration cannot hold the students to stay in the school for safety purposes and tends to find remedies to reach out for the students in order to continue their studies; thus, the Dynamic Learning

interventions provided for the learners that serve as an alternative knowledge acquisition for the learners, though they are not in attendance due to the unexpected weather disturbances.

Dr. Hussein (2013) believes that the process of the Dynamic Learning Program, which is learning by doing and where the teacher talks less and students work and perform more, evaluates this concept as an effective way of making the students become responsible towards their studies.

The Junior High School learners of Anomar National High School are residents in the rural areas where there are massive floods during heavy rains and typhoons, causing them not to take the risk in going to school because of a detrimental road to cross over. As a result of staying at home for safety, the presence of the students attending the classes in the school shrinks down throughout the fourth quarter of the year, which starts in the mid of September and ends in December.

A great hindrance for the learners' progress results in a still and unmoving academic performance, and the teacher, being the guide of the learners, needs to be creative enough to improve the English academic performance of the students through filling in and bringing back the dates and days of the unattended classes with the use of the Dynamic Learning Program.

Taking into consideration of the policy No

Child Left Behind, the existing predicament in the Junior High School students of Anomar National High School can be greatly catered to with the appropriate activities and instructions that the Dynamic Learning Program contains, and this concerns the researcher.

DISCUSSION OF RESULTS

There was a significant difference in the Second and Third Quarter grades of the Junior High School students of Anomar National High School after the utilization of the Dynamic Learning Program in English; thus, the p – p -value of 0.05 is less than the t -value of 17.34.

This underscores that the utilization of the Dynamic Learning Program influenced the academic performance of the Junior High School students in Anomar National High School since there was a great change in the grades they obtained in the second and third quarters.

Moreover, the applied intervention could be said to be an effective means of putting the students back on track, which gave an indication that students can be more responsible in doing tasks on their own. Polintan (2013) posited that, Dynamic Learning Program, as a kind of Alternative Delivery Mode, worked well for students with more learning, less talking, no tutoring, and less homework, which means students can focus more on their academic studies.

As agreed by Corrales (2012), the Dynamic Learning Program was designed to maximize students' motivation, focus, confidence, and composure, self-discipline and stamina in learning, the Junior High School students were able to recover faster and upgrade their academic performance and gradually became competitive.

CONCLUSIONS AND RECOMMENDATIONS

Data from this study indicate that the academic performances of the students-respondents differ in the second and third quarters, and this is due to the application and

utilization of the Dynamic Learning Program to the secondary students of Anomar National High School.

As the intervention continuously went on, a lot of instances dealt with analyzing the method of the utilized intervention, which made the researcher review the Dynamic Learning Program with its learning modules and activities through conferences with students, teachers/facilitators, parents, and other peers in the teaching premise; with this, it helped the researcher to write down the points to ponder for the enhancement of the learning intervention.

The independence of the students in terms of working responsibly was sharpened and honed, making them do the assigned task(s) to them in a designated timeframe and abolishing the procrastination practice.

The daily implementation/application of the Dynamic Learning Program as an intervention in English classes monitored each participant to help them improve their academic performance, and this is the significant contribution of the intervention program implemented by the researcher, which served as the best step and guide in conducting lessons and discussions in English classes since it enabled students to explore and discover more about their potential to study with a greater extent of independency, which led to better learning through getting good grades.

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Awareness of Parents of Surigao City National High School (SCNHS) Students on Earthquake Preparedness: Basis for the Formulation of School-Community Preparedness Plan

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INTRODUCTION

The Philippines is considered one of the most disaster-prone countries in the world. The country's exposure to disasters is, to a significant extent, due to its geographical location and physical characteristics. It lies along the Western Pacific Basin (a generator of climatic conditions such as monsoons, thunderstorms, the intertropical convergence zone (ITCZ), and typhoons, among others), making it a path of an average of 20 tropical cyclones annually, nine of which make landfall. Climate risk includes exposure to super typhoons and other extreme weather, El Niño-related droughts, projected rainfall change, and projected temperature increase.

In Surigao City, the 2017 quake, which hit last February 10, 2017, was a serious and traumatic experience to all Surigaonons, considering the 332 aftershocks and strong foreshocks. According to the Department of Social Welfare and Development (DSWD), at least 300 houses in Surigao del Norte were damaged following the earthquake. Seven bridges collapsed, isolating San Francisco. At least eleven towns were also affected, experiencing power outages. Some buildings and schools collapsed and were partially damaged, like Surigao State College and Technology (SSCCT) and Anao-aon National High School (ANHS), Surigao del Norte National High School (SNNHS), and many others. Buildings at some public schools were damaged and thus labelled as "condemned" due to their impact. The Provincial Disaster Risk Reduction and Management Council (PDRPMC) of Surigao del Norte projected that the cost of damage to property and infrastructure was at least

₱665 million (CNN Philippines, 2017).

Further, in the Rapid Disaster Assessment Report (RADAR) submitted by the School Disaster Risk Reduction Management (SDRRM) Coordinator in 2017, there were 10 families severely affected by the 6.9 magnitude quake last February 9. Thus, this study attempted to understand the awareness of parents as interviewed by their children and how preparedness was taken into action through DepEd Order No. 44, Series 2015, in any unexpected occurrence like an earthquake.

With this, this study was conducted to further strengthen or promote earthquake preparedness, especially since children are the most vulnerable people in the community; thus, parents and teachers are required to have the widest knowledge dissemination in terms of its responses and preparedness before, during, and after a quake happens.

DISCUSSION OF RESULTS

To understand the qualitative data collected in this study, a descriptive analysis was used, which narrated the responses of the parents. Face-to-face interviews were used by the students, where the interviewer had an opportunity to ask their parents a series of questions.

From the results, it could be gleaned that a great percentage of responses from Hindi and Hindi Sigurado were evident which called for an immediate response in support to NDRRMC's call and provisions of zero casualty, safer and resilient community through

adopting a disaster risk reduction, and management approach that is holistic, comprehensive, integrated, and proactive in lessening the socioeconomic, and environmental impacts of disasters including climate change, and promote the involvement and participation of all sectors and stakeholders concerned, at all levels especially the local community.

With this, this research study proposed a community preparedness plan for scaling resilience and increasing awareness among people in the local community. Further, the results revealed that a “Yes” or “Oo” was the common response to the before-and-after-earthquake preparedness questions, while during earthquake preparedness yielded common responses. This simply meant that a great or maximum awareness is gleaned from the results, which further implies that the community preparedness behavior is achieved fully to get ready for disasters, which, according to UNESCO (2010), disaster preparedness focuses on plans to respond to a disaster threat or occurrence. It takes into account an estimation of emergency needs, identifies the resources to meet these needs, and also highlights preparedness objectives. Thus, this research study proposed a community preparedness plan in answer to the great number of percentage of respondents with Hindi (No) and Hindi Sigurado (Not Sure) responses and to strengthen the earthquake preparedness among parents and the entire community of Surigao City National High School.

CONCLUSIONS AND RECOMMENDATIONS

The results of this study revealed that the community earthquake preparedness has been achieved by the parents of the students of Surigao City National High School based on the knowledge received from different forms of hazard and disaster education. Parents were simply aware of the actions to be done during an earthquake, like preparedness before, during, and after. The Barangay Disaster Risk Reduction Council members should be properly trained regarding disaster management to understand the disaster

management framework so that they can use it as a tool to manage disasters at school. Activities like disaster awareness and disaster risk reduction, mock drills, first-aid training, training on fire safety, and other response skills (e.g., light search and rescue, swimming, evacuation, and emergency shelter) should be further enhanced and developed in the curriculum of the students. Further, schools should coordinate with the community to address the threats and dangers to the most vulnerable groups in the place. The education sector should also tap into the community in the training and workshops in disaster management to empower them with knowledge and awareness.

With the findings above, it is therefore recommended that the school and community should intensify the implementation of the earthquake preparedness plan where these people reside to develop a well-informed and resilient environment. The Barangay Disaster Risk Reduction Council should also adopt the NDRRMC and Hyogo Frameworks on disaster preparedness plans. Vulnerability assessment should also be developed to serve as the starting point in identifying whether a place is vulnerable to disasters or not. This relates to the need for a decision-making structure and planned strategies of the barangay to properly inform the community well, like having special training courses, either literacy or cooperative trainings, and developing public warning information that will help provide a useful supplement to the overall educational process of disaster education.

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The Use of Digitized and Contextualized Vocabulary Games to Increase the Reading Comprehension Performance of the Grade VII Students of Wilfredo D. Rafols Memorial National High School, S.Y. 2018-2019

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INTRODUCTION

Teaching children to read is one of the primary objectives of education. Reading is a basic life skill. It is a cornerstone for a child's success in school and, indeed, throughout life (Anderson et al., 1985).

The Department of Education recognizes that the foundation of learning is in a child's early language, literacy, and numeracy skills (D.O. No. 12, s. 2015). Hence, it initiated and implemented different programs and projects to make every Filipino child a reader.

Moreover, while learning to read is important for students' educational growth, the concept of comprehension plays an equally vital role. Apart from learning to read, an individual also needs to be able to break down, analyze, and reorganize ideas and information.

Furthermore, not only is reading comprehension important in the language area, but also in other areas like mathematics and the sciences. For example, Barnes (2005) observed that finding the main idea, using information in detail, and making inferences are needed skills to solve math problems. The importance of integrating reading in science was also described by Bowers (2000), who claimed that reading complements science well because of the similarities between reading skills and science process skills. Inferring, predicting, and concluding are some of the common skills attributed and utilized when one is reading or doing math or doing science.

The ability to comprehend texts remains a challenge to some of the learners of Wilfredo D. Rafols Memorial National High School. The school recorded frustrating results in the reading comprehension of the Grade 7 students for three consecutive years, as reflected in the school's Philippine Informal Reading Inventory data. Phil-IRI is an assessment tool designed by DepEd that aims to measure and describe students' reading performance both in word recognition and comprehension. It was found that not all students reach a satisfactory level of reading comprehension that is sufficient to meet the demands of learning, thus placing the low comprehension problem at the top of the school's priority list under the School Priority Improvement Areas of the School Improvement Plan for S.Y. 2016-2018.

DISCUSSION OF RESULTS

The posttest results for the three sets of reading materials under the literal level, which recorded the mean of 2.35, 2.28, and 1.73, had shown an increase compared to the pretest mean scores of 0.81, 0.30, and 0.15. Therefore, the use of digitized and contextualized vocabulary games for this level of comprehension has proven effective. Fresch (2008) found that the main source of difficulty for students is knowing the meaning of words, if they are even able to pronounce them. In the same manner, students who do not understand some words in texts tend to have difficulty comprehending and learning from those texts (Cunningham & Stanovich, 1998). Additionally, Manzo, Manzo, and

Thomas (2006) concluded that “word learning can improve the capacity to learn,” and “a rich vocabulary increases comprehension.” Although there is more to reading comprehension than vocabulary, there is good evidence that gains in vocabulary knowledge are associated with gains in reading comprehension (e.g., Clarke et al., 2010). Moreover, Hirsch (2003) went further by saying that vocabulary experts agree that adequate reading comprehension depends on a person already knowing between 90 and 95 percent of the words in a text.

Furthermore, the scores of the respondents had also increased significantly in the posttest under the interpretive level, as reflected in the mean results. All posttest results from reading texts 1 to 3 recorded the mean of 1.88, 1.40, and 1.20, respectively, compared to the pretest mean scores of 0.13, 0.03, and 0.05. Hence, the digitized and contextualized vocabulary games had improved respondents’ understanding of the text. Stahl and Bravo (2010) stressed that the importance of truly understanding a word extends beyond the word definition. Hence, the word games used in this study do not only contain definitional information but also contextual information about each word’s meaning. According to Michael Graves (2000), effective intentional vocabulary instruction includes teaching specific words to support understanding of texts containing those words, teaching word-learning strategies that students can use independently, and promoting the development of word consciousness and using word play activities to motivate and engage students in learning new words.

Moreover, the pretest and posttest results under the applied level of comprehension also showed a difference. From the pretest mean scores of 0.08, 0.05, and 0.03, they have increased to 1.08, 1.00, and 1.10, respectively. According to Armbruster & Nagy (1992), an effective approach to content area vocabulary is one that “must take into account the different roles that words play in a text and must utilize methods that help students build new concepts.”

There is a significant difference in the reading comprehension performance of the respondents with and without the use of the digitized and contextualized vocabulary games, as it recorded a p-value of .000 in all literal, interpretive, and applied levels of comprehension, which is less than the 0.05 level of significance. Hence, the hypothesis is rejected. One of the most important aspects of using technology as a means of vocabulary instruction is the visuals presented to further solidify word meanings, as well as provide a shared experience and context for discussion of words (Dalton & Grisham, 2011; Hall & Dougherty-Stahl, 2012; Kim & Gilman, 2008; Proctor et al., 2011). Also, incorporating various types of technology such as video clips, electronic or computer-based games, various means of technological presentations, online tools, and computer-based instruction allows students to have greater interaction with text and words (Dalton & Grisham, 2011; Hall & Dougherty-Stahl, 2011; Proctor et al., 2011). Hence, increased amounts of interaction and experience with vocabulary allow students to create more meaningful context for understanding words and deeper vocabulary development.

CONCLUSIONS AND RECOMMENDATIONS

Respondents’ low comprehension performance was mostly attributed to low comprehension in text interpretation (interpretive level) and application of concepts (applied level), as shown in their pretest scores.

Meaningful games create a fun and engaging atmosphere for learning vocabulary where students can be able to expand their vocabulary on their own.

Digitized and contextualized vocabulary games can help in increasing comprehension of the reading texts among students.

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Analysis of Bullying Cases of SCPS Based on Anecdotal Records: An Action Research

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INTRODUCTION

Bullying is redundant, monotonous, and destructive power-based behavior of students. There are multiple forms of bullying, such as name-calling, hitting or threatening others, and spreading false rumors. According to the National Association of School Psychologists (2012), social networking and text messaging are considered major forms of bullying. Those who are directly or indirectly involved in bullying are at increased risk of misbehavior, abuse, and absenteeism from school. Thus, bullying creates a barrier to learning with negative outcomes on the part of both students and institutions. Students may be bullies and sometimes act as bullies, depending on the situations. Bullying among students not only decreases their academic performance but also causes mental health problems and physical injury. The bullying may refer to the situation of “getting picked on” by others. It happens to different types of repeatedly occurring threats, harassments, abuse, ill-treatment, and victimization. The phenomenon of “getting picked on” may extend from a few pupils in the class, who are chronically and frequently targeted by friends, to a wide range of social contexts.

Ansary (2015) identifies the need to develop ‘a norm to report bullying to a responsible adult within the school, clearly distinguishing such telling from “snitching.”’ Thompson and Smith (2011) recommend having multiple reporting systems and a centralized recording system in place that are non-stigmatizing and non-exposing, identify vulnerable students at intake, track student behavior to target additional peer support, and provide evidence for the effectiveness of interventions.

Surigao City Pilot School, with a very large population of schoolchildren, is exposed to different cases of bullying, which need to be resolved to protect the welfare of each learner enrolled in the said institution. With this, the school adheres to support the Republic Act 10627, or the Anti-Bullying Act (the “Act”), which aims to protect children enrolled in kindergarten, elementary, and secondary schools and learning centers from being bullied. The school takes the issue of bullying seriously since the school is the second home of the pupils, and every teacher takes the responsibility to protect every pupil from harm and to provide a friendly and safe learning environment for them.

Apparently, the scenario of bullies and being bullied is observed in all class levels, and this gives rise to another problem, which could be enumerated as absenteeism, troubles in classes resulting in the new formation of groups or peers that will dominate other groups/individuals, and lowering the self-esteem of the pupils. These observed results of bullying serve as existing problems in Surigao City Pilot School that each teacher struggles to alleviate. Through this study, root causes of bullying incidents are analyzed, and the establishing of resolutions through policies and advocacies regarding the concerned predicament is pursued and put into action to realize the desired outcome, which is the concern of the researchers. Lee, Kim, and Kim (2015) also found that anti-bullying programs have a significant effect on reducing victimization. Evans, Fraser, and Cotter (2014) found that 50 percent of the anti-bullying programs they assessed had significant effects on reducing bullying behaviors and 67 percent had significant effects on reducing victimization. Thus, it

seeks to provide each learner with safe learning environment in which they can be successful learners and reach their potential academically, emotionally, physically, and socially.

DISCUSSION OF RESULTS

The bullying cases existing in Surigao City Pilot School were repeatedly done by the 246 pupils from Kindergarten to grade VI, and all of the bullying cases had the prevalence of "always," though the numerical mean of each bullying case differed from each other but belonged to the range of 3.01–4.0.

Since the implementation of the bullying intervention program was crafted and planned accordingly and underwent a process in which verification and validation of the training matrix was done by the guidance counselor and 2 SPG Advisers and approved by the school principal, it could be assessed that the schedule of implementation of the bullying intervention was religiously followed as it was indicated in the timetable of the training matrix.

The intervention applied to the research respondents during the conduct of the study is of great help not only to the pupils but also to the parents, teachers, and the school. The activities every Friday helped a lot in realizing the desired outcome of the bullying intervention. As a result, the level of implementation of the intervention program had a positive impact on the respondents and on the classroom atmosphere, in which trouble, other conflicts, and disputes and disagreements were avoided and prevented. This kind of classroom atmosphere is all needed by the young learners to achieve maximum trust, eagerness to study, socialize with others, interact, and be courageous enough to join the class discussions. Rigby and Johnson (2016) found that teachers' and students' evaluations of classroom-based anti-bullying strategies are overwhelmingly positive, with over half of students rating some aspects of classroom-based approaches as helpful in stopping bullying.

With the presence of the facilitators during the intervention program together with the

participation of class advisers, the school principal, and parents, it could be said that the aimed goal in treating the bullying problem in the school is somehow addressed and respondents gradually change for the better. Veenstra, Lindenberg, Huitsing, Sainio, and Salmivalli (2014) posited that teachers and other adults in schools have a key role to play in the prevention and cessation of bullying; thus, bullying is more frequent and possibly more severe when adult supervision is lacking or when teachers ignore the incident. Teachers' efforts at reducing bullying, as perceived by their students, have also been found to be associated with a decrease in bullying over time (Veenstra et al. 2014). When teachers become aware of bullying incidents, they generally choose to take action rather than ignore the incident (Bauman et al. 2008; Burger et al. 2015).

CONCLUSIONS AND RECOMMENDATIONS

Data treated in this study indicated the level of bullying incidence in Surigao City Pilot School, particularly before and after the implementation of the bullying intervention program, which gained different results. The existing bullying problems could be alleviated if teachers and parents closely monitored the children with trust, affection, and appreciation.

The refinement of the pupils' behavior has been observed, and so the attitude of being responsible towards their fellows has been sharpened and honed, making them achieve the core values of a Filipino learner, which are Maka-Diyos, Maka-tao, Makakalikasan, and Makabansa. The bullying intervention towards the respondents helped each parent to get closer to their children and gave opportunity to understand their children's needs.

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Teachers' Perceptions of Arabic Language and Islamic Values Education (ALIVE) Implementation in the Division of Surigao City: Basis for a Proposed Program Enhancement

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INTRODUCTION

The Arabic Language and Islamic Values Education (ALIVE) Program in the Department of Education has the primary objective of providing relevant and responsive basic quality education to Muslim children and all others who desire to participate in the program. It is anchored on the Basic Education Curriculum (BEC) of the Department of Education and complies with DepEd Order No. 51, series of 2004, or the standard Madrasah Curriculum for Public and Private Schools. The program is built on the principles of the Schools First Initiatives (SFI). It intends to produce ALIVE learners who are imbued with desirable Islamic values, partnership, and collaboration with the local government and Muslim leaders in the community, and with competent and credible stakeholders.

The program sustains relevance and responsiveness to community expectations and needs by sourcing inputs to the teaching and learning process as well as to its management and administration from the community through adoption of acceptable recruitment criteria/process and compensation scheme for ALIVE teachers; a viable and credible performance assessment and monitoring system; and adaptation of a system of grading and reporting progress in, and recognition of, the performance of the ALIVE learners, in line with the goals and objectives of the BEC and of the DepEd Order No. 51 s. 2004. The ALIVE program of CARAGA region is implemented in schools whose environment is conducive to learning

in the light of the Child-friendly School

The system is being ably managed.

Recognizing the changing needs in this age of competitiveness, the researchers found it relevant to probe deeper into and to find out the current predicament of the *asatidz*, or Muslim teachers. Further, the researchers also found it equally important to evaluate the impact of the ALIVE Program implementation to generate valuable information on whether the *asatidz* actually implemented the *derrasa*—a set of competencies—in their respective classrooms.

The specific purpose of this study was to investigate the impact of the implementation of Arabic Language and Islamic Values Education in teaching ALIVE. Aside from seeking information about the implementation of the ALIVE, it also aimed to generate knowledge of what worked and what did not and understand why so that future activities could be improved to maximize the impact of the program.

DISCUSSION OF RESULTS

The extent of the ALIVE curriculum implementation of the *Asatidz* in the Elementary Schools of Surigao City was qualitatively described as high implementation of the competency along the following strands: communicates clear learning goals, establishes routines and procedures to maximize instructional time,

demonstrates mastery in teaching, cultivates good study habits among pupils through appropriate activities, designs, and utilizes teaching methods and translates learning competencies to instructional objectives. Asatidz satisfactorily implemented the competency on utilizing multimedia facilities to enhance teaching and learning.

The topmost competency that asatidz gives much emphasis to is communicating clear learning goals. Utilizing a multimedia facility to enhance teaching and learning is the lowest among the seven strands in terms of NCBTS curriculum and planning strands.

The Asatidz encountered moderate problems according to rank, namely: insufficient instructional materials, facility constraints, limited training in teaching the Arabic language and Islamic Values Education, support and assistance from higher officials, and inadequate classrooms.

Based on the results of the study, the researchers proposed an intervention program for institutional development, which addresses the ALIVE Program among the implementing basic education schools.

CONCLUSIONS AND RECOMMENDATIONS

Since Asatidz has high implementation of the competency of the ALIVE curriculum along the following strands: communicates clear learning goals, establishes routines and procedures to maximize instructional time, demonstrates mastery in teaching, cultivates good study habits among pupils through appropriate activities, designs and utilizes teaching methods, and translates learning competencies to instructional objectives, then they are employing almost all the time the abovementioned competencies to improve instruction and promote learning. Asatidz are not skilled in using multimedia facilities to enhance teaching and learning.

The chief competency that asatidz highly demonstrates is communicating clear learning goals. Utilizing multi-media facilities to enhance teaching and learning is satisfactorily exhibited among the seven

strands in terms of the curriculum and planning strands.

There is an indication that ALIVE classes have insufficient learning materials.

The proposed intervention program for institutional development on the ALIVE Program among implementing basic education schools has separate activities for school heads and teachers.

Based on the foregoing findings and conclusions, the following recommendations are given:

1. Asatidz training and continued, ongoing, relevant professional development are essential if benefits from investments in ICTs are to be maximized.
2. Provide opportunities for capacity building and professional development programs for asatidz on contemporary multimedia facility utilization. DepEd officials should plan out relevant activities and trainings for all Asatidz to enhance their strategies and methodologies in teaching that are geared towards the improvement of the implementation of the ALIVE Program Curriculum.
3. It is recommended that provision for sufficient learning materials, updated books, and other references be made for every pupil, making the distribution a 1:1 ratio.
4. The Schools Division Office of Surigao City is encouraged to adopt and implement the proposed intervention program for the institutional development of the ALIVE Program.

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Square Pegged in a Round Hole: A Phenomenological Study on the Experiences of School Coordinators in the School-Based Management (SBM)

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INTRODUCTION

School-Based Management (SBM) is a framework that decentralizes decision-making to the school level, empowering stakeholders to improve educational outcomes. Despite its potential, SBM implementation in Level 1 schools in the Schools Division of Siargao faces challenges such as limited understanding of roles, lack of stakeholder engagement, and inadequate practices. This study aimed to explore the lived experiences of SBM teacher-coordinators and identify barriers to effective implementation.

Using a descriptive phenomenological design, the study involved five purposively selected elementary SBM coordinators from mainland Siargao. Data were collected through validated semi-structured interviews and focus group discussions, analyzed using Colaizzi's 7-step method. Ethical standards were upheld, including informed consent, confidentiality, and voluntary participation.

DISCUSSION OF RESULTS

The study revealed three major themes from the coordinators' narratives: unfamiliarity with roles, lack of knowledge of the SBM framework, and a strong need for learning and development.

Each theme includes the following subthemes that highlight specific challenges in SBM implementation:

Theme	Subthemes
Unfamiliarity with Functions	Struggles in Execution, Misconception of Teachers' Role
Lack of Knowledge of SBM	Insufficient Understanding, No Practice as a 'Way of Life'
Need for Learning and Development	Remediating Gaps through Training and Workshops

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that SBM coordinators face significant challenges due to unclear roles, limited understanding of the framework, and lack of consistent practice. These issues hinder stakeholder engagement and the improvement of SBM Level of Practice in schools.

Recommendations include proposing a Learning and Development Plan for coordinators, strengthening monitoring and evaluation mechanisms, reactivating the Division Field Technical Assistance Team (DFAT), and enhancing rewards and recognition systems. These actions support the Department of Education's goal of improving SBM implementation and learner outcomes.

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Learners' Perception Towards the Utilization of Self-Learning Materials (SLMs) during Pandemic

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Introduction

The sudden onset of the COVID-19 pandemic in 2020 forced a dramatic shift in the Philippine education system, moving from traditional classroom learning to distance learning modalities to ensure educational continuity. The Department of Education (DepEd) introduced Self-Learning Materials (SLMs), such as printed modules and activity sheets, to support students in areas with limited access to digital resources, particularly in rural settings like South Cabadbaran District. This study aimed to explore how Senior High School students perceived these SLMs, focusing on their effectiveness and preferences during the pandemic and for future face-to-face learning. The research addressed four key questions: What is the profile of learners using printed SLMs? Why do they prefer SLMs? What are their attitudes toward SLMs? What are their preferences for SLM use in future face-to-face settings?

The study was conducted in August 2021 at South Cabadbaran District, involving 325 Grade 11 and 12 students from academic and Technical-Vocational-Livelihood (TVL) tracks, selected through purposive sampling to ensure representation of diverse economic and academic backgrounds. A descriptive survey design was employed, using a validated 4-point Likert scale questionnaire to collect data on learner perceptions. Data were analyzed using descriptive statistics (means, percentages) and Wilcoxon signed ranks tests to assess significance. Ethical considerations included securing parental

consent for minors, ensuring participant anonymity, and adhering to the Data Privacy Act of 2012 (Republic Act No. 10173) to protect confidentiality.

Findings / Results and Discussion

The study addressed four research questions to evaluate learners' experiences with SLMs.

Learner Profile: Of the 325 respondents, 64% came from families with a combined monthly income below Php 10,000, reflecting economic challenges in rural areas. Additionally, 57% were parent-supported, while 43% were from TVL tracks, such as Shielded Metal Arc Welding (SMAW) and Computer Systems Servicing (CSS). This economic and academic diversity influenced their preference for printed SLMs, which required no internet access.

Reasons for Choosing SLMs: Learners overwhelmingly preferred printed SLMs (73% agreed) due to their user-friendliness, clear instructions, and flexibility, allowing self-paced learning without reliance on costly internet or devices. Key reasons included ease of understanding and no need for rigid schedules, unlike online classes, which was critical in low-resource settings.

Attitudes Toward SLMs: A significant 57.2% of learners (186 students) expressed a positive attitude toward SLMs (mean=3.03, SD=0.46), citing sufficient time to complete tasks and clarity of content. Wilcoxon signed ranks tests confirmed a statistically significant positive perception ($p=0.000$), indicating SLMs were well-received for their accessibility and structure.

Preference for Face-to-Face Learning: While 73% favored continuing SLM use in future face-to-face classes for their flexibility, 26% disagreed, citing limited teacher interaction as a drawback. This suggests a need to balance SLMs with guided instruction to enhance engagement, as supported by Chytr et al. (2020), who emphasize the role of teacher support in distance learning.

Indicator	Strongly Agree (%)	Agree (%)	Mean	Interpretation
SLMs are user-friendly	12%	73%	3.03	Positive
Sufficient time for SLMs	10%	70%	2.95	Positive
Prefer SLMs in face-to-face	12%	57%	2.75	Moderately Positive

Conclusion and Recommendation

The study revealed that Senior High School students in South Cabadbaran District viewed SLMs positively, valuing their user-friendliness, flexibility, and accessibility, particularly in low-income, rural contexts where digital resources are scarce. The significant positive perception (57.2%) underscores SLMs' role in supporting DepEd's Basic Education Learning Continuity Plan (DepEd Order No. 12, s. 2020), which aimed to ensure learning continuity during the pandemic. However, the 26% who preferred more teacher interaction highlight a need for blended approaches. To enhance SLM effectiveness and align with DepEd's goal of resilient education, the following recommendations are proposed:

1. Integrate SLMs in Face-to-Face Learning: Schools should incorporate SLMs into regular classes to maintain

- flexibility and support self-paced learning, especially for TVL students.
2. Enhance Interactivity: Develop SLMs with interactive elements, such as quizzes or visual aids, to boost engagement and address learner feedback on limited interaction.
3. Teacher Training: Conduct Learning Action Cell (LAC) sessions to train teachers on integrating SLMs effectively with in-person guidance.
4. Localize Materials: Adapt SLMs to include local contexts, such as regional examples or dialects, to increase relevance and comprehension.
5. Ongoing Monitoring: Regularly survey learners to refine SLM design and delivery, ensuring alignment with student needs and preferences.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Mr. Ceballos et.al.

Assessment on the Implementation of the Enhanced Basic Education Learning Continuity Plan (BE-LCP) as a Catch-up Plan in the DepEd Division of Cabadbaran City

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Introduction

The COVID-19 pandemic disrupted education worldwide, forcing schools to adapt to remote and blended learning to ensure continuity. In the Philippines, the Department of Education (DepEd) implemented the Basic Education Learning Continuity Plan (BE-LCP) to address these challenges, but its effectiveness in local contexts like Cabadbaran City Division remained unclear. This study aimed to evaluate the BE-LCP's implementation as a catch-up plan in Cabadbaran City, focusing on its alignment with DepEd's framework, stakeholder engagement, and challenges faced. The research addressed: How was the BE-LCP implemented? What are the stakeholders' perceptions? What problems were encountered, and what policies can improve implementation?

Conducted in 2022 across 23 elementary and 13 secondary schools in Cabadbaran City Division, the study used a mixed-methods approach, combining quantitative surveys and qualitative interviews with 321 respondents (teachers and school heads). Data were analyzed using descriptive statistics (means) and thematic analysis. Ethical measures included securing informed consent, ensuring anonymity, and adhering to the Data Privacy Act of 2012 (Republic Act No. 10173) to protect respondent privacy.

Findings / Results and Discussion

The study addressed four research questions to evaluate the BE-LCP's implementation.

Implementation Status: All five components –streamlining the curriculum, aligning learning materials, selecting delivery modalities, capacitating teachers, and ensuring marginalized learners' access– were rated “Fully Implemented” (mean=3.91–3.97). Schools effectively revised plans (e.g., School Improvement Plans) and adopted modular learning based on student needs.

Stakeholder Perceptions: Respondents ranked ensuring marginalized learners' access highest (mean=4.00), followed by teacher capacitation, curriculum streamlining, learning material alignment, and financing (mean=3.74). This reflects strong community engagement and commitment to equity, aligning with DepEd's Sulong Edukalidad initiative.

Problems Encountered: Three themes emerged: insufficient funds (e.g., for printing modules), limited external support (e.g., from local government), and excessive reporting requirements, which strained resources and teacher workload.

Proposed Policies: Respondents suggested increased funding, enhanced stakeholder participation (e.g., parental involvement), and streamlined planning to reduce administrative burdens. These align with findings from Cahapay (2020), emphasizing resource allocation for effective learning continuity.

Component	Mean	Interpretation
Access for Marginalized Learners	4.00	Fully Implemented
Teacher Capacitation	3.97	Fully Implemented

Curriculum Streamlining	3.94	Fully Implemented
Learning Material Alignment	3.92	Fully Implemented
Financing	3.74	Fully Implemented

Conclusion and Recommendation

The BE-LCP was fully implemented in Cabadbaran City Division, with strong stakeholder support for ensuring access for marginalized learners and capacitating teachers, though challenges like funding shortages and excessive reporting persisted. These findings support DepEd's Basic Education Learning Continuity Plan (DepEd Order No. 12, s. 2020), which aims to ensure learning continuity during crises. To enhance implementation, the following are recommended:

- Increase Funding: DepEd should allocate additional funds for module production and distribution to reduce financial strain on schools.
- Enhance Stakeholder Engagement: Schools should involve parents and local government in planning and resource support to strengthen community ties.
- Streamline Reporting: Simplify reporting requirements to reduce teacher workload, allowing more focus on instruction.
- Conduct Regular Training: Implement ongoing Learning Action Cell sessions to sustain teacher capacitation.
- Monitor Equity Measures: Regularly evaluate access for marginalized learners to ensure inclusivity.
- These steps strengthen the BE-LCP, aligning with DepEd's goal of resilient, equitable education delivery during crises.

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This Research Bulletin is an abridged version of the full manuscript of Ms. Mativo, et.al.

**School Learning Action Cell (SLAC) Implementation in the Division of Cabadbaran City:
Basis for Enhancement Program**

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Introduction

The School Learning Action Cell (SLAC) is a cornerstone of professional development for teachers in the Philippines, designed to foster collaborative learning and improve teaching practices as mandated by DepEd Order No. 35, s. 2016. However, challenges such as time constraints, limited resources, and inconsistent participation can hinder its effectiveness. This study aimed to evaluate SLAC implementation in Cabadbaran City Division’s public elementary schools, focusing on how teacher profiles (designation, years of service, educational attainment, and LAC session attendance) relate to performance in four key areas: Learners’ Diversity & Inclusion, Content & Pedagogy, Assessment & Reporting, and Curriculum Contextualization. It also sought to identify strengths, challenges, and propose an enhancement program to strengthen SLAC’s impact.

The research employed a descriptive-inferential quantitative design, involving 80 respondents (20 school heads, 20 master teachers, and 40 teachers) selected through stratified random sampling from Cabadbaran City Division’s elementary schools. Data were collected via surveys assessing SLAC performance, with statistical analysis using Pearson correlation to examine relationships between teacher profiles and performance. Ethical considerations included voluntary participation, informed consent, and data confidentiality. Conducted in 2024, the study was funded by DepEd’s Basic Education

Research Fund to ensure rigorous and ethical research practices.

Findings / Results and Discussion

The study found no significant relationship between designation, educational attainment, or years of service and SLAC performance across all areas, with correlations (e.g., $r = 0.355$ for designation in Content & Pedagogy, $p = 0.284$) not reaching statistical significance. However, the number of LAC sessions attended showed significant positive correlations with performance in Learners’ Diversity & Inclusion ($r = 0.233$, $p = 0.038$) and Assessment & Reporting ($r = 0.263$, $p = 0.018$). SLAC strengths included collaborative learning (75 mentions), professional development (73 mentions), and inclusive participation (72 mentions). Challenges were time constraints (74 mentions), lack of resources (66 mentions), and inconsistent participation (64 mentions).

Table 1: Key Findings on SLAC Implementation

Aspect	Finding
Profile Impact	No significant correlation with designation, education, or years of service; LAC session attendance significantly impacts Diversity & Inclusion and Assessment & Reporting.
Performance Areas	Strong performance in all areas (mean scores: 3.73–3.78), highest in

	Curriculum Contextualization (3.78).
Strengths	Collaborative learning, professional growth, inclusive participation.
Challenges	Time constraints, lack of resources, inconsistent participation.
Proposed Enhancements	Regular sessions, resource augmentation, external facilitators, engagement strategies.

The findings highlight that regular participation in LAC sessions significantly enhances teachers' abilities in addressing learner diversity and assessment practices. Collaborative environments fostered by SLAC support professional growth, but time and resource limitations hinder consistent engagement, necessitating targeted interventions.

Conclusion and Recommendation

The study concludes that SLAC implementation in Cabadbaran City Division is effective, particularly in fostering collaborative and inclusive teaching practices, but its impact is constrained by time, resources, and participation issues. Regular LAC session attendance significantly improves performance in key areas, underscoring the value of sustained professional development. These findings align with DepEd Order No. 35, s. 2016, which promotes SLAC as a strategy for enhancing teaching and learning through collaborative professional communities. To strengthen SLAC, DepEd Cabadbaran City should implement a structured enhancement program, including regular session schedules to minimize conflicts, resource allocation for teaching aids and technology, and training for facilitators to improve session quality. Engaging external

experts and introducing incentives can boost participation. These recommendations support DepEd's commitment to continuous professional development, ensuring SLAC maximizes teacher competencies and student outcomes.

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This Research Bulletin is an abridged version of the full manuscript of Ms. Nakila and supplements her research presentation during the 1st Quarter Virtual Regional Research Stakeholders Forum last March 28, 2025, in reference to RM No. 0248, s. 2025.

Extent of Compliance of the Office to the Standard Processes in Property Inventory and Utilization

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Introduction

Efficient management of government resources, including properties, is critical for ensuring operational effectiveness and accountability in public agencies like the Department of Education (DepEd). However, the Schools Division Office (SDO) of DepEd Cabadbaran City has faced challenges such as misplaced properties, untracked assets, and crowded storage of damaged items, indicating gaps in adhering to standard property management processes. This study aimed to assess the extent of SDO's compliance with these standard processes, identify facilitating and hindering factors, and propose a quality control process to enhance property inventory and utilization, aligning with the government's mandate for resource stewardship under Presidential Decree No. 1445.

The study was conducted in DepEd Cabadbaran City Division, involving 44 plantilla personnel (excluding senior officials and validation team members) selected through purposive sampling. A mixed-methods descriptive design was employed, using a validated survey questionnaire with closed- and open-ended questions based on the SDO's Property and Supply Operational Manual. Data were analyzed using descriptive statistics (frequency and percentage) and thematic analysis for qualitative responses. Ethical considerations included securing informed consent, ensuring respondent anonymity, and adhering to the

Data Privacy Act of 2012 (Republic Act No. 10173) to protect personal information.

Findings / Results and Discussion

The study addressed four research questions to evaluate SDO's property management compliance. **Compliance Level:** The SDO was *Highly Compliant* (100%) in preparing inventory lists and conducting physical counts, reflecting adherence to COA Circular No. 2020-006. It was *Mostly Compliant* (77.27%–97.73%) in eight processes, including issuing Inventory Custodian Slips (97.73%) and submitting inventory reports (86.36%), but *Poorly Compliant* in taking pictures of items for disposal (50%) and submitting Inventory and Inspection Reports of Unserviceable Property (IIRUP) to the Appraisal Committee (47.73%). **Facilitating Factors:** Key enablers included availability of inventory forms (e.g., RPCPPE, Annex A), updated property data, SDO's commitment to quality, and scheduled inventory activities. **Hindering Factors:** Poor compliance stemmed from ongoing inventory finalization per COA Circular No. 2020-006 and use of incorrect forms (e.g., Requisition Issue Slips for consumables instead of PPEs). **Proposed Quality Control Process:** Respondents suggested updating the operational manual to align with actual practices and incorporating new processes like requiring transfer documents.

Process	Compliance (%)	Interpretation
Preparing Inventory Lists	100%	Highly Compliant
Physical Count of Properties	100%	Highly Compliant
Issuing Inventory Custodian Slip	97.73%	Highly Compliant
Taking Pictures for Disposal	50%	Poorly Compliant
Submitting IIRUP to Appraisal Committee	47.73%	Poorly Compliant

Conclusion and Recommendation

The SDO of DepEd Cabadbaran City is *Mostly Compliant* (81.33%) with its property inventory and utilization processes, excelling in inventory preparation and physical counts but lagging in disposal-related processes due to incomplete documentation and incorrect form usage. Facilitating factors like standardized forms and schedules support compliance, while ongoing inventory finalization and procedural inconsistencies hinder it. These findings align with DepEd's Property and Supply Management Handbook (2013), emphasizing accurate asset accounting. To enhance compliance, the SDO should: 1) Update the operational manual to reflect actual practices; 2) Use correct forms as stipulated; 3) Add processes for property returns, transfers, and employee accountability; 4) Conduct regular staff orientation on property management protocols; 5) Convene the Appraisal Committee promptly to streamline disposal processes. These recommendations support

DepEd's goal of efficient resource management under its operational guidelines.

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This Research Bulletin is an abridged version of the full manuscript of Mr. Obedencio, et.al. and supplements their research presentation during the 2nd Quarter Virtual Regional Research Stakeholders' Forum last June 17, 2024, in reference to RM No. 0460, s. 2024.

Video Reading Lessons (VRL): Strategy for Beginning Readers in Cabadbaran City Division

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Introduction

The COVID-19 pandemic disrupted education in the Philippines, exacerbating existing challenges in reading proficiency among young learners, particularly in Grade 1. The shift from face-to-face to blended learning and back created a reading crisis, as many pupils struggled to master foundational skills like letter recognition and word reading. This study aimed to evaluate the effectiveness of Video Reading Lessons (VRL) in improving reading levels among Grade 1 beginning readers in non-central schools of Cabadbaran City Division. It addressed three key questions: What are the reading levels before and after VRL implementation? Is there a significant difference in reading levels post-intervention? The objective was to enhance early reading skills to support a robust educational foundation.

Conducted from August to December 2023 in five non-central schools (Antonio Luna, Calamba, Lusong, Mahaba, and Putingbato), the study involved 31 Grade 1 beginning readers identified as struggling with letter names and sounds. A pre-test/post-test design was used, with VRL implemented via 15-minute sessions twice daily in school and 15 minutes at home with parental support. Reading progress was assessed biweekly using teacher-made materials, focusing on letter recognition, syllables, words, and phrases. Data were analyzed with descriptive statistics (mean, standard deviation) and T-tests ($p < 0.05$). Ethical considerations included securing informed consent, ensuring anonymity, and

adhering to the Data Privacy Act of 2012 (Republic Act No. 10173).

Findings / Results and Discussion

The study assessed reading proficiency across four competencies. Pre-Intervention Reading Levels: Most pupils (83.87%) could not identify letter names and sounds, with none able to read syllables, words, or phrases (mean=1.00, SD=0.00). Post-Intervention Reading Levels: After eight weeks of VRL, 61.29% of pupils reached high proficiency (reading simple phrases, mean=4.52, SD=0.77), with significant improvements in letter recognition (100%), syllables (90.32%), and four/five-letter words (77.42%). Significant Difference: A T-test revealed a highly significant improvement ($p = 0.000$), rejecting the null hypothesis. ANOVA showed no significant differences across schools, indicating VRL's consistent effectiveness. The VRL's interactive, teacher-led videos, using the Marungko Approach, enhanced motivation and cognitive engagement, aligning with Noetel et al. (2021).

Competency	Pre-Test (%)	Post-Test (%)	Mean (Post)	Interpretation
Letter Names & Sounds	16.13%	100%	4.52	High Proficiency
Syllables	0%	90.32%	4.52	High Proficiency
Four/Five-Letter Words	0%	77.42%	4.52	High Proficiency

Simple Phrases	0%	61.29%	4.52	High Proficiency
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Conclusion and Recommendation

The VRL intervention significantly improved reading proficiency among Grade 1 beginning readers, with most achieving high proficiency in reading simple phrases after eight weeks. The strategy's success lies in its accessibility, teacher familiarity, and flexibility, allowing repeated viewing without internet dependency. This aligns with DepEd's Basic Education Learning Continuity Plan (DepEd Order No. 12, s. 2020), emphasizing innovative strategies for literacy. Recommendations include: 1) Teachers should integrate VRL into daily reading instruction; 2) School Heads should allocate resources for VRL distribution (e.g., USB drives); 3) DepEd should scale VRL to other grades and divisions; 4) Parents should be trained to support home-based VRL use. These steps strengthen DepEd's early literacy programs, fostering a solid educational foundation.

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This Research Bulletin is an abridged version of the full manuscript of Ms. Orquina and supplements her research presentation during the Researchers' Notebook 2024 last November 11, 2024, in reference to RM No. 1109, s. 2024.

Integrating Cognitive Competencies in Reading Comprehension among Junior High School Students in Cabadbaran City National High School

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Introduction

Reading comprehension is a cornerstone of academic success and lifelong learning, enabling students to understand, analyze, and interpret texts critical for navigating education and daily life. However, at Cabadbaran City National High School (CCNHS), 21% of Junior High School students were at the frustration level in reading comprehension, as shown in the 2024–2025 Group Screening Test. This study evaluated the effectiveness of six reading materials integrated with cognitive competencies—vocabulary, grammar, and text structure—in improving reading skills among Grade 8, 9, and 10 students. The research addressed four questions: What are the pre-test and post-test comprehension levels? Is there a significant difference between these scores? What remediation strategies can enhance comprehension?

Conducted in 2024 at CCNHS, the study employed a quasi-experimental action research design with 135 purposively sampled students from Grades 8 (Watson), 9 (Moseley), and 10 (Serway). A 10-item pre-test and post-test, adapted from the Phil-IRI, included guessing tasks (pre-test) and writing tasks (post-test) to assess comprehension. Data were analyzed using percentages and mean comparisons. Ethical measures ensured parental consent for minors, participant anonymity, and compliance with the Data Privacy Act of 2012 (Republic Act No. 10173), safeguarding student privacy throughout the study.

Findings / Results and Discussion

The study addressed four research questions to assess the impact of E-Saliksik reading materials.

Pre-Test Comprehension Levels: Across Grades 8, 9, and 10, 92% of male and 89% of female participants were at the frustration level, with only 2% of each gender reaching the independent level. This high frustration rate underscored the urgent need for targeted interventions to improve reading skills.

Post-Test Comprehension Levels: After exposure to the six reading materials, frustration levels decreased to 86% for both genders. Independent readers increased to 5% (male) and 10% (female), with notable gains in Grade 10 Serway, where female independent readers rose to 16%. This suggests the materials fostered some improvement, particularly for females, aligning with Loveless (2015), who notes females often outscore males in reading assessments.

Significant Difference: The pre-test mean score was 54.37%, while the post-test score was 51.82%, indicating a 2.55% decline. However, individual progress varied: Grade 10 Serway students showed significant gains, with several moving to the independent level, while Grade 8 Watson students experienced declines, suggesting section-specific challenges. The materials' focus on cognitive competencies like vocabulary and grammar enhanced engagement for some, but the overall decline

indicates a need for broader material coverage.

Proposed Remediation: A 12-week remediation plan was proposed, starting after the first-quarter Phil-IRI pre-test. It includes interactive, localized reading materials (e.g., games, illustrated texts) to sustain engagement and address diverse learner needs, particularly for frustration-level readers.

Level	Pre-Test Male (%)	Pre-Test Female (%)	Post-Test Male (%)	Post-Test Female (%)
Independent	2%	2%	5%	10%
Instructional	6%	9%	8%	4%
Frustration	92%	89%	86%	86%

Conclusion and Recommendation

The E-Saliksik reading materials reduced frustration levels by 4% and increased independent readers, particularly in Grade 10, despite a slight overall score decline of 2.55%. This indicates that cognitive strategies like vocabulary and grammar exercises can improve comprehension for some students, but challenges persist, especially in Grade 8. The findings support DepEd's Catch-Up Fridays initiative (DepEd Memorandum No. 001, s. 2024), which aims to enhance literacy and improve PISA performance. To further develop reading skills, the following are recommended:

1. **Develop Comprehensive Materials:** Teachers should create reading materials covering all four quarters to ensure sustained skill development.
2. **Sustain Catch-Up Fridays:** Schools should continue dedicating Fridays to reading activities, focusing on comprehension to reduce frustration levels.

3. **Cross-Subject Integration:** Subjects beyond English and Filipino, such as Science and Social Studies, should incorporate reading exercises to reinforce comprehension skills.
4. **Localized Interactive Tools:** Teacher-researchers should develop action research on contextualized materials, like interactive books or games, tailored to students' cultural and regional backgrounds.
5. **Evaluate Cognitive Strategies:** Future studies should identify the most and least effective cognitive strategies to optimize reading interventions.

These recommendations align with DepEd's Matatag Education Agenda, aiming to bridge the reading gap and elevate the Philippines' global educational standing.

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This Research Bulletin is an abridged version of the full manuscript of Ms. Montajes, et.al.

A Comprehensive Review of Continuous Improvement (CI) Implementation in the CI Schools of DepEd Cabadbaran City: Tracing the Journey from Past to Present

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Introduction

The Department of Education (DepEd) in the Philippines has embraced Continuous Improvement (CI) to enhance educational quality and school management, particularly through its Continuous Improvement Program (CIP). In DepEd Cabadbaran City, CI implementation faces challenges such as limited resources, resistance to change, and varying stakeholder engagement, which can hinder sustainable progress. This study aimed to evaluate the evolution, effectiveness, best practices, challenges, stakeholder involvement, and sustainability strategies of CI in 16 schools and three division sections. It sought to answer how CI has evolved, its impact on educational outcomes, best practices, challenges, stakeholder engagement, and strategies for ensuring long-term sustainability.

The research utilized a non-experimental quantitative design, surveying 114 respondents, including CI team members, teachers, and school leaders across Cabadbaran City Division. Data were collected through structured surveys to assess CI practices, with ethical considerations ensuring voluntary participation, informed consent, and confidentiality. The study, conducted in 2024, analyzed responses to provide insights into CI's progress and inform future educational strategies, aligning with DepEd's commitment to data-driven and collaborative improvement.

Findings / Results and Discussion

The study revealed that most schools are in early or established CI phases, showing significant institutional improvements but slower impacts on student academic performance. Leadership support and staff involvement were critical to CI success, with collaborative planning and data-driven decision-making identified as best practices. However, challenges included limited resources, resistance to change, and inconsistent stakeholder engagement, particularly among parents and community members, whose involvement remained moderate. Strategies for sustainability emphasized capacity building, policy frameworks, and regular evaluations.

Table 1: Key Findings on CI Implementation

Aspect	Finding
Evolution	CI evolved from administrative streamlining to data-driven, stakeholder-focused approaches.
Effectiveness	Strong institutional gains; limited direct impact on student performance.
Best Practices	Collaborative planning, data-driven decisions, leadership commitment.
Challenges	Resource constraints, resistance to change, moderate external engagement.

Stakeholder Engagement	High among school staff; moderate among parents/community.
Sustainability Strategies	Training, policy integration, centralized resource platforms, monitoring.

The findings highlight that while CI has improved operational efficiency, its impact on student outcomes requires further focus. Schools with strong leadership and staff engagement showed better CI outcomes, but resource limitations and external stakeholder involvement remain barriers. Structured training and centralized platforms were identified as key to sustaining CI efforts.

Conclusion and Recommendation

The study concludes that CI in DepEd Cabadbaran City has advanced institutional efficiency but needs targeted interventions to enhance student performance and stakeholder engagement. Leadership, training, and systematic monitoring are critical for sustainability, with a focus on overcoming resource constraints and resistance to change. These findings support DepEd's Continuous Improvement Program (CIP) under School-Based Management, aiming to improve educational quality through evidence-based practices.

To strengthen CI, DepEd Cabadbaran City should implement structured training and mentoring programs, create a centralized online repository for CI resources, and establish regular assessment cycles. Engaging parents and communities through targeted initiatives and recognizing contributions can enhance stakeholder involvement. These recommendations align with DepEd's CIP, promoting sustainable school improvements and better learning outcomes.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Mr. Pelenio and supplements his research presentation during the 1st Quarter Virtual Regional Research Stakeholders Forum last March 28, 2025, in reference to RM No. 0248, s. 2025.

Automated School Form Excel Generator (ASFEG) as an Efficient Mechanism for Teachers in Preparation of School Forms 9 and 10 for Senior High School Learners

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Introduction

The COVID-19 pandemic has significantly impacted educational systems worldwide, increasing the workload of teachers who must adapt to virtual teaching while managing extensive administrative tasks. Among these, preparing School Forms 9 and 10, which document student grades and personal information, is particularly time-consuming and prone to errors due to manual data entry. This study aimed to evaluate the efficiency of the Automated School Forms Excel Generator (ASFEG), an innovative tool developed by teachers at Cabadbaran City National High School, in reducing the time and improving the accuracy of preparing these forms. The research addressed key questions: How proficient are Senior High School (SHS) teachers in using Excel? How much time do they spend preparing Forms 9 and 10 using current methods versus ASFEG? Is there a significant difference in time spent using these methods?

The study employed a quasi-experimental design, involving 40 SHS teachers from five schools in Cabadbaran City Division, selected through purposive sampling based on their access to laptops and Excel proficiency. Participants were divided into two groups: the Current Mechanism (CM) group, using manual data entry, and the ASFEG group, using the automated tool. Data on time spent preparing forms for five Grade 12 students were collected, ensuring ethical considerations such as informed consent and

data confidentiality. The research was conducted in August–October 2021, with results analyzed using the Mann-Whitney Test due to non-parametric data distribution.

Findings / Results and Discussion

The study assessed teacher profiles and Excel proficiency, finding that 60% of participants were Teacher II, with 50% rating their Excel skills at Proficiency Level 4 (on a 1–5 scale). The Current Mechanism group took an average of 108.5 minutes to prepare Forms 9 and 10, with times ranging from 30 to 360 minutes (SD = 83.66). In contrast, the ASFEG group averaged 23.5 minutes, with a range of 16 to 32 minutes (SD = 5.79), indicating significantly less variation and faster completion. The Mann-Whitney Test confirmed a statistically significant difference ($U = 6$, $p = .000$), showing ASFEG's superior efficiency.

Table 1: Time Spent Preparing School Forms 9 and 10

Group	Average Time (min)	Range (min)	Standard Deviation
Current Mechanism	108.5	30–360	83.66
ASFEG	23.5	16–32	5.79

The results demonstrate that ASFEG reduces preparation time by approximately 78% compared to the current method, minimizing errors from manual double-entry. Younger teachers generally

performed faster, suggesting age-related differences in technological proficiency. ASFEG's automated grade consolidation also ensured consistency between Forms 9 and 10, addressing issues like rounding discrepancies observed in manual methods.

Conclusion and Recommendation

The study conclusively shows that ASFEG significantly reduces the time required to prepare School Forms 9 and 10 while enhancing data accuracy, thereby alleviating teacher workload. This efficiency allows teachers to focus more on instructional tasks, potentially improving student outcomes. The findings align with DepEd Order No. 11, s. 2018, which emphasizes accurate and efficient preparation of school forms to support educational quality.

To leverage these benefits, it is recommended that ASFEG be adopted across all SHS in Cabadbaran City Division, including private schools adhering to the Unified SHS prospectus. DepEd should facilitate its dissemination via Google Drive and official platforms like the DepEd Cabadbaran Facebook page. Additionally, teacher training on Excel skills should be prioritized to maximize ASFEG's effectiveness. A separate ASFEG for Junior High and Elementary levels should be developed to extend these benefits, supporting DepEd's goal of streamlining administrative processes to enhance teaching efficiency.

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This Research Bulletin is an abridged version of the full manuscript of Ms. Rasonable, et.al. and supplements their research presentation during the 4th Quarter Virtual Regional Research Stakeholders Forum last November 28, 2023, in reference to RM No. 1060, s. 2023.

Evaluation of the Implementation of the Joint Delivery Voucher Program for Senior High School Technical-Vocational Livelihood Specializations in the Division of Cabadbaran City

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Introduction

The introduction of the K to 12 program through the Enhanced Basic Education Act of 2013 brought Technical-Vocational-Livelihood (TVL) specializations to Senior High School (SHS), aiming to equip students with practical skills for employment or entrepreneurship. However, challenges such as limited facilities, scarce learning resources, and insufficiently trained teachers have hindered effective TVL implementation in Cabadbaran City Division. This study evaluated the Joint Delivery Voucher Program (JDVP-TVL), which partners schools with Technical Education and Skills Development Authority (TESDA) institutions to enhance TVL training. It addressed: How do school heads, teachers, and learners perceive JDVP-TVL implementation? Is there a significant difference in perceptions by position? What challenges exist, and what interventions can improve the program?

Conducted in 2022 at three SHSs in Cabadbaran City Division, the study used a mixed-methods approach, surveying 54 respondents (6 school heads, 24 teachers, 24 learner-beneficiaries) and conducting interviews. A validated researcher-made instrument assessed perceptions of teaching-learning, facilities, and work readiness. Data were analyzed using means, standard deviations, ANOVA, and thematic analysis. Ethical measures included informed consent, anonymity, and compliance with the Data Privacy Act of 2012 (Republic Act No. 10173).

Findings / Results and Discussion

The study addressed four research questions to evaluate JDVP-TVL implementation.

Perceptions of School Heads and Teachers: Respondents strongly agreed (mean=4.58–4.79) that JDVP-TVL provided quality training, aligned with competencies, and offered adequate materials, though budget inclusion for TESDA assessments was lower (mean=4.20, SD=0.94), indicating funding gaps.

Learner Perceptions: Students agreed (mean=4.00–4.30) that JDVP-TVL enhanced skills and work readiness, with high confidence in TESDA assessments (mean=4.30, SD=0.56). This aligns with Oracion et al. (2020), noting skill-building benefits.

Differences in Perceptions: ANOVA showed no significant differences across positions ($p>0.05$), suggesting unified positive views despite the COVID-19 pandemic's impact on hands-on training.

Challenges and Interventions: The pandemic's blended learning limited practical activities. Proposed interventions included expanding face-to-face training, increasing TESDA assessment funding, and improving facility access.

Indicator	Mean	SD	Interpretation
Quality Training (Heads/Teachers)	4.79	0.41	Strongly Agree

TESDA Assessment Budget	4.20	0.94	Agree
Work Readiness (Learners)	4.30	0.56	Strongly Agree
Skill Application (Learners)	4.00	0.79	Agree

Conclusion and Recommendation

JDVP-TVL was positively perceived for enhancing TVL skills and work readiness, despite challenges from limited face-to-face training during the COVID-19 pandemic and insufficient funding for TESDA assessments. These findings support DepEd's K to 12 program (DepEd Order No. 21, s. 2019), aiming for skilled graduates. Recommendations include:

1. **Increase Face-to-Face Training:** Schools should prioritize hands-on sessions as restrictions ease.
2. **Secure Funding:** DepEd should allocate budgets for TESDA assessments to ensure certification.
3. **Enhance Facilities:** Partner with TESDA to upgrade workshops and equipment.
4. **Conduct Training:** Offer teacher workshops on TVL competencies to improve instruction.
5. **Monitor Implementation:** Regularly evaluate JDVP-TVL to address gaps and ensure alignment with industry needs.

These steps strengthen the program's alignment with DepEd's goal of producing employable, skilled SHS graduates.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Mr. Vidal.

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Curriculum Implementation Monitoring and Evaluation System: Technology Tool in Tracking the Academic Performance of the Learners

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Introduction

The global shift to remote and hybrid learning during the COVID-19 pandemic exposed challenges in tracking students' academic progress effectively. In the Philippines, the Department of Education (DepEd) faced difficulties in monitoring curriculum implementation and addressing learners' academic gaps, particularly in the transition between face-to-face and distance learning. To address this, the Curriculum Implementation Monitoring and Evaluation System (CIMES) was developed as an online tool to track learners' academic performance across subjects and quarters. The study aimed to evaluate CIMES' efficiency in tracking the learners' academic performance, focusing on its notable features, technology applications, and output generation, and to identify areas for improvement to enhance its utility for educators.

The research was conducted in Cabadbaran City Division during the 2022-2023 school year, involving 85 participants, including School ICT Coordinators, School Heads, and District Supervisors/Education Program Supervisors. A mixed-methods approach combined quantitative descriptive research with qualitative generic inquiry, using surveys and Focused Group Discussions (FGDs). Data were analyzed through descriptive and inferential statistics and thematic analysis. Ethical considerations included obtaining informed consent, ensuring participant confidentiality, and

adhering to DepEd research protocols to protect participants' rights and privacy.

Findings / Results and Discussion

The study addressed five research questions to evaluate CIMES' efficiency. **Participant Profile:** Most of the participants were aged 41–50 (32.9%), mostly female (63.5%), dominated with bachelor's degrees (54.1%), and mostly participated by School ICT Coordinators (43.5%) with 5 years or less of experience (23.5%). **Perceptions of CIMES:** Participants strongly agreed on CIMES' efficiency across its notable features (M=4.61, SD=0.89), technology applications (M=4.58, SD=0.89), and output generation (M=4.59, SD=0.87). Key strengths included clear options for selecting school years and quarters (M=4.67) and automated data storage (M=4.68). However, accessibility issues due to internet dependency (M=4.47) and incomplete Most Essential Learning Competencies (MELCs) lists (M=4.55) were noted. **Differences in Perceptions:** No significant differences were found based on age, educational level, or experience, but significant differences existed by sex ($p=0.000$) and position ($p=0.006$), with females and ICT Coordinators/School Heads showing varied perceptions due to limited data access. **System Efficiency:** Qualitative findings highlighted two themes: *Algorithmic Automation* (automated data processing reduced workloads) and *System Access* (user-friendly interface). **Challenges and Improvements:** Themes of *Data Discrepancy* (incomplete/repeated MELCs), *Data Inaccessibility* (limited access to

consolidated data), and *Internet Service* (connectivity issues) emerged, indicating areas for system enhancement.

Indicator	Mean	Key Finding
Notable Features	4.61	Clear options for school year/quarter (4.67)
Technology Applications	4.58	Strong data storage capability (4.68)
Output Generation	4.59	Automated MPS generation (4.62)

Conclusion and Recommendation

CIMES was perceived as highly efficient, with strong user approval for its automation and accessibility, enabling effective tracking of learners' academic performance. However, challenges like data discrepancies, limited data access, and internet dependency require attention to enhance reliability. The system supports DepEd's Basic Education Learning Continuity Plan (DepEd Order No. 12, s. 2020) by facilitating data-driven curriculum monitoring. Recommendations include: 1) Teachers/ICT Coordinators should ensure complete and timely data entry; 2) School Heads should monitor submissions and advocate for stable internet; 3) Supervisors should provide training to improve system use and address MELC inaccuracies; 4) DepEd should enhance CIMES with offline capabilities and full data access for all users to align with the goal of seamless curriculum implementation.

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This Research Bulletin is an abridged version of the full manuscript of Mr. Vidal, et.al. and supplements their research presentation during the 3rd Quarter Virtual Regional Research Stakeholders' Forum last August 23, 2024, in reference to RM No. 0707, s. 2024.

Evaluation Of Research Program Implementation in Caraga Region Using CIPP (Context, Input, Process, Product) Model

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INTRODUCTION

The Department of Education (DepEd) in Caraga Region annually allocates Php 2,000,000 for the Basic Education Research Fund (BERF), supporting research projects by teaching and non-teaching personnel. Despite these investments, challenges remain with the completion and utilization of research due to workload and technical support gaps, leading to unutilized funds and underexploited findings. This study aimed to evaluate the implementation of the research program in DepEd Caraga, focusing on four key dimensions—Context, Input, Process, and Product (CIPP)—to identify strengths and opportunities for improvement. The core research questions examined how DepEd meets research needs (Context), assesses program strategies (Input), adheres to research management guidelines (Process), and achieves stated program objectives (Product).

To address the above, the study employed a mixed-methods descriptive research design conducted in 2019. Purposeful sampling involved Senior Education Program Specialists (Research Coordinators) across six Schools Division Offices and researchers funded under the BERF from 2016–2018. Quantitative data were collected through a 49-item Likert-scale questionnaire adapted from Pantin (2018), while qualitative insights were gathered via focus group discussions and one-on-one interviews. Ethical procedures were followed rigorously—consent was obtained,

respondent anonymity ensured, and data confidentiality maintained.

DISCUSSION OF RESULTS

The study assessed the research program across the four CIPP components, with key findings summarized below:

Context: Respondents strongly agreed (mean: 3.80) that DepEd meets the needs of research management, with objectives aligning well with improving teaching practices through data-driven decisions. The timeline and structure for action research were deemed adequate.

Input: Capability-building efforts, such as training on action research, were rated highly (mean: 3.23), but publication support was only very satisfactory due to limited plagiarism checks.

Process: Research management guidelines were consistently followed (mean: 3.18), with strong quality assurance through organized data analysts and editors. However, partnerships with higher education institutions and NGOs need enhancement.

Product: The program significantly improved researchers' confidence and skills (mean: 3.69–3.74), but the utilization of research findings in schools and offices was less effective (mean: 2.96 for classroom teaching strategies).

CIPP Component	Mean Score	Qualitative Rating
Context	3.62	Excellent
Input	3.07	Excellent
Process	3.00	Excellent
Product	3.49	Excellent

CONCLUSIONS AND RECOMMENDATIONS

The evaluation revealed that DepEd Caraga's research program is well-structured, with strong support for research management and capability building. However, the limited utilization of research findings and weak external partnerships highlight areas for improvement. These findings underscore the program's potential to enhance educational practices while identifying gaps in translating research into actionable outcomes.

To strengthen the BERF program and align with DepEd Order No. 16 s. 2017, the following recommendations are proposed: (1) Develop operational guidelines for incorporating research findings into School Improvement Plans (SIPs) to ensure long-term utilization; (2) Strengthen collaborations with higher education institutions to enhance technical and financial support; (3) Conduct a qualitative cost-benefit analysis to evaluate program outcomes. These steps will enhance the program's impact on DepEd's goal of promoting a robust research culture in basic education.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Dr Guerta and supplements her research presentation during the Virtual Research Congress last ____2019 under the topic, " Evaluation of Research Program Implementation using the CIPP

Model". To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.

Exploring the Factors Behind High Rates of Teenage Pregnancy Among Public Secondary School Learners in Butuan City

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INTRODUCTION

Teenage pregnancy remains a pressing public health and educational concern in the Philippines, particularly in Butuan City. Adolescents face medical, psychological, and socioeconomic risks that often disrupt their education and future opportunities. The Department of Education Butuan City Division recorded an increasing number of pregnant learners over three consecutive school years, prompting the need to investigate the underlying causes. This study aimed to identify the factors contributing to high rates of teenage pregnancy among public secondary school learners and assess whether these factors vary based on age, delivery type, and baby status.

The research employed a descriptive-correlational design using convenience sampling across ten districts in Butuan City. Data were collected via survey questionnaires distributed to 122 adolescent mothers. Ethical protocols included informed consent from respondents and institutional approval. The study analyzed economic, familial, educational, and peer pressure factors using statistical tests such as ANOVA and Kruskal-Wallis.

DISCUSSION OF RESULTS

1. Respondent Profile

Age Group	Frequency	Percentage
12-13 years old	52	42.6%
14-15 years old	41	33.6%

16-17 years old	21	17.2%
18-19 years old	8	6.6%

The study highlights early adolescence—particularly ages 12 to 13—as the most vulnerable group for teenage pregnancy in Butuan City, accounting for over 42% of cases. This finding underscores the urgency of implementing preventive interventions at the elementary and early junior high school levels.

Delivery Type	Frequency	Percentage
NSVD	104	85.2%
Cesarean Section	15	12.3%
VBAC	3	2.5%
Baby Status	Frequency	Percentage
Healthy	118	96.7%
Pre-mature	3	2.5%
Death	1	0.8%

2. Factors Influencing Teenage Pregnancy

Among the contributing factors, economic hardship emerged as the most influential, followed closely by educational limitations. These suggest that poverty and lack of awareness or access to reproductive health education significantly increase the risk of early pregnancy. Peer pressure and familial influences were also notable but had a comparatively moderate impact.

Factor	Mean Score	Interpretation
Economic	3.84	Large Extent
Educational	3.45	Large Extent

Factor	Mean Score	Interpretation
Peer Pressure	3.28	Moderate Extent
Familial	3.22	Moderate Extent
Overall	3.45	Large Extent

3. Statistical Analysis

- **Age Group Differences:** Educational ($p = 0.027$) and Peer Pressure ($p = 0.050$) factors showed significant or marginal differences across age groups.
- **Delivery Type Differences:** Peer Pressure factor was significant ($p = 0.040$); others were not.
- **Baby Status Differences:** No significant differences found across all factors.

Overall, the results point to a complex interplay of socioeconomic and psychosocial factors, with economic and educational vulnerabilities being the most critical. These findings call for multi-sectoral strategies that combine education, health services, and community support to reduce teenage pregnancy rates and improve adolescent well-being.

CONCLUSIONS AND RECOMMENDATIONS

The study revealed that economic hardship and limited educational awareness are major contributors to teenage pregnancy among Butuan City's public-school learners. Peer pressure also plays a notable role, especially among younger adolescents. These findings underscore the need for targeted interventions that address both socioeconomic and educational gaps.

Recommendations:

- Strengthen adolescent reproductive health education through school-based programs and symposiums.
- Collaborate with the Department of Health (DOH) to enhance community awareness campaigns.
- Include adolescent mothers in the Sustainable Livelihood Program (SLP) to improve household conditions.
- Align efforts with DepEd's MATATAG Agenda, particularly the goal to "Take good care of learners" by promoting well-being and inclusive education.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Mr. Abugho and supplements the research brief shared during the meeting of the school heads last July 17, 2025, under the topic, "Exploring the Factors of High Rates of Teenage Pregnancy among the Public Secondary Schools Learners in Butuan City". To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.

Challenges and Coaching Practices of School Paper Advisers in Butuan City Division: Basis for Intervention

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INTRODUCTION

Campus journalism plays a vital role in developing students' communication, critical thinking, and leadership skills. However, Butuan City Division has seen a decline in National Schools Press Conference (NSPC) wins from 2018 to 2024, raising concerns about the effectiveness of school paper advisers and coaches. This study investigates the factors affecting their performance, focusing on their proficiency in coaching, challenges encountered, coaching practices, preparedness, and facilitating factors. The research aims to uncover gaps in support, training, and resources that hinder advisers from maximizing student potential in journalism competitions.

The study employed a descriptive-correlational design using a validated survey instrument. A total of 128 school paper advisers from public and private schools in Butuan City Division participated. Data were collected via online questionnaires and analyzed using descriptive statistics and Pearson correlation. Ethical protocols included informed consent, confidentiality, and voluntary participation.

DISCUSSION OF RESULTS

1. Proficiency in Coaching Across Journalism Categories

Category	Mean Score	Proficiency Level
News Writing	3.18	Slightly Proficient
Editorial Writing	3.03	Slightly Proficient
Column Writing	2.77	Slightly Proficient
Feature Writing	3.05	Slightly Proficient
Sports Writing	2.64	Slightly Proficient
Copyreading	2.79	Slightly Proficient
Photojournalism	2.86	Slightly Proficient
Sci-Tech Writing	2.74	Slightly Proficient
Editorial Cartooning	2.69	Slightly Proficient

Most advisers demonstrated only moderate proficiency, especially in specialized categories like sports writing and cartooning.

2. Extent of Challenges Faced

Challenge Area	Mean Score	Challenge Level
Professional Growth	3.65	High
Competing Priorities	3.67	High
Resource Constraints	3.78	High
Lack of Facilities	3.60	High
Admin & Logistical Issues	3.78	High

Advisers face significant challenges in accessing resources, balancing roles, and securing institutional support.

3. Coaching Practices and Preparedness

Dimension	Mean Score	Frequency
Background Knowledge	3.38	Sometimes
Training	3.43	Sometimes
Resource Availability	3.18	Sometimes
Facilitated Learning	3.41	Sometimes

Coaching practices are inconsistently applied due to limited training and resource access.

4. Facilitating Factors and Correlation

Facilitating Factor	Mean Score	Frequency
School Funding	3.62	Often
Collaboration	3.26	Sometimes
Access to Materials	3.14	Sometimes

Correlation analysis showed a strong positive relationship between coaching practices, preparedness, and proficiency ($r = 0.843$, $p < 0.001$).

CONCLUSIONS AND RECOMMENDATIONS

School paper advisers in Butuan City Division exhibit moderate proficiency and face high levels of challenge in coaching student journalists. Their practices and preparedness are hindered by limited training, resources, and institutional support. These gaps contribute to the division's declining performance in national journalism competitions.

Recommendations:

- Institutionalize regular training programs aligned with DepEd Order

No. 26, s. 2023 (Campus Journalism Program).

- Allocate dedicated funding and facilities for campus journalism activities.
- Establish mentorship networks and collaborative platforms for advisers.
- Integrate journalism coaching into professional development under the MATATAG Curriculum and LRCP.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Mrs. Alvizo and supplements her research presentation during the 2nd Quarter Virtual Regional Stakeholders' Forum last June 20, 2025 under the topic, "Factors Affecting School Paper Advisers in Butuan City Division: A look into their Challenges and Coaching Practices as Basis for Intervention". To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.

Gratitude and Social Support of Teachers in Coping with Stress

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INTRODUCTION

Public school teachers face a multitude of stressors—from heavy workloads and shifting educational policies to emotional demands and limited resources. In the wake of the COVID-19 pandemic, mental health concerns among educators have intensified, prompting the need for effective coping mechanisms. This study investigates how gratitude and social support influence stress levels among teachers in Butuan City Division. Specifically, it explores the relationships between perceived stress, gratitude, and social support, aiming to inform mental health interventions and support systems within the Department of Education.

Using a descriptive-correlational design, the study surveyed 353 public school teachers through Google Forms. Instruments included the Perceived Stress Scale (PSS), Gratitude Questionnaire (GQ-6), and Multidimensional Scale of Perceived Social Support (MSPSS). Data were analyzed using descriptive statistics and Pearson correlation. Ethical protocols such as informed consent, confidentiality, and compliance with the Data Privacy Act of 2012 were strictly observed.

DISCUSSION OF RESULTS

1. Teacher Stress Levels and Manifestations

Stress Factor	Mean Score	Interpretation
Work-related Stressors	2.95	Moderately Noticeable
Professional Distress	2.64	Moderately Noticeable
Discipline and Motivation	2.62	Moderately Noticeable
Behavioral Manifestations	1.73	Barely Noticeable
Fatigue Manifestations	2.30	Barely Noticeable

Teachers reported moderate stress levels, with work-related and professional distress being the most prominent.

2. Gratitude Levels

Gratitude Indicator	Mean Score	Interpretation
Overall Gratitude Score	29.55	Low
Appreciation of Life History	6.47	Agree
Gratitude to a Variety of People	6.36	Agree
Perception of World as Gratitude-worthy	2.36	Disagree

Despite some positive expressions, overall gratitude levels were low, indicating room for improvement in fostering appreciative attitudes.

3. Perceived Social Support

Source of Support	Mean Score	Interpretation
Significant Others	5.63	High Support
Family	5.51	High Support
Friends	5.32	High Support
Overall Social Support	65.83	High Perceived Support

Teachers felt strongly supported by their social networks, particularly family and significant others.

4. Correlation Analysis

- Stress negatively correlated with social support ($r = -0.246$, $p < 0.001$)
- Gratitude positively correlated with social support ($r = 0.308$, $p < 0.001$)
- No significant correlation between stress and gratitude ($r = -0.083$, $p = 0.125$)

These findings suggest that social support plays a more substantial role than gratitude in mitigating stress among teachers.

CONCLUSIONS AND RECOMMENDATIONS

The study reveals that while public school teachers in Butuan City Division experience moderate stress, strong social support networks significantly buffer its impact. Gratitude, although present in specific expressions, remains generally low and underutilized as a coping mechanism.

Recommendations:

- Integrate mental health and stress management modules

into teacher professional development, aligned with Republic Act No. 11036 (Mental Health Act).

- Establish peer support groups and wellness committees in schools to foster collaboration and emotional resilience.
- Promote gratitude practices through reflective activities and recognition programs.
- Encourage school leaders to create safe spaces for relaxation and mindfulness.

These initiatives support DepEd's broader goals under the MATATAG Agenda and the National Mental Health Program, enhancing teacher well-being and educational quality.

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This Research Bulletin is an abridged version of the full manuscript of Dr. Bagaforo and supplements the research brief shared during the meeting of the school heads last July 17, 2025, under the topic, "Understanding the Factors Affecting the Utilization of Department of Education-Procured Science and Mathematics Equipment in Schools of Butuan City Division". To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph

Assessment on the Implementation of Comprehensive Sexuality Education (CSE) across Target Learning Areas in Butuan City Division

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INTRODUCTION

Despite national mandates under DepEd Order No. 31, s.2018 and Memorandum No. 559, s.2024, the integration of Comprehensive Sexuality Education (CSE) across subjects in secondary schools remains inconsistent. Teachers face challenges in delivering age-appropriate, culturally sensitive, and values-based sexuality education, particularly in subjects like Araling Panlipunan, MAPEH, Science, Edukasyon sa Pagpapakatao (EsP), and Personality Development. This study investigates the extent of CSE implementation, focusing on teaching approaches, training and support, monitoring and evaluation, and curriculum integration. It also explores the relationship between teachers' orientation and their effectiveness in delivering CSE.

The study employed a mixed-methods design using stratified simple random sampling. Respondents included Grade 7 and Senior High School teachers from public secondary schools in Butuan City Division. Data were collected via validated online surveys and analyzed using descriptive statistics, inferential tests, and Giorgi's qualitative method. Ethical protocols such as informed consent and adherence to the Data Privacy Act of 2012 were strictly observed.

DISCUSSION OF RESULTS

1. Profile of Participants

Category	Majority Group
Sex	Female (83.58%)
Department	SHS (71.64%)
Teaching Position	Teacher III (46.27%)
Training	No (50.75%)

Participation	
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- Female SHS teachers were the primary implementers.
- Many lacked formal training on CSE integration.

2. Teaching and Learning Approaches

Indicator	Mean	Description
Respect for learner diversity	4.64	Very High
Confidentiality in handling disclosures	4.61	Very High
Overall Mean	4.20	Moderately High

- Teachers showed strong ethical and inclusive practices but lacked consistent access to contextualized materials.

3. Training and Support

Indicator	Mean	Description
Access to training	3.15	Quite High
Creating inclusive environments	4.40	Moderately High
Overall Mean	3.77	Moderately High

- Training is sporadic and mostly limited to division-level sessions.

4. Monitoring and Evaluation

Indicator	Mean	Description
Access to assessment tools	3.51	Moderately High
Access to national data	3.12	Quite High
Overall Mean	3.33	Quite High

- Monitoring systems are underdeveloped, with limited access to evaluative data.

5. Curriculum Integration Across Subjects

Subject Area	Overall Mean	Description
Science 7	4.03	Moderately High
EsP 7	3.98	Moderately High
Araling Panlipunan 7	3.86	Moderately High
MAPEH (Health) 7	4.39	Moderately High
Personality Dev. 11/12	4.38	Moderately High

- MAPEH and Personality Development showed the strongest integration.
- Araling Panlipunan had the lowest implementation intensity.

6. Relationship Between Orientation and Implementation

Variable Pair	Significance	Interpretation
Years of CSE Integration × Training	Significant	Training improves implementation
Other variables	Not Significant	No strong correlation

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that while teachers demonstrate ethical and inclusive practices in delivering CSE, gaps in training, instructional materials, and monitoring systems hinder full implementation. Teachers with formal orientation and sustained support are more effective in integrating CSE across subjects. To strengthen implementation, the following are recommended:

- Institutionalize regular, multi-level CSE training aligned with DepEd Order No. 31, s.2018 and Memorandum No. 559, s.2024.
- Develop contextualized instructional materials and update DepEd Online LR resources.

- Establish robust monitoring and evaluation systems using SERAT 3.0.
- Promote strategic curriculum mapping across learning areas.

These findings can inform enhancements to DepEd's MATATAG Curriculum, the School-Based Health Program, and the Adolescent Reproductive Health (ARH) initiatives.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript by Mr. Buloron, titled "Assessment on the Implementation of Comprehensive Sexuality Education (CSE) across Target Learning Areas in Butuan City Division." It serves as a follow-up to the study conducted by Mr. Abugho, "Exploring the Factors of High Rates of Teenage Pregnancy among Public Secondary School Learners in Butuan City." To request a copy of Mr. Buloron's manuscript, please send an email to ps.prd@deped.gov.ph.

The Efficacy of Project REACH on the Availability and Accessibility of Learning Resources under Pure Modular Learning Modality

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INTRODUCTION

The COVID-19 pandemic disrupted traditional classroom instruction, prompting DepEd to adopt distance learning modalities. Taligaman National High School implemented Pure Modular Learning, but parents—especially those from marginalized communities—faced challenges in accessing printed modules due to frequent school visits, rising transportation costs, and incomplete learning materials. These issues highlighted the need for a more sustainable and accessible solution. The study aimed to determine the efficacy of Project R.E.A.C.H. (Remote Educational Assistance for Continuous learning at Home) in improving the availability and accessibility of learning resources. Specifically, it sought to answer: (1) How did parents rate the availability and accessibility of learning resources before Project REACH? (2) How did they rate these aspects during its implementation?

The study employed a descriptive action research design. Fifty parents from Barangay De Oro, Butuan City—where one of the Project REACH kiosks was installed—served as respondents. Data were collected through phone interviews and surveys using Likert scales and frequency counts. Ethical considerations included informed consent, voluntary participation, and data confidentiality. The research was conducted with approval from the school principal and in coordination with local barangay officials.

DISCUSSION OF RESULTS

1. Before Project REACH Implementation

Indicator	Weighted Mean	Verbal Description
Availability	2.0	Disagree
Accessibility	2.1	Disagree

- Parents visited the school an average of 4.5 times per month to claim incomplete modules.
- High transportation costs and limited schedules due to quarantine protocols exacerbated the burden.

2. During Project REACH Implementation

Indicator	Weighted Mean	Verbal Description
Availability	3.5	Agree
Accessibility	3.6	Agree

- Project REACH utilized Raspberry Pi kiosks installed in barangay halls, allowing offline access to digital modules via Wi-Fi.
- Parents and learners could download complete learning resources without traveling to school.
- Sangguniang Kabataan (SK) leaders facilitated operations,

expanding reach across remote areas.

REFLECTION

Project REACH significantly improved the availability and accessibility of learning resources under Pure Modular Learning. By leveraging low-cost technology and community partnerships, the intervention reduced the burden on parents and ensured continuous learning for students in remote areas.

Recommendations:

- Replicate Project REACH in other geographically isolated and disadvantaged communities.
- Train teachers to embed instructional videos and multimedia in digital modules.
- Integrate Project REACH into the school's Learning Continuity Plan and ICT strategies.
- Encourage LGU support for sustaining and scaling the initiative.

Policy Implication:

This research supports the implementation of DepEd Order No. 012, s. 2020 (BE-LCP), and aligns with the Basic Education Development Plan (BEDP) 2030. It contributes to DepEd's Digital Rise Program and School-Based Management (SBM) by promoting inclusive, tech-enabled learning solutions.

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Disclaimer:

This Research Bulletin is a condensed summary of the full manuscript authored by Mr. Directo. It complements his research presentation delivered during the 1st Regional Virtual Research Congress held on March 31, 2021 with the theme, "Revitalizing Educational Research amid Pandemic. To request a copy of Mr. Directo's complete manuscript, kindly email ps.prd@deped.gov.ph.

Integration of the Communication System into the Automated Attendance Tracking Solution as Intervention Program for the Students At-Risk of Dropping Out (SARDO)

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INTRODUCTION

Taligaman National High School faced a concerning dropout rate of 4.3% in SY 2016–2017, despite reports of high monthly attendance in School Form 2 (SF2). This discrepancy revealed flaws in manual attendance tracking and a lack of timely communication with parents. Inspired by DepEd's commitment to inclusive education, the researcher aimed to develop a reliable system to identify and intervene with Students At-Risk of Dropping Out (SARDO). The study sought to answer: (1) How can a communication mechanism be integrated into a computer-aided attendance tracking system? (2) How effective is this integration in improving attendance, reducing tardiness, and lowering dropout rates?

The study employed a descriptive-correlational action research design. All 317 Senior High School students from Grades 11 and 12 during the second semester of SY 2017–2018 were included. Data were gathered through a custom-built attendance tracking system using barcoded IDs and automated SMS feedback to parents. Ethical standards such as informed consent, data privacy, and voluntary participation were upheld throughout the study.

DISCUSSION OF RESULTS

1. Design of the Intervention System

- Students used barcoded IDs to log attendance via a scanner at the school gate.
- A Microsoft Excel-based program generated customized Cebuano SMS messages to parents, indicating whether their child was on time, late, or absent.
- Messages were sent twice daily and weekly summaries were used to prompt counseling for SARDOs.

2. Effectiveness of the Intervention

Indicator	Before Intervention	After Intervention
Average Attendance	82.52% (Nov 2017)	94.67% (Feb 2018)
Tardiness Rate	27.88%	18.67%
On-Time Comers	54.64%	74.93%
Dropout Rate	4.30%	0.62%

Graphical Highlights:

- Attendance steadily increased month-on-month.
- Absenteeism and tardiness declined significantly.
- On-time arrivals rose, especially after parents began receiving daily updates.
- Dropouts reduced from 8 students to just 2 after implementation.

REFLECTION

The integration of a communication mechanism into the automated attendance tracking system proved highly effective in identifying SARDOs early and engaging parents in timely interventions. The system fostered accountability and strengthened school-family partnerships, resulting in improved attendance, reduced tardiness, and a dramatic drop in the dropout rate.

Recommendations:

- Scale the intervention to other schools with high SARDO rates.
- Institutionalize automated attendance systems with SMS feedback.
- Provide training for teachers and ICT staff on system use and data interpretation.
- Include this model in DepEd's Continuous Improvement (CI) initiatives and School-Based Management (SBM) practices.

Policy Implication:

This research supports the enhancement of DepEd's Learner Information System (LIS), the Child Protection Policy, and the implementation of the Basic Education Development Plan (BEDP) 2030, particularly in promoting learner retention and parental engagement.

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Disclaimer:

This Research Bulletin is a condensed summary of the full manuscript authored by Mr. Directo. It complements his research presentation delivered during the 2018 Caraga Regional Research Congress held on December 7, 2018, where he was recognized as the Best Oral Research Presenter. To request a copy of Mr. Directo's complete manuscript, kindly email ps.prdd@deped.gov.ph.

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Experiences of School Heads and Teachers in the Pilot Implementation of the MATATAG Curriculum

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INTRODUCTION

The MATATAG Curriculum was introduced in January 2023 to address persistent issues in the K to 12 program, such as overloaded content, teacher burnout, and weak learner outcomes. It aims to streamline competencies and prioritize literacy, numeracy, and socio-emotional skills. This study explored the experiences of school heads and teachers during the pilot implementation in Butuan City, focusing on perceptions of curriculum effectiveness, stakeholder support, and implementation challenges.

Using a qualitative design, the study employed purposive sampling and semi-structured interviews with educators from Baobaoan Integrated School and Pedro Duncano National High School. Thematic analysis was used to interpret responses. Ethical standards were upheld through informed consent, voluntary participation, and data privacy protection.

DISCUSSION OF RESULTS

1. Perceptions of Curriculum Effectiveness

Key Themes	Highlights
Transition Challenges	Initial confusion due to broad topics and lack of training
Pedagogical Shifts	Shift to learner-centered, project-based instruction
Curriculum Relevance	Decongested content aligned with standards and real-life applications

Student Development	Improved independence, engagement, and foundational skills
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Teachers appreciated the curriculum's clarity and relevance but faced adjustment difficulties due to vague guidelines and incomplete materials.

2. Stakeholder Support

Support Level	Description
Basic Support	Provision of ICT tools, lesson exemplars, and infrastructure
Intermediate Support	Technical assistance via LAC sessions and local government aid
Comprehensive Support	Collaboration among DepEd, LGUs, parents, and private partners
Support Gaps	Selective training, delayed communication, and uneven resource distribution

While support was generally adequate, gaps in training and communication hindered smooth implementation.

3. Implementation Challenges and Strategies

Challenge Theme	Common Issues	Coping Strategies
Lack of Training	Selective orientation,	Peer mentoring,

Challenge Theme	Common Issues	Coping Strategies
	unfamiliar content	curriculum mapping
Resource Shortages	Missing exemplars, labs, books	Improvised materials, tech integration
Time Constraints	Compressed class periods	Flipped classrooms, differentiated pacing
Student Readiness	Limited prior knowledge	Game-based and inquiry-based activities
Workload and Pressure	Emotional stress, added responsibilities	Collaboration, flexible teaching methods

Educators responded with creativity and collaboration, using multimedia tools and experiential learning to maintain engagement.

CONCLUSIONS AND RECOMMENDATIONS

The MATATAG Curriculum is viewed as a progressive reform that enhances foundational learning and promotes student-centered instruction. Despite initial challenges, educators adapted through collaboration and innovation. To ensure successful rollout, the following are recommended:

- Expand inclusive and timely teacher training programs.
- Improve communication and resource distribution systems.
- Strengthen stakeholder partnerships for sustained support.
- Promote school-based mentoring and collaborative planning.

These findings support the enhancement of DepEd's MATATAG Curriculum rollout and align with the Basic Education

Development Plan (BEDP) 2030 and the Learning Recovery and Continuity Plan (LRCP).

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript by Mr. Gales, titled "Experiences of School Heads and Teachers Involved in the Pilot Implementation of the MATATAG Curriculum in Butuan City Schools." To request a copy of Mr. Buloron's manuscript, please send an email to ps.prd@deped.gov.ph.

Boosting Critical Thinking in Math through the Conversion Wheel Manipulative

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INTRODUCTION

Many Grade 10 students struggle with understanding trigonometric concepts, particularly the conversion between degrees and radians. This difficulty contributes to low performance in mathematics, as reflected in the 66.93% Mean Percentage Score (MPS) in Butuan City's second periodical exam. To address this, the researchers developed and tested a hands-on learning tool—the Conversion Wheel Manipulative—to enhance students' critical thinking and problem-solving skills in trigonometry. The study aimed to determine its effectiveness in improving performance and developing praxeologies among learners.

This action research used a mixed-methods approach, combining quantitative (pretest-posttest design) and qualitative (interviews, observations) techniques. The study involved all Grade 10 students of Bagong Silang National High School during the 2023–2024 school year. Ethical considerations included informed consent from students and parents, and approval from school administrators. The intervention spanned one week of active learning sessions using the Conversion Wheel.

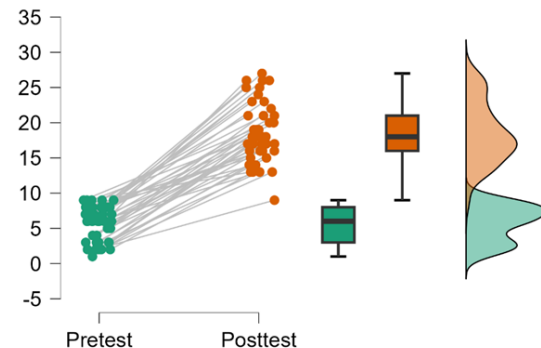
DISCUSSION OF RESULTS

1. Improvement in Critical Thinking Skills

Measure	Mean Score	Standard Deviation	Significance (p-value)
Pretest	5.721	2.482	
Posttest	18.442	4.322	0.000 (Significant)

The posttest scores showed a dramatic increase, confirming the effectiveness of the Conversion Wheel in enhancing students' understanding and critical thinking.

2. Raincloud Analysis of Scores



Green: Pretest | Orange: Posttest

The raincloud analysis visually reinforced the statistical results, showing a clear upward shift in scores after the intervention.

3. Developed Praxeology

Component	Description
Task (T)	Perform and visualize conversions between degrees and radians

Component	Description
Technique (τ)	Hands-on manipulation, peer collaboration, teacher guidance
Technology (θ)	Use of the Conversion Wheel for exploration and problem-solving
Theory (Θ)	Application of trigonometric rules and peer/teacher feedback

Students demonstrated deeper understanding through active engagement and collaborative learning.

4. Qualitative Insights

Students reported that the Conversion Wheel:

- Made solving faster and more intuitive
- Sparked curiosity and deeper inquiry
- Reduced reliance on gadgets and formulas
- Encouraged teamwork and active participation

REFLECTION

The Conversion Wheel Manipulative significantly improved students' critical thinking and performance in trigonometry. It provided a tactile, visual, and collaborative approach to learning, making abstract concepts more accessible and engaging.

Recommendations:

- Integrate manipulatives like the Conversion Wheel into math instruction across grade levels.
- Train teachers in designing and using hands-on tools.
- Align with DepEd's MATATAG Curriculum and Learning Recovery and Continuity Plan (LRCP) to

support innovative and inclusive teaching strategies.

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Disclaimer:

This Research Bulletin presents a condensed summary of the full study authored by Mrs. Lingo and Mr. Cranzo, titled "Utilization of Conversion Wheel Manipulative in Developing Praxeology in Mathematics of Grade 10 Students." To request a copy of Mr. Buloron's complete manuscript, kindly email ps.prd@deped.gov.ph.

Improving Pupils' Performance in Araling Panlipunan 6 through the Application of Digitalized Comic Strips

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INTRODUCTION

Araling Panlipunan (AP) is often perceived by learners as a challenging and less engaging subject due to its text-heavy content and emphasis on memorization. This has led to lower mastery levels compared to other core subjects. To address this, the study explored the use of digitalized comic strips as supplementary materials to improve pupils' performance and engagement in AP 6. The research aimed to determine the effectiveness of comic strips in enhancing understanding of historical topics and increasing learner motivation.

The study employed a quasi-experimental design with both quantitative and qualitative methods. Two Grade 6 sections at Butuan City Special Education Center – Emerald (experimental group) and Diamond (control group) – were involved. Emerald received digitalized comic strips during instruction, while Diamond followed the standard teaching approach. Data were gathered through validated pretests and posttests, interviews, and observations. Ethical protocols included informed consent and data privacy compliance.

DISCUSSION OF RESULTS

1. Performance Across Key Topics

Competency Topic	Emerald (Comic Strip)	Diamond (No Comic Strip)	Percent Difference
American Government & Filipino Efforts for Independence	73.48% (Moving Mastery)	56.36% (Average Mastery)	26.37%
Japanese Occupation: Goals and Key Events	74.18% (Moving Mastery)	64.43% (Average Mastery)	14.07%
Policies and Results of Japanese Occupation	76.62% (Moving Mastery)	64.94% (Average Mastery)	16.50%

Emerald consistently outperformed Diamond across all topics, indicating the effectiveness of comic strips in improving comprehension and retention.

2. Statistical Significance of Improvement

Group	Pretest Mean	Posttest Mean	t-value	p-value	Interpretation
Diamond	16.74	25.29	10.40	0.000	Significant Improvement
Emerald	17.15	27.97	18.01	0.000	Significant Improvement

Both groups improved, but Emerald showed a greater gain, confirming the impact of the comic strip intervention.

3. Posttest Comparison Between Groups

Section	Mean Score	p-value	Interpretation
Emerald	27.97	0.040	Significant difference in favor of Emerald
Diamond	25.29		

Learners exposed to comic strips demonstrated better mastery and engagement.

REFLECTION

The use of digitalized comic strips significantly improved pupils' performance in Araling Panlipunan 6. The visual and narrative elements of comics enhanced comprehension, retention, and learner interest. This strategy is especially effective for topics requiring historical understanding and contextual analysis.

Recommendations:

- Integrate digitalized comic strips into AP instruction across grade levels.
- Train teachers in developing and using visual learning tools.
- Align with DepEd's Learning Recovery and Continuity Plan (LRCP) and the MATATAG Curriculum to promote inclusive and engaging instruction.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript by Mr. Neri, titled "Improving Pupils' Performance in Araling Panlipunan 6 through the Application of Digitalized Comic Strips." To request a copy of Mr. Neri's manuscript, please send an email to ps.prd@deped.gov.ph.

Understanding the Factors Affecting the Utilization of DepEd-Procured Science and Mathematics Equipment in Schools of Butuan City Division

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INTRODUCTION

Despite the Department of Education's (DepEd) efforts to enhance science and mathematics instruction through the provision of instructional equipment, many schools struggle to fully utilize these resources. The study was inspired by the observed gap between equipment availability and actual classroom integration, especially in light of the Philippines' low performance in international assessments like PISA. The research aimed to determine the extent of utilization, perceived effectiveness, and the factors—both facilitating and hindering—that influence the use of DepEd-procured Science and Mathematics Equipment (SME) in Butuan City Division. Key research questions addressed utilization patterns, teacher attitudes and skills, infrastructure support, and strategies for improvement.

The study employed a descriptive quantitative research design using a structured survey instrument. A total of 248 teachers from elementary and secondary schools in Butuan City Division participated, representing various grade levels, school sizes, and teaching ranks. Schools were selected through purposive sampling to ensure geographic and demographic diversity. Ethical standards such as informed consent, confidentiality,

and voluntary participation were strictly observed.

DISCUSSION OF RESULTS

1. Utilization of Equipment

Frequency of Use	Percentage
Always	18.55%
Often	26.61%
Sometimes	30.24%
Rarely	14.92%
Never	9.68%

- Utilization is moderate, with only 18.55% of teachers consistently using the equipment.
- Measuring instruments, models, and manipulative materials are the most frequently used.

2. Facilitating and Hindering Factors

Facilitating Factors	Frequency
Adequate Training	180
Equipment Availability	100
Administrative Support	86
Teacher Collaboration	82
Hindering Factors	Frequency
Lack of Training	150
Absence of Lab In-Charge	85
Poor Infrastructure	47
Insufficient Technical Support	110

- Training and administrative support are critical enablers.
- Lack of training and infrastructure are major barriers.

3. Teacher Knowledge, Attitudes, and Skills

Confidence Level	Percentage
Very Confident	12.50%
Confident	26.21%
Neutral	29.44%
Not Confident	31.45%

- 81.05% of teachers had no formal training.
- Despite this, 89.52% believe the equipment is important for student learning.

4. Infrastructure and Support Systems

Infrastructure Availability	Percentage
Adequate	44.35%
Inadequate	55.65%
Technological Support	Percentage
Reliable	35.48%
Unreliable	42.34%

- Infrastructure gaps and unreliable technical support hinder effective use.

5. Strategies for Improvement

- Institutionalize division-wide training programs.
- Assign laboratory in-charges or technicians.
- Improve infrastructure and storage facilities.
- Promote peer mentoring and collaborative learning.
- Integrate equipment use into curriculum planning.
- Establish monitoring and evaluation systems.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that while DepEd-procured Science and Mathematics equipment is perceived as effective and valuable, its utilization is inconsistent due to lack of training, infrastructure, and support systems. To maximize the impact of these resources, the Division of Butuan City should implement structured training programs, designate laboratory personnel, and improve infrastructure. These findings can inform DepEd's Basic Education

Learning Continuity Plan (BE-LCP), the DepEd Computerization Program (DCP), and the School-Based Management (SBM) framework by integrating equipment utilization into professional development and school improvement plans.

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- **Disclaimer:**
- *This Research Bulletin is an abridged version of the full manuscript by Dr. Orbillos, et al, titled "Understanding the Factors Affecting the Utilization of Department of Education-Procured Science and Mathematics Equipment in Schools of Butuan City Division." It serves as a follow-up to the study conducted by Mr. Abugho, "Exploring the Factors of High Rates of Teenage Pregnancy among Public Secondary School Learners in Butuan City."*
- *To request a copy of Mr. Buloron's manuscript, please send an email to*

Development of Ethnomathematics-Based Instructional Material: A Supplementary Learning Material in Improving Grade 7 IP Learners' Academic Performance

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INTRODUCTION

Indigenous learners often face challenges in mainstream education due to the lack of culturally relevant materials. In Butuan City, where Manobo tribal learners are part of the Indigenous Peoples Education (IPEd) program, there is a need to bridge traditional knowledge with formal education. This study aimed to develop ethnomathematics-based instructional materials rooted in the Manobo tribe's cultural practices—such as counting, measuring, classifying, and modeling patterns—and assess their effectiveness in improving Grade 7 learners' academic performance in mathematics.

Using a descriptive-developmental design, the researcher applied the ADDIE model (Analysis, Design, Development, Implementation, Evaluation) to create the instructional materials. The study involved Grade 7 Manobo learners at Kinamlutan National High School during SY 2022–2023. Data were collected through pretests, posttests, and perception surveys. Ethical protocols included informed consent from parents, tribal leaders, and school officials, with full compliance to the Data Privacy Act of 2012.

DISCUSSION OF RESULTS

Ethnomathematics Embedded in Manobo Culture

Concept	Cultural Practice Example
Counting	Manobo numeration system (e.g., "sampuyo" for 10)
Measuring	Time via sun position; mass via "gantang" & "taro"
Classifying	Size-based sorting: "ma-aslag" (big), "main-tuk" (small)
Modeling Pattern	Beadwork, clothing patterns of Datu and Bae

Academic Performance Before and After Implementation

Test Type	Mean Score	Percentage
Pretest	7	46.57%
Posttest	11	73.33%

A paired-sample t-test showed a statistically significant improvement ($p < 0.001$), confirming the instructional material's effectiveness.

Student Perception of Effectiveness

Statement Example	Weighted Mean	Description
"The materials helped me understand math better."	4.32	Strongly Agree
"The materials were relevant to my culture."	4.00	Agree

Statement Example	Weighted Mean	Description
"The materials made math more enjoyable."	4.48	Strongly Agree
Overall Weighted Mean	4.37	Strongly Agree

Students found the materials engaging, culturally relevant, and effective in improving their confidence and participation.

REFLECTION

The study concludes that integrating ethnomathematics into instructional materials significantly enhances the academic performance and engagement of Grade 7 Manobo learners. The materials made mathematical concepts more relatable and meaningful by connecting them to students' cultural experiences.

To sustain and scale this impact, the following are recommended:

- Institutionalize ethnomathematics-based materials in IPed schools.
- Conduct teacher training on culturally responsive pedagogy.
- Collaborate with tribal elders for curriculum contextualization.
- Align future materials with DepEd Order No. 32, s. 2015 (IPed Curriculum Framework) and the Learning Recovery and Continuity Plan (LRCP).

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript by Ms. Señorita, titled "Development of Ethnomathematics-Based Instructional Material: A Supplementary Learning Material in Improving Grade 7 IP Learners' Academic Performance." To request a copy of Ms. Señorita's manuscript, please send an email to ps.prd@deped.gov.ph.

Readiness of Public Schools in Butuan City Division for the Implementation of Education 4.0

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INTRODUCTION

The Fourth Industrial Revolution has ushered in Education 4.0—a paradigm shift integrating smart technologies, digital platforms, and innovative pedagogies into the learning environment. In Butuan City, the Department of Education (DepEd) faces the challenge of preparing public elementary schools to meet these demands. This study investigates the readiness of schools in terms of infrastructure, technological competence, and financial support, aiming to identify gaps and inform strategic interventions.

Using a quantitative research design, the study surveyed 402 teachers and 89 school administrators across 10 districts in Butuan City Division. Stratified-proportionate sampling ensured representation from diverse school contexts. Data were collected via a validated Google Forms questionnaire. Ethical protocols included informed consent and data privacy compliance. Statistical analyses, including Kruskal-Wallis and t-tests, were conducted to examine differences across age, sex, and position.

DISCUSSION OF RESULTS

1. Infrastructure Readiness

Indicator	Mean Score	Interpretation
Wi-Fi availability	3.47	Ready

Interactive tech (e.g., smart boards)	2.62	Moderately Ready
Digital learning materials	2.64	Moderately Ready
Data privacy protection	3.52	Ready

Most schools have basic connectivity and privacy safeguards but lack widespread access to devices and interactive technologies.

2. Technological Competence

Indicator	Mean Score	Interpretation
Use of tech in lesson plans	3.56	Ready
Knowledge of emerging tech (AI, VR, etc.)	3.01	Moderately Ready
Integration of tech in teaching	3.75	Ready

Teachers show strong integration of technology in instruction but need more exposure to emerging tools and regular training.

3. Financial Support

Indicator	Mean Score	Interpretation
Budget for tech upgrades	2.89	Moderately Ready

Indicator	Mean Score	Interpretation
Stakeholder engagement in fundraising	3.24	Moderately Ready

Funding remains a challenge, with limited budget allocations and reliance on external support.

4. Significant Differences

- **Age:** Significant differences in technological competence ($p < 0.001$).
- **Position:** Significant differences in tech perceptions ($p = 0.014$).
- **Sex:** No significant differences across all variables.

CONCLUSIONS AND RECOMMENDATIONS

Public elementary schools in Butuan City are moderately ready for Education 4.0, with strengths in teacher competence and connectivity, but gaps in infrastructure and financial support. Age and position influence technological readiness, suggesting the need for differentiated capacity-building.

Recommendations:

- Strengthen digital infrastructure and device availability.
- Expand professional development on emerging technologies.
- Institutionalize tech-focused budget planning and stakeholder engagement.
- Align initiatives with DepEd Memorandum No. 497, s. 2018 and the MATATAG Agenda to promote inclusive, tech-driven learning environments.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript by Mrs. Sotis and supplements her research presentation during the School Heads' Meeting last March 20, 2024, under the topic, "Readiness of Public Schools in Butuan City Division for the Implementation of Education 4.0". To request a copy of Mrs. Sotis's manuscript, please send an email to ps.prd@deped.gov.ph.

The Use of Canva Whiteboard Animation Comics in Teaching Algebra to Grade 7 Students

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INTRODUCTION

Algebra remains one of the most challenging subjects for students globally and in the Philippines, often associated with abstract thinking, low motivation, and math anxiety. The 2022 PISA results and the 2024 NAT scores revealed alarmingly low proficiency in mathematics among Filipino learners. To address this, the Department of Education launched the National Mathematics Program (DepEd Memo No. 110, s. 2022). Inspired by global and local studies on the effectiveness of comics in education, this research explored the impact of Canva-created whiteboard animation comics on Grade 7 students' algebra competence. The study aimed to answer: (1) What are the algebra scores of Grade 7 students before and after using comics? (2) Is there a significant difference in scores before and after using comics? (3) How do students experience comics made using Canva?

The study employed a one-group pretest-posttest design using a mixed-methods approach. Fifty-two Grade 7 students from Riverside Integrated Secondary School participated, divided equally between Sections Joaquin and Hernandez. Quantitative data were gathered through pre-tests and post-tests, while qualitative data were collected via focus group discussions. Ethical considerations included informed consent, voluntary

participation, and approval from school and division officials.

DISCUSSION OF RESULTS

1. Algebra Scores Before and After Using Comics

Assessment	Mean Score	Standard Deviation
Pre-Test	29%	3.41
Post-Test	46%	3.25

- Students showed a 17% improvement in algebra scores.
- Reduced standard deviation suggests more consistent performance.

2. Statistical Significance of Score Improvement

Statistic	Value
t-statistic	7.48
Degrees of Freedom	51
p-value	< 0.001
Mean Difference	17%
Cohen's d	1.04 (Large)

- The improvement is statistically significant with a large effect size.
- Confidence interval (12.3% to 21.4%) confirms reliability of results.

3. Student Experiences with Comics

Theme	Sample Student Insights
Engagement & Enjoyment	"More happy, excited" (S1), "Entertaining" (S3)
Comprehension & Retention	"Easier to understand" (S4), "Memorable" (S7)
Behavioral Improvements	"Bullies became quiet" (S14), "More participation" (S11)
Preference for Visual Learning	"Shapes are engaging" (S6), "Pictures help" (S13)
Suggestions for Improvement	"Add voice-over" (S12), "Use real-life characters" (S16)

CONCLUSIONS AND RECOMMENDATIONS

The use of Canva whiteboard animation comics significantly improved students' algebra scores and engagement. The intervention fostered better comprehension, retention, and classroom behavior. Students expressed a strong preference for visual learning and suggested enhancements like voice-overs and realistic characters.

Recommendations:

- Integrate comics into regular math instruction.
- Train teachers in comic creation using Canva and similar tools.
- Explore comics' impact on other math topics and grade levels.
- Develop voice-over and animated versions for broader accessibility.

Policy Implication:

This research supports DepEd's National Mathematics Program (DepEd Memo No. 110, s. 2022) and aligns with the Basic Education Development Plan (BEDP)

2030. It contributes to the Digital Rise Program and the development of Strategic Intervention Materials (SIMs) for numeracy enhancement.

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Disclaimer:

This Research Bulletin presents a condensed summary of the full manuscript authored by Mr. Florante P. Tabudlong and colleagues, titled "The Use of Canva Whiteboard Animation Comics in Teaching Algebra to Grade 7 Students." To request a copy of the complete manuscript, kindly email ps.prd@deped.gov.ph

Empowering School Heads for E-SIP Success: The Impact of WTR Strategic Intervention in Professional Growth and Planning

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INTRODUCTION

Effective school planning is crucial for providing quality education, but school leaders often face significant hurdles. In the Department of Education (DepEd) Tandag City Division, many school heads lacked sufficient training to develop and implement their Enhanced School Improvement Plans (E-SIPs), a three-year roadmap for school progress (Abalorio & Diamante, 2022). This challenge was magnified for newly appointed leaders and further complicated by frequent leadership changes that disrupted planning continuity (Agra, 2023). To address this, a study was conducted to evaluate the effectiveness of a targeted program called the Workshop-Training-Resource (WTR) Strategic Intervention. The research aimed to determine the extent to which the WTR intervention improved the skills of school heads, how it impacted their leadership practices and collaboration, and how they perceived the overall training experience.

This study used a descriptive-evaluative research design to measure the impact of the WTR intervention. The participants included all 31 public school heads within the DepEd Tandag City Division. Data were gathered through online evaluation tools and feedback forms completed by the participants after the three-day workshop. The collected information was analyzed using descriptive statistics to identify key trends and outcomes. The research was conducted with the highest ethical standards, ensuring participant consent and data confidentiality in compliance with the Data Privacy Act of 2012.

DISCUSSION OF RESULTS

Table 1. E-SIP Development Components

Indicators	Mean	Proficiency Level
Introduction to E-SIP Development Component	4.59	Highly Proficient
Stakeholder Engagement & Communication	4.55	Highly Proficient
Data-Driven Decision Making	4.50	Highly Proficient
Resource Allocation & Budgeting	4.48	Proficient
E-SIP Action Planning	4.49	Proficient
Data Collection Methods, Analysis, Techniques, and Interpretation	4.53	Highly Proficient
Overall Mean	4.52	Highly Proficient

a. A Significant Boost in Planning Proficiency

After the training, school heads reported a major increase in their ability to develop an E-SIP. On a five-point scale, their overall proficiency was rated as "Highly Proficient" (Overall Mean = 4.52). They felt most confident in foundational areas like understanding the E-SIP process, engaging with stakeholders (parents, teachers, and community members), and using data for decision-making. While still rated as "Proficient," areas like budgeting and detailed action planning were identified as needing further focus.

Table 2. Mean scores and interpretations on the impact of the WTR Strategic Intervention.

Indicator	Mean	DR
The WTR Strategic Intervention has positively Impacted my leadership practices.	4.50	SA
The WTR Strategic Intervention has positively influenced my decision – making processes related to the crafting and implementation of the Enhanced School Improvement Plan (E-SIP)	4.47	A
The Workshop-Training-Resources (WTR) Strategic Intervention has enhanced my ability to effectively communicate goals and objectives to stakeholders.	4.50	SA
The Workshop-Training-Resources (WTR) Strategic Intervention has increased my proficiency in utilizing data for informed decision making.	4.40	A
The Workshop-Training-Resources (WTR) Strategic Intervention has strengthened my ability to foster a culture of continuous improvement within the school.	4.47	A
Overall Mean	4.47	A

b. Enhanced Leadership, Collaboration, and Professional Growth

The intervention was perceived as a powerful tool for professional development. Participants "Agreed" that the WTR program improved their leadership practices, helped them communicate school goals more effectively, and contributed significantly to their personal professional growth (Mean = 4.67). The workshop also successfully fostered a collaborative environment, encouraging school heads to learn from one another, share best practices, and build support networks.

c. Practical and Valuable Resources

The materials provided during the training were highly valued. School heads reported that resources like *step-by-step guides, instructional videos, and examples of successful E-SIPs* "Significantly Improved" their ability to create clear and effective plans. These practical tools were praised for making complex concepts easier to understand and

apply directly to their school's needs. The hands-on nature of the workshop, from foundational learning on Day 1 to presenting a crafted plan on Day 3, was consistently highlighted as relevant and impactful.

CONCLUSIONS AND RECOMMENDATIONS

The WTR Strategic Intervention effectively empowered school heads in Tandag City Division by enhancing their skills in data-driven planning and leadership competencies such as collaboration, strategic communication, and continuous improvement. Positive feedback on the provided resources highlights the value of practical tools in professional development. Given its success, the WTR model is recommended for adaptation and scaling across other DepEd divisions, supporting key policies like RA 9155 and DepEd Order No. 44, s. 2015.

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Disclaimer: *This research bulletin highlights promising outcomes from the WTR Strategic Intervention in DepEd Tandag City Division. While the findings reflect the positive experiences of participating school heads, results may vary in other contexts. Readers are encouraged to consider local conditions and consult relevant authorities to maximize the benefits of adapting this intervention.*

Exploring the Pedagogical Content Knowledge and Challenges among Public Elementary Music Teachers in Tandag City

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INTRODUCTION

Pedagogical Content Knowledge (PCK) is essential for effective teaching, combining pedagogical skills and subject matter expertise. While PCK has been widely studied in subjects like mathematics and science, its application in music education remains underexplored in the Philippines. This study addresses this gap by examining the state of music education in Tandag City, focusing on the PCK of public elementary school teachers in Grades 4, 5, and 6. It aims to understand how teachers' knowledge and training influence their ability to deliver music instruction effectively.

The study employed a descriptive-evaluative design and purposive sampling, involving 55 MAPEH teachers from 27 elementary schools. Data were collected through a questionnaire adapted from Manila (2020), covering teacher profiles, content knowledge, pedagogical knowledge, and challenges. Ethical standards were upheld through informed consent and confidentiality, ensuring participants could share their experiences freely.

RESULTS AND DISCUSSION

1. Teacher Profile

Attribute	Percent age
Bachelor in Elementary Education	90.9
No formal music training	94.5

At least 18 units in a master's program	52.7
Over 15 years of teaching experience	32.7

2. Content Knowledge Proficiency

Element	Mean	Descriptor
Tempo	2.91	Approaching Proficiency
Timbre	2.56	Developing
Others (e.g., Melody, Harmony)	1.05–1.69	Beginning
Overall Mean	1.64	Beginning

3. Pedagogical Knowledge

Indicator	Mean	Descriptor
Conducting Song Analysis	3.77	High
Teaching a Song	3.47	High
Preliminary Activities & Strategies	3.06–3.17	Moderate
Overall Mean	3.37	Moderate

4. Challenges

Challenge	Mean	Descriptor
Lack of Teacher Training	4.27	Very High
Inadequate Instruments & Materials	3.84–4.15	High

Negative Attitudes (Teachers & Pupils)	2.75–3.04	Moderate
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Overall Mean	3.57	High
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5. The results of the statistical analysis revealed that music-specific training had a significant effect on both content knowledge and pedagogical knowledge among public elementary music teachers. Specifically, the ANOVA test indicated a statistically significant influence of music-specific training on content knowledge ($p = .005$) and pedagogical knowledge ($p = .014$). Furthermore, Pearson correlation analysis showed weak negative correlations between content and pedagogical knowledge, particularly in the areas of timbre ($r = -.275$, $p = .042$) and harmony ($r = -.294$, $p = .029$).

CONCLUSION

The study concluded that music-specific training significantly enhances both content and pedagogical knowledge. Formal education and years of experience alone were insufficient. The findings support the integration of targeted professional development to improve music instruction.

RECOMMENDATION

Based on the findings, several recommendations are proposed to enhance music education in public elementary schools. DepEd national officials are encouraged to expand music-focused workshops and integrate music education into teacher preparation programs. Division superintendents should institutionalize regular music training and assess its effectiveness. School administrators are advised to identify specific training needs, allocate appropriate resources, and provide incentives for teacher development. Teachers are encouraged to actively pursue professional training and engage in

collaborative learning communities. Lastly, Local Government Officials are urged to allocate local funds and support policies that promote and sustain music education initiatives.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Dr. Alngog and supplements his research presentation during the Virtual Stakeholders' Forum last September 1, 2021 under the topic, "Exploring the Pedagogical Content Knowledge and Challenges among Public Elementary Music Teachers in Tandag City". To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.

School Based Feeding Program Implementation in Tandag City Elementary Schools and Its Academic Performance and Nutritional Status of Severely Wasted Learners: Basis for an Operational Guidelines and Initiatives

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Adequate,” suggesting a need for

INTRODUCTION

Malnutrition among school-aged children remains a pressing concern in Tandag City, with 236 learners classified as severely wasted in the 2023–2024 school year. This condition negatively affects children’s cognitive development, school attendance, and academic performance. In response, the Department of Education implemented the School-Based Feeding Program (SBFP) to address both nutritional deficiencies and educational disparities (Corpuz & Bantulo, 2023).

This study evaluated the SBFP’s implementation across all elementary schools in Tandag City using a mixed-methods approach. Quantitative data were gathered from 97 respondents, including school heads, teachers, parents, and Barangay officials. Qualitative insights were collected through focus group discussions with 30 informants. Ethical standards were strictly followed, ensuring informed consent and data confidentiality.

DISCUSSION OF RESULTS

The implementation of the School-Based Feeding Program (SBFP) in Tandag City was evaluated across several dimensions. The program’s coverage and duration were rated as “Very Satisfactory,” indicating that meals were consistently provided throughout the school year. Personnel involved in the program, including school principals, nutrition coordinators, and nurses, received “Outstanding” ratings for their leadership and health monitoring efforts. However, the facilities used—particularly kitchens and dining areas—were assessed as “Moderately

infrastructure improvements. Financial resources were deemed “Very Adequate,” reflecting efficient budget utilization, although enhancements in meal diversity and staff training were recommended. Complementary activities such as the “Gulayan sa Paaralan” and the Essential Health Care Program (EHCP) were found to be moderately to highly implemented, supporting the overall effectiveness of the SBFP (Sahagun, 2022).

The outcomes of the School-Based Feeding Program (SBFP) in Tandag City demonstrated significant improvements in the health and academic performance of severely wasted learners. Of the 192 identified beneficiaries, 65.10% were successfully rehabilitated to a normal nutritional status by the end of the 100–120 feeding days. Additionally, school attendance among these learners improved from 96.57% before the program to 98.86% after its implementation. Academic performance also showed a statistically significant increase, with the average grades rising from 81.36 in the first grading period to 83.18 in the final grading period.

Despite the overall success of the School-Based Feeding Program (SBFP) in Tandag City, several challenges were identified during its implementation. One recurring issue was the occasional reluctance of student beneficiaries to consume vegetables, which affected meal acceptance and nutritional intake. Additionally, limited parental involvement and existing infrastructure constraints, particularly in kitchen and dining facilities, posed barriers to optimal program delivery. Minor logistical delays in food delivery were also reported, although these did not significantly disrupt the

program's overall operations (Vizcocho, 2022).

Insights gathered from focus group discussions highlighted several key areas for enhancing the School-Based Feeding Program (SBFP) in Tandag City. Participants emphasized the importance of offering more diverse and culturally relevant meals to increase student engagement and nutritional intake. Additionally, there was a strong call to improve kitchen and dining facilities to ensure safe and comfortable meal preparation and consumption. Strengthening community partnerships and increasing parental involvement were also identified as critical to sustaining the program's success. Finally, the need for enhanced monitoring and feedback systems was underscored to ensure continuous improvement and responsiveness to stakeholder needs (Van, et al 2022).

CONCLUSIONS AND RECOMMENDATIONS

The SBFP in Tandag City significantly improved the nutritional status, attendance, and academic performance of severely wasted learners. The program's success was driven by strong leadership, effective health monitoring, and community support.

To improve the School-Based Feeding Program (SBFP) in Tandag City, key recommendations include upgrading kitchen and dining facilities, increasing parental involvement through workshops, and enhancing the "Gulayan sa Paaralan" for sustainable food sourcing. Expanding nutrition education and health monitoring, along with allocating more funds for staff training and meal variety, are also essential for sustaining program quality and impact.

Policy Linkage:

This research supports DepEd's School-Based Feeding Program under the School Health and Nutrition Program, contributing to the goals of DepEd Order No. 39, s. 2017 and the Sustainable Development Goal 2: Zero Hunger.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Mr. Joel V. Cubio, et al. and supplements his research presentation during the Nutrition Month Culmination Activity in the DepEd Philippines Facebook Page last July 31, 2025. To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.

Functionality Levels of Child Protection Committees in Tandag City Schools

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INTRODUCTION

Child protection is vital to ensuring the safety and well-being of children. In response to growing concerns about abuse and neglect, the Department of Education (DepEd) mandates the creation of Child Protection Committees (CPCs) in schools. These committees are tasked with implementing policies and programs that safeguard children from harm. However, their effectiveness depends on how well they are organized, resourced, and aligned with national guidelines (Gichohi & Mæstad, 2023).

In the Philippine context, the Department of Education (DepEd) has issued several orders and policies to strengthen child protection mechanisms. Notable among these is DepEd Order No. 40, s. 2012, known as the *Child Protection Policy*, which mandates the creation of Child Protection Committees (CPCs) in schools. This policy outlines guidelines for identifying, reporting, and addressing child protection issues, emphasizing the role of CPCs in ensuring a safe learning environment.

Additionally, DepEd Memorandum No. 221, s. 2013 highlights the need for continuous capacity-building programs for CPC members to enhance their effectiveness in addressing child abuse and bullying cases. These directives align with the broader objective of creating childfriendly schools and communities as advocated by international frameworks like the United Nations Convention on the Rights of the Child (UNCRC).

This study assessed the functionality of CPCs in 31 schools across Tandag City using the Updated CPC Functionality Assessment Tool. Through surveys and focus group discussions, the research identified strengths and gaps in five key areas: organization, policies, resources, service delivery, and accountability. The findings aim to guide interventions that will improve child protection efforts in schools.

DISCUSSION OF RESULTS

The study revealed that the overall functionality of Child Protection Committees (CPCs) in 31 schools within Tandag City Division was categorized as moderately functional, with an average score of 2.26 across five key indicators: organization and coordination, policies and guidelines, capacities and resources, service delivery, and accountability and performance. Service delivery received the highest score (240), indicating that many schools actively implement child protection programs. However, this did not always correlate with efficiency, as gaps in coordination and resource availability persisted. Organization and coordination scored 212, showing that while some schools had structured CPCs, others lacked formal processes. Capacities and resources (138) and policies and guidelines (110) were the lowest-scoring indicators, highlighting issues such as insufficient funding, personnel, and outdated or weakly enforced policies. Accountability and performance scored 159, suggesting that monitoring and evaluation mechanisms were present but inconsistent. High-performing schools like Rosario Integrated School and Carmen Integrated School demonstrated strong CPC

structures and comprehensive service delivery, while low-performing schools such as Awasian Elementary School and Buenavista Elementary School exhibited significant gaps in all indicators. These findings underscore the need for targeted interventions, including policy updates, resource mobilization, and capacity-building efforts to enhance CPC effectiveness and ensure child protection across all schools (DSWD, 2020).

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that the functionality of Child Protection Committees (CPCs) across schools in Tandag City Division is highly variable. While some schools demonstrated strong performance in organization, policy implementation, resource allocation, service delivery, and accountability, others faced substantial challenges. The overall functionality score of 2.26 categorized the CPCs as moderately functional, indicating that although operational, many committees require targeted support to enhance their effectiveness.

Based on the findings, the study recommends targeted interventions to improve the functionality of Child Protection Committees (CPCs) in schools with lower performance. Specifically, schools such as Awasian Elementary School, Buenavista Elementary School, and San Isidro Elementary School should receive additional training, resources, and support to strengthen their organizational structures, policy implementation, and service delivery. Regular monitoring and updates of child protection policies and evaluation tools are essential to ensure relevance and responsiveness to emerging issues. Strengthening accountability systems is also critical; schools must develop mechanisms for tracking and assessing the effectiveness of their child protection programs to enhance transparency and outcomes. Moreover, stakeholder engagement should be broadened to include marginalized communities, ensuring inclusive participation in child protection efforts. Finally, evidence-based practices must be

adapted to local contexts to ensure their effectiveness and sustainability, with schools evaluating current strategies to align with community needs and available resources.

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Disclaimer:

This research bulletin is intended solely for academic and policy development purposes. The findings, interpretations, and conclusions expressed herein are those of the authors and do not necessarily reflect the views or official policies of the Department of Education or any affiliated institutions. While every effort has been made to ensure the accuracy of the data presented, the authors disclaim any liability for errors, omissions, or any consequences arising from the use of this publication. The assessment results are based on the data collected from participating schools in Tandag City and may not be generalizable to other contexts.

A Lasting Harvest: Assessing the 18-Year Impact of the *Eskwelahan sa Saka* Literacy Program

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INTRODUCTION

In many rural farming communities, young children face significant barriers to early education, which can hinder their readiness for formal schooling and limit their future opportunities (santos 2020; Lardizabal, 2018)). In Purok Maligaya III, a farming community in Tandag City, this challenge was met with a unique, community-driven solution: the *Eskwelahan sa Saka* (School in the Farm). Established 18 years ago as an extension project by North Eastern Mindanao State University (NEMSU), the program aimed to provide foundational literacy and numeracy skills to children aged 3-5. This study sought to evaluate the long-term impact of this grassroots initiative by assessing its relevance, effectiveness, and sustainability. The primary research question was: What has been the lasting impact of the *Eskwelahan sa Saka* program on the literacy, school readiness, and community engagement of its participants?

The study employed a mixed-methods research design, combining quantitative surveys with in-depth qualitative analysis. The research was conducted in Purok Maligaya III, Rosario, Tandag City, the program's site for nearly two decades. Data was collected from 60 respondents, including past and present program beneficiaries, parents, and community leaders, through surveys, focus group discussions, and observations. The research strictly adhered to ethical standards, ensuring informed consent was obtained from all participants and protecting their confidentiality and anonymity throughout the study.

DISCUSSION OF RESULTS

Community Perception of Program Effectiveness

The study revealed the overwhelming success and enduring legacy of the *Eskwelahan sa Saka* program. Quantitative data showed a high level of agreement among community members regarding the program's positive effects. It was consistently seen as culturally relevant, affordable, and highly effective in preparing children for formal schooling. Qualitative findings identified three critical pillars that ensured the program's sustainability and deep community integration. These pillars were brought to life through powerful success stories shared by the participants.

Pillars of Success and Community Stories

Community-Based Ownership

The community took full control and responsibility for the program, ensuring its continuation long after the university's initial involvement. A former parent-volunteer became a vocal advocate for early literacy, successfully lobbying for barangay funds to be allocated for educational materials.

Empowerment Through Literacy

The program provided not just academic skills but also confidence and leadership opportunities, especially for out-of-school youth who served as volunteer teachers. An out-of-school youth who volunteered as a

teacher regained a sense of direction and is now known as "Kuya Teacher," serving as a role model for his peers.

Intergenerational & Inclusive Learning

The program created a learning environment that included everyone, from toddlers to elders, fostering a culture of shared education. | An elderly resident, initially just observing, began learning basic literacy alongside the young children, demonstrating that learning has no age limit.

CONCLUSIONS AND RECOMMENDATIONS

The Eskwelahan sa Saka program stands as a powerful testament to the effectiveness of community-owned, culturally-rooted educational initiatives. Over 18 years, it has not only prepared children for academic success but has also strengthened community bonds, empowered youth leaders, and fostered a lifelong love for learning across generations. Its success is not rooted in expensive resources but in the collective will and shared responsibility of the community it serves.

Based on these findings, it is strongly recommended that the Department of Education (DepEd) recognize the Eskwelahan sa Saka as a model for community-based literacy programs.

Contribution to DepEd Policy: This research directly supports the goals of the MATATAG Agenda, particularly its core components of making the curriculum relevant to produce job-ready, active, and responsible citizens, and taking steps to accelerate the delivery of basic education facilities and services. The program serves as a proven, low-cost, high-impact model for establishing community learning hubs. It is recommended that the Schools Division of Tandag City document the program's best practices and create a scalable framework that can be adapted and replicated in other rural and last-mile communities across the region, aligning with the MATATAG goal of

bringing fundamental support to learners where it is most needed.

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The findings, interpretations, and conclusions expressed in this bulletin are entirely those of the authors. They do not necessarily represent the official views or policies of the Department of Education, North Eastern Mindanao State University, or any other affiliated institution. The results are specific to the context of the study and are intended for informational and academic purposes to encourage discussion and further research.

Exploring the Readiness of Pre-Service Teachers for AI Integration in Philippine Education

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INTRODUCTION

Artificial Intelligence (AI) is transforming education globally, offering new possibilities for personalized learning, curriculum development, and administrative efficiency. In the Philippine context, AI presents opportunities to improve access and quality of education, especially in underserved areas. However, the success of AI integration depends on the preparedness of future educators. This study investigates the familiarity, perceptions, and readiness of pre-service teachers in Tandag City to incorporate AI into their teaching practices (UNESCO, 2021).

Using a mixed-methods approach, the study surveyed 72 pre-service teachers and conducted focus group discussions (FGDs). The research explored their confidence in using AI tools, perceived challenges, and expectations. Ethical standards were upheld, including informed consent and compliance with the Data Privacy Act of 2012.

RESULTS AND DISCUSSION

In the study, the demographic profile of the respondents revealed that a significant majority (86.7%) were fourth-year pre-service teachers, indicating a higher level of exposure to educational technology and pedagogical practices. Additionally, 53.8% of the participants specialized in Elementary Education, reflecting the prevalent demand for educators in foundational

learning stages within the Philippine education system.

Survey Highlights

Survey Indicators	Most Frequent Response	%
Familiarity with AI	Very Familiar	65%
AI's Impact in 10 Years	Likely	60%
Key Area of Impact	Lesson Planning & Curriculum Development	72%
AI Replacing Teachers	No, teachers are essential	85%
Overall Perception	Somewhat Positive	70%
Greatest Challenge	Lack of AI Training	55%
Greatest Benefit	Automating Admin Tasks	60%
Formal AI Training	No, learned informally	68%
Confidence in AI Use	Somewhat Confident	58%
Essential Skill	Adaptability	62%
Recommended Action	Hands-on AI Training	75%

Pre-service teachers showed a generally positive outlook toward Artificial Intelligence (AI) in education. Most respondents (65%) were very familiar with AI, and 60% anticipated its significant impact on teaching within the next ten years. Lesson planning and curriculum development were identified as the primary areas of influence (72%), while 85% emphasized that teachers remain essential despite technological advancements.

Although 70% viewed AI's impact as "somewhat positive," challenges such as the lack of formal training (55%) and reliance on informal learning (68%) were evident. Confidence in using AI tools was moderate (58%), and adaptability was considered the most crucial skill (62%). A strong majority (75%) recommended hands-on training, highlighting the need for structured AI education in teacher preparation programs.

Focus Group Insights

Focus group discussions revealed contrasting perceptions between non-users and trained users of Artificial Intelligence (AI). Non-users and untrained pre-service teachers expressed curiosity about AI but also voiced concerns regarding its complexity, ethical implications, and the potential for job displacement. In contrast, users and trained pre-service teachers emphasized AI's efficiency in areas such as diagnostics, analytics, and content creation. Despite recognizing its benefits, they also stressed the importance of ethical safeguards and the need for AI tools to be user-friendly to ensure effective integration into educational settings.

CONCLUSION

Pre-service teachers recognize AI's potential to enhance education, particularly in lesson planning and administrative efficiency. However, most lack formal training, which affects their confidence and readiness. To address this,

teacher education programs should integrate AI-focused curricula and hands-on training using platforms like Google Classroom and DepEd learning systems.

RECOMMENDATIONS

Incorporate AI literacy and practical training into teacher education programs to support the Digital Rise Program and Basic Education Development Plan (BEDP) 2030, ensuring educators are equipped to use AI ethically and effectively.

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Disclaimer:

This study is limited to the perceptions and experiences of pre-service teachers in Tandag City and may not be generalizable to other regions or educational contexts within the Philippines. To request a copy of her manuscript, send an email to jasmin.lacuna@deped.gov.ph.

SELF-DIRECTIVE WEIGHT MANAGEMENT STRATEGY (SWIMS): INNOVATIVE FITNESS BIO TRACKER IN TEACHING PHYSICAL EDUCATION 10

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INTRODUCTION

The global health crisis brought by COVID-19 in 2020 exposed major weaknesses in health systems and emphasized the importance of preventive care and healthy lifestyles (WHO, 2020). Among the most pressing health risks is obesity, which significantly increases the likelihood of developing chronic diseases (CDC, n.d.; NIDDK, n.d.).

At Berseba National High School, weight management has emerged as a growing concern, with several students experiencing health issues potentially linked to poor lifestyle habits and lack of physical activity. Monitoring Body Mass Index (BMI) is a practical way to assess and address these risks.

This study aimed to help students maintain a healthy BMI through regular monitoring and promote active lifestyles to prevent illness. With 17 identified overweight students during the 2023–2024 school year, the development of a BMI bio-tracker was proposed as an effective intervention to support weight management and encourage long-term health awareness among learners.

RESULT & DISCUSSION

Based on the findings, the SWIMS program effectively addressed the issue of overweight students at Berseba National High School. Prior to the intervention, all 17 respondents (3 males and 14 females) were classified as overweight. After the first two weeks of the program, a significant positive shift was observed, with 10 out of 14 female respondents (71.43%) transitioning to a normal BMI classification, demonstrating the program's initial effectiveness.

This positive trend continued over the following two weeks. By the end of the four-week period, the number of overweight students had decreased from 17 to just 4. The study concluded that the program's intense, fat-burning activities were directly responsible for the weight reduction, supported by positive student engagement, punctuality, and increased awareness of weight management.

These results suggest that consistent and regular participation in such physical activities can lead to sustained health benefits and may eventually eliminate overweight cases in the school.

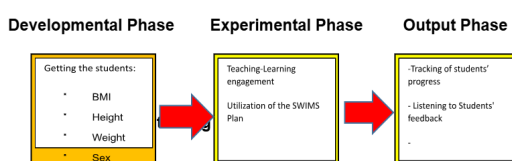


Table 2. Student's status before the program implementation.

BMI STATUS BEFORE THE SWIMS IMPLEMENTED					
	RESPONDENTS	HEIGHT	WEIGHT	BMI	Classification
FEMALES:					
1	Respondent 1	165	73	26.81	Overweight
2	Respondent 2	155	75	31.22	Overweight
3	Respondent 3	161	65	25.63	Overweight
4	Respondent 4	152	58	25.57	Overweight
5	Respondent 5	154	60	25.30	Overweight
6	Respondent 6	134	50	27.85	Overweight
7	Respondent 7	148	55	25.11	Overweight
8	Respondent 8	146	44	25.33	Overweight
9	Respondent 9	152	60	25.97	Overweight
10	Respondent 10	150	58	25.78	Overweight
11	Respondent 11	135	47	25.79	Overweight
12	Respondent 12	134	46	25.62	Overweight
13	Respondent 13	152	62	26.84	Overweight
14	Respondent 14	150	58	25.78	Overweight
MALES					
	RESPONDENTS	HEIGHT	WEIGHT	BMI	DESCRIPTION
1	Respondent 22	165	75	27.57	Overweight
2	Respondent 23	152	65	28.13	Overweight
3	Respondent 24	153	64	27.34	Overweight

Based on the data in Table 2, a total of 17 students were identified as overweight, with BMI values ranging from 25.0 to 29.9. This finding served as the immediate justification for implementing the SWIMS program. The study's authors underscored the urgency of the situation, noting that leaving these students' overweight status unaddressed could increase their risk of developing obesity and other related health issues. This initial data, therefore, acted as the crucial baseline, highlighting a significant health concern that the program was designed to mitigate.

CONCLUSION & RECOMMENDATION

The SWIMS program at Berseba National High School proved effective in addressing student overweight issues. A four-week intervention of high-intensity physical activity significantly reduced the number of overweight students, with most female

participants moving into a normal BMI range. This success, supported by positive student engagement and increased health awareness, highlights the program's potential as a sustainable model for improving student well-being and weight management.

RECOMMENDATIONS

Based on the successful outcomes of the SWIMS program, it is recommended that Berseba National High School institutionalize this program and expand it to all students to promote a school-wide culture of health. The physical activities should be complemented with nutrition education to provide a holistic approach to weight management. To evaluate the long-term impact, a longitudinal study is necessary. Finally, the school should share its successful model with other institutions to address similar health concerns.

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Effects of Instructional Media on the Academic Performance of Grade V Learners in Teaching Science

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INTRODUCTION

The persistent low performance of Filipino students in Science, as highlighted by national and international assessments such as the National Achievement Test (NAT) and the Programme for International Student Assessment (PISA), has raised concerns among educators and policymakers. Traditional teaching methods have not significantly improved students' understanding and achievement in Science. This research was motivated by the need to explore whether integrating instructional media—such as video lessons, visual aids, and computer-aided instruction—could enhance the academic performance of Grade V learners in Science at Mabuhay Integrated School during the 2022–2023 school year. The main objectives were to determine the effects of instructional media on students' learning, compare academic performance between conventional and media-based teaching, and assess if the difference is statistically significant.

The study used a quasi-experimental design involving all Grade V learners at Mabuhay Integrated School. In the first quarter, students experienced conventional teaching (chalk-talk, blackboard, and paper-based materials). In the second quarter, the same students were taught using instructional media (videos, PowerPoint, computer presentations). Data were collected through a researcher-made survey and analysis of students' grades. Ethical considerations included informed consent and confidentiality of student data.

DISCUSSION OF RESULTS

1. Learner Perceptions of Instructional Media

Survey results showed that most students *strongly agreed* that instructional media improved their understanding and motivation in Science. Video lessons and visual aids were rated as the most effective tools.

Indicator	Mean	Interpretation
Video lessons improve understanding	4.60	Strongly Agree
Visual aids make lessons clearer	4.72	Strongly Agree
Computer-aided lessons enhance performance	4.32	Strongly Agree
PowerPoint presentations help learning	4.24	Agree

2. Academic Performance Comparison

The mean grade of students increased from **79.84%** (conventional method) in the first quarter to **82.2%** (instructional media) in the second quarter.

Quarter	Mean Grade
1st	79.84%
2nd	82.2%

3. Statistical Significance

A dependent samples t-test showed a significant difference in academic performance between the two teaching methods ($t = 5.41$, $p < 0.05$), indicating that instructional media had a positive impact.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that instructional media—particularly video lessons and visual aids—significantly enhance the academic performance and engagement of Grade V learners in Science by catering to diverse learning styles and making complex concepts more accessible. In line with this, it is recommended that teachers regularly integrate video lessons, visual aids, and computer presentations into their teaching strategies to improve learning outcomes. School heads are encouraged to support professional development focused on the effective use of instructional media, while the Department of Education (DepEd) should continue prioritizing ICT integration in the curriculum and ensuring the provision of necessary digital resources. This research further supports DepEd's push for technology integration in classrooms, aligning with the ICT policies and the Basic Education Learning Continuity Plan (BE-LCP), and underscores the need for schools to invest in educational technology to strengthen Science instruction.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Mr. Glendel E. Taypa and supplements his research presentation during the Regional Research Notebook 2023 under the topic, "Effects of Instructional Media on the Academic Performance of Grade V Learners in Teaching Science". To request a copy of his manuscript, send an email to glendel.escasinas@deped.gov.ph

Level of Awareness of Newly Designated RPMS Instructional Supervision Leaders: Basis for Capacity Building

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INTRODUCTION

In the evolving landscape of education, instructional leaders play a pivotal role in enhancing teaching and learning practices. The Department of Education (DepEd) has emphasized the importance of instructional supervision through the Results-Based Performance Management System (RPMS) aligned with the Philippine Professional Standards for Teachers (PPST). However, many newly designated instructional leaders—Master Teachers, Head Teachers, and Teacher In-Charges—lack formal training in RPMS-PPST implementation. This study aimed to assess their level of awareness and readiness to fulfill supervisory roles effectively.

The research employed a descriptive quantitative and qualitative design. Thirty respondents were selected through purposive sampling from secondary and senior high schools in the Division of Tandag City. Data were gathered using a three-part questionnaire covering demographic profiles, awareness levels, and qualitative insights. Ethical considerations such as privacy, consent, and confidentiality were strictly observed.

RESULTS AND DISCUSSION

1. Awareness Levels Across RPMS Domains

Respondents demonstrated high awareness across all seven RPMS domains, with a grand mean of 4.23 (Very Satisfactory).

RPMS Domain	Mean Score	Descriptive Rating
Content and Pedagogy	4.41	Very Satisfactory
Learning Environment	4.28	Very Satisfactory
Diversity of Learners	4.12	Very Satisfactory
Curriculum and Planning	4.21	Very Satisfactory
Assessment and Reporting	4.20	Very Satisfactory
Community Linkages and Professional Skills	4.23	Very Satisfactory
Personal Growth and Professional Development	4.16	Very Satisfactory

2. Relationship Between Demographics and Awareness

The study revealed that there was no statistically significant relationship between the level of awareness of newly designated instructional leaders and their demographic variables such as age, sex, civil status, or instructional supervision experience. However, a significant

relationship was found between educational attainment and awareness, with a Pearson's r value of -0.572 and a p -value of 0.01, indicating that higher educational attainment is associated with greater awareness of RPMS implementation.

3. Facilitating Factors

The study identified five main facilitating factors that support the effective implementation of PPST-RPMS classroom observations. These include clear guidelines and proper training, supportive school leadership, teacher motivation and engagement, collaboration and peer support, and the availability of resources and tools. Each of these elements contributes to a more structured, confident, and collaborative environment for instructional supervision.

4. Hindering Factors

The study identified several hindering factors affecting the implementation of PPST-RPMS classroom observations. These include time constraints, resistance to change, inadequate training, observer biases, limited resources, and conflicting priorities and schedules. Each of these challenges disrupts the consistency, objectivity, and effectiveness of instructional supervision, highlighting the need for targeted interventions to support newly designated instructional leaders.

CONCLUSION

The study concluded that newly designated instructional leaders possess commendable awareness of RPMS-PPST domains, particularly in pedagogy and learning environments. However, gaps remain in addressing learner diversity and ensuring consistent evaluations. Educational attainment significantly influences awareness, underscoring the

need for targeted professional development.

RECOMMENDATION

Implement the proposed 5-day capacity training program titled *Building Effective Instructional Leadership*, focusing on RPMS-PPST, observation techniques, feedback, inclusive education, and leadership.

- Align training with DepEd Order No. 2, s. 2015, DepEd Memorandum No. 8, s. 2023, and the RPMS Manual for Teachers and School Heads. Prioritize resource allocation, time management, and standardized evaluation tools to enhance instructional supervision.

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Disclaimer:

This research is a summarized interpretation of the original study by Tuyor (2025) and is intended for informational and educational purposes only. It does not represent official policy or endorsement by the Department of Education. To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.

**Perception towards the Conduct of Research: Basis for the Enhancement of the
Implementation of the Research Program in the Division
of Bayugan City, Philippines**

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Introduction

Research enhances education by promoting evidence-based practices that improve teaching and learning (Torres et al., 2023). DepEd policies, such as DO No. 2, s. 2015, require teachers—especially Master Teachers to conduct annual action research as part of their performance evaluation.

However, in Bayugan City Division, many teachers remain inactive in research due to time constraints, heavy workloads, limited training, and lack of support, despite the availability of funding through the Basic Education Research Fund (Reyes & Florentino, 2024).

This study investigates teachers' perceptions, identifies barriers to action research, and examines current practices. Findings will guide the development of training, support systems, and policies to strengthen the research culture in the division (Alvarado & Mendoza, 2023). The findings will support School Heads, Principals, and Division Officials in designing interventions such as targeted training programs and policy enhancements to foster a more research-oriented teaching community (Alvarado & Mendoza, 2023).

Discussion and Result

The practice and engagement of action research in the Division of Bayugan City is generally high, with 94% of teachers reporting they have conducted it. This proactive involvement is motivated by factors such as career progression and addressing classroom challenges. The perception of action research is also highly positive across all groups, with master teachers and supervisors showing a very high appreciation for its role in professional development and its status as a key result area.

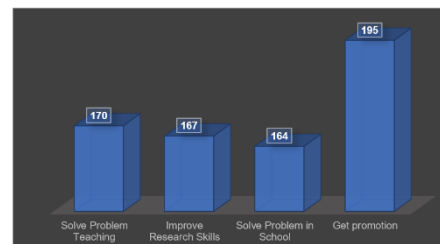


Figure 1.2 Purpose on Conducting Action Research

There is a significant difference in perception among the groups, with master teachers and supervisors holding more favorable views than regular teachers. Despite this, the overall environment is conducive to research. However, this engagement is hindered by several factors, most notably heavy teaching loads and a lack of time, as well as insufficient training, resources, and budget. These challenges

suggest that while educators are willing to engage in action research, systemic support is needed to make the practice more effective and widespread.

The findings show a clear contrast: teachers are willing and proactive in doing research, but systemic barriers limit its effectiveness. With 94% having conducted research and 62% attending training, teachers demonstrate a strong commitment to growth. Motivations like career advancement and solving classroom issues highlight that action research is both a practical and empowering tool for professional development.

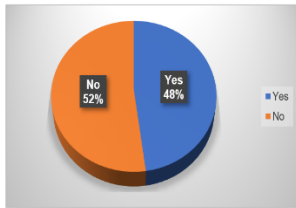


Figure 1.6 Any reference materials that could improve their knowledge and skills

The medium rating for skill improvement and limited access to reference materials for 52% of teachers highlight a key gap. While many engage in research, the lack of resources, mentorship, and training may limit its quality and impact, hinder meaningful professional growth and reduce the value of the research experience.

The differing perceptions across roles reveal that master teachers and supervisors, who view research more positively, can lead efforts to strengthen research culture. Their understanding of its long-term benefits positions them to mentor and support regular teachers, creating both top-down and bottom-up momentum for sustained research engagement.

The challenges of heavy teaching loads and lack of time are not unique to Bayugan City but reflect a global issue. For action research to be sustainable, it must be integrated into

the school system with proper time, resources, and support not treated as an extra task. Additionally, while less emphasized, the lack of recognition highlights the need to build a culture that values and rewards teachers' research efforts, making action research a core part of professional development.

Conclusion and Recommendations

This study found that teachers in Bayugan City Division generally have a positive perception of conducting research, recognizing its value for professional growth and classroom effectiveness. However, challenges such as heavy teaching loads, lack of training, limited time, and insufficient support hinder their active engagement. To address these issues, schools should provide regular research training, improve access to resources, allocate time for research activities, and offer incentives like recognition and promotion. Encouraging collaboration and establishing school-based research committees can also strengthen the research culture and support teachers in their development.

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Standardized Teacher-Made Assessment (STeMA): Its Effect on the Academic Performance in Science of Grade 5 Learners

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INTRODUCTION

A significant number of Grade 5 learners at Tandag Pilot Elementary School were found to be under-performing in Science, with 69% scoring below the 75% mastery level during the first two quarters of SY 2022–2023. This issue reflects broader national concerns, as highlighted by the 2022 PISA results, where Filipino students ranked 79th out of 81 countries in science proficiency. Motivated by these findings, the researchers aimed to improve students' academic performance through a structured assessment tool—Standardized Teacher-Made Assessment (STeMA).

The study employed a quasi-experimental design involving 43 low-performing learners from Grades 5–FL and Acacia sections. Data were collected through pre- and post-assessments, with remedial instruction provided using Self-Learning Modules (SLMs), videos, and practice tests. Ethical clearance was obtained, and parental consent was secured prior to implementation.

DISCUSSION OF RESULTS

Table 1. Mean Scores Comparison

Quarter	Section	N	Mean	SD
1st–2nd	Acacia	32	63.14	6.29
1st–2nd	FL	11	67.21	3.18
1st–2nd	All	43	64.18	5.9
3rd–4th	Acacia	32	83.83	5.29
3rd–4th	FL	11	89.15	4.2
3rd–4th	All	43	85.19	5.51

The data in Table 1 presents a comparison of the written Science scores of Grade 5 learners from Acacia and FL sections before and after the implementation of the Standardized Teacher-Made Assessment (STeMA). During the first and second quarters, prior to the intervention, the Acacia section had a mean score of 63.14 with a standard deviation of 6.29, while the FL section had a slightly higher mean score of 67.21 and a lower standard deviation of 3.18. The combined mean score for both sections was 64.18, indicating that most students were performing below the 75% mastery level. The higher variability in scores within the Acacia section suggests inconsistent performance among learners.

After the implementation of STeMA in the third and fourth quarters, there was a marked improvement in scores. The Acacia section's mean score rose to 83.83 with a reduced standard deviation of 5.29, and the FL section achieved an even higher mean score of 89.15 with a standard deviation of 4.20. The overall mean score for both sections increased to 85.19, with a standard deviation of 5.51. This significant rise in scores, coupled with a slight reduction in variability, indicates that the intervention not only enhanced academic performance but also helped standardize learning outcomes across students. Notably, the FL section showed the greatest improvement, suggesting strong engagement with the intervention strategy.

Table 2. Paired T-Test Results

Section	Quarter Comparison	Mean Difference	p-value	Decision
Acacia	1st-2nd vs 3rd-4th	20.687	<.001	Reject null hypothesis
FL	1st-2nd vs 3rd-4th	21.942	<.001	Reject null hypothesis
All	1st-2nd vs 3rd-4th	21.008	<.001	Reject null hypothesis

Table 2 presents the results of a paired t-test conducted to determine whether there was a statistically significant difference in the Science scores of Grade 5 learners before and after the implementation of the Standardized Teacher-Made Assessment (STeMA). The test compared scores from the 1st-2nd quarters (pre-intervention) with those from the 3rd-4th quarters (post-intervention) for both Acacia and FL sections, as well as the combined group.

For the Acacia section, the t-value was -16.21 with a mean difference of 20.69 and a p-value of <.001, indicating a highly significant improvement in scores. Similarly, the FL section showed a t-value of -15.94, a mean difference of 21.94, and a p-value of <.001, also confirming a significant increase in performance. When both sections were combined (All), the t-value was -20.83, with a mean difference of 21.01 and a p-value of <.001, further validating the effectiveness of the intervention.

In all cases, the null hypothesis (which assumes no difference in scores before and after the intervention) was rejected. This means that the improvement in scores was not due to chance, but rather a result of the STeMA intervention. The consistent and significant results across both sections demonstrate that STeMA was effective in enhancing students' academic performance in Science.

CONCLUSIONS AND RECOMMENDATIONS

The implementation of the Standardized Teacher-Made Assessment (STeMA) significantly enhanced the academic performance of low-performing Grade 5 learners in Science. By providing structured,

standards-based assessments, STeMA helped students become more familiar with test formats and encouraged active participation in remedial instruction. The marked improvement in learners' scores after the intervention demonstrates its effectiveness in addressing learning gaps. Based on these findings, it is recommended that STeMA be adopted in quarterly Science assessments for Grades 3 to 6. Additionally, validated regional standardized tests should be integrated into regular classroom practice to ensure consistency and reliability in assessment. Expanding the intervention to other subjects and grade levels may further support broader academic improvement. This research aligns with DepEd Order No. 8, s. 2015 and DepEd Order No. 36, s. 2020, which emphasize the importance of regular, balanced assessments in enhancing student learning outcomes.

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Traversing the New Normal: Information and Communication Technology (ICT) Literacy Among Seasoned Teachers

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INTRODUCTION

The shift to the "new normal" in education, accelerated by the recent global health crisis, has underscored the critical role of technology in the teaching-learning process (Akgün & Topal 2023). While Information and Communication Technology (ICT) offers a bridge to overcome physical distance, it also presents a significant challenge, particularly for seasoned educators who may not be as digitally native as their younger counterparts (Buabeng-Ando, 2022). The sudden transition to remote and blended learning has necessitated a rapid adaptation to various digital tools and platforms, revealing a pressing need to understand and address the ICT literacy levels of experienced teachers. This study aimed to explore the ICT literacy of seasoned teachers in Tandag City, focusing on their ability to integrate technology into their teaching practices.

This study employed a descriptive research design to analyze the ICT literacy, challenges, and acceptability of ICT integration among seasoned teachers in Tandag City. The research utilized quantitative data gathered through researcher-made and validated questionnaires with Likert-scale items to assess the teachers' ICT literacy, challenges, and their level of acceptability towards ICT integration (Baterna et al, 2020). The respondents of the study were 57 seasoned teachers from both public and private schools in Tandag City, selected through total population sampling. These teachers, with at least 20 years of teaching experience, provided a valuable perspective on their ICT

literacy and adaptability to the demands of the new normal in education. The study adhered to strict ethical protocols, ensuring the confidentiality of the respondents' identities and the honest presentation of the collected data.

DISCUSSION OF RESULTS

a. Struggles in Using ICT Applications

While seasoned teachers demonstrated proficiency in basic computer operations, they encountered significant challenges with more advanced ICT tasks. Tasks such as creating a simple webpage, converting file formats, and using video conferencing tools were identified as major struggles. This suggests that while foundational ICT skills are present, there is a clear need for training in more complex and collaborative digital tools that are essential for effective online and blended learning environments.

b. Level of Acceptability of ICT Integration

Despite the challenges they face, the seasoned teachers demonstrated a highly positive attitude towards the integration of ICT in the teaching-learning process. The overall mean score of 3.49 indicates a "Highly Acceptable" perception of ICT integration. Teachers strongly believe in the importance of learning to use computers in their lessons and are willing to learn more about relevant computer applications. This high level of acceptability is a crucial factor for the successful implementation of any ICT-related professional development program.

c. Level of ICT Literacy

The study revealed significant gaps in the ICT literacy of seasoned teachers, particularly in advanced applications. As shown in Figure 3, areas such as "Mobile Learning," "Web-Based Learning," and "Educational Networking" were categorized as "Not Mastered". Only "Classroom Equipment" was "Nearing Mastery," indicating a moderate level of competence in using basic classroom technology like projectors and interactive boards. These findings highlight the urgent need for targeted training to enhance teachers' proficiency in integrating advanced ICT into their instructional practices.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that while seasoned teachers in Tandag City are open and willing to integrate ICT into their teaching practices, there are significant gaps in their ICT literacy, particularly in advanced and collaborative tools. This discrepancy between their positive attitude and their actual skills highlights the urgent need for targeted and comprehensive professional development.

Based on these findings, it is recommended that the Department of Education (DepEd) implement targeted professional development programs focused on enhancing the ICT literacy of seasoned teachers. These programs should go beyond basic computer skills and focus on advanced applications such as mobile learning, web-based learning platforms, and educational networking. By investing in the upskilling of seasoned teachers, DepEd can ensure that all educators are equipped to effectively navigate the evolving educational landscape and create more engaging and dynamic learning environments for their students. This recommendation directly supports the goals of DepEd's.

National Educators Academy of the Philippines (NEAP), which is mandated to provide high-quality professional development for teachers and school leaders. Furthermore, this aligns with DepEd's

broader vision of integrating technology into the K-12 curriculum and fostering 21st-century skills among learners.

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Disclaimer:

This research bulletin is a condensed version of a full research paper of Mr. Ronel B. Cordovez. The findings and recommendations presented are based on the data collected and analyzed by the author. The views and opinions expressed in this publication are solely those of the author and do not necessarily reflect the official policy or position of the Department of Education or any other affiliated institution. To request a softcopy of this study, email at ronel.cordovez@deped.gov.ph.

Utilization of Structured, Developed, and Guided Note-taking Strategy in Science Classroom in the New Learning System

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INTRODUCTION

The COVID-19 pandemic significantly disrupted traditional classroom instruction, leading to challenges in student comprehension, especially in science subjects. At Jacinto P. Elpa National High School, Grade IX SPA students showed poor academic performance, with a mean percentage score of only 32.36% in the first quarter of SY 2020–2021. To address this, the researchers introduced iNOTE, a hybrid note-taking strategy combining Cornell Notes and Sketch Notes, aiming to enhance students' academic achievement in science.

This quasi-experimental study involved 60 Grade IX SPA students divided into two groups: the experimental group used the iNOTE strategy, while the control group followed traditional note-taking. Data were collected through pre-tests and post-tests on topics related to Organic Compounds. Ethical considerations included informed consent and validation of instruments by academic experts.

DISCUSSION OF RESULTS

The study investigated the effectiveness of the iNOTE note-taking strategy on the academic performance of Grade IX SPA students in science instruction. Results from the pre-test revealed that the experimental group had a mean score of 9.67, while the control group scored slightly higher with a mean of 10.47. After the intervention, the post-test scores showed a notable improvement, with the experimental group achieving a mean score of 21.0 compared to the control group's 19.7. A paired samples t-test yielded a p-value of 0.001, indicating a

statistically significant difference in performance between the two groups. This result supports the conclusion that the iNOTE strategy had a positive impact on students' academic achievement in science.

Summary of Results

Test Type	Experimental Group	Control Group
Pre-Test Mean	9.67	10.47
Post-Test Mean	21.0	19.7
Gain Score	+11.53	+9.03

The experimental group demonstrated greater improvement in academic performance, validating the effectiveness of the iNOTE note-taking strategy. Students who utilized iNOTE showed enhanced comprehension and retention, which can be attributed to the structured format of Cornell Notes and the visual reinforcement provided by Sketch Notes. These findings align with previous research indicating that organized note-taking systems, such as Cornell Notes, facilitate better information encoding and retrieval (Bellinger & DeCaro, 2019; Robinson, 2018). Moreover, visual note-taking has been shown to support learning by engaging students' creativity and catering to visual learning preferences (Evans & Shively, 2019).

CONCLUSIONS AND RECOMMENDATIONS

The iNOTE strategy significantly improved science comprehension among Grade IX SPA students. It is recommended for broader

application across subjects to support DepEd's Most Essential Learning Competencies (MELCs) and enhance student performance in modular and hybrid learning environments.

The integration of the iNOTE note-taking strategy aligns well with the Department of Education's Learning Recovery and Continuity Plan (LRCP), which aims to address learning gaps exacerbated by the COVID-19 pandemic. Specifically, the findings of the study support the enhancement of students' study habits and comprehension through structured and creative note-taking methods. This initiative complements the objectives outlined in DepEd Order No. 13, s. 2022, which provides implementing guidelines on the school calendar and activities, including the development and use of effective instructional materials. Furthermore, the iNOTE strategy can be incorporated into the enhancement of Self-Learning Modules (SLMs), ensuring that students are better equipped to process and retain information independently, thereby contributing to improved academic outcomes.

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Mapping Capacity: A Demographic-Based Evaluation of NSBI System Implementers in Tandag City for Strengthened ICT Support

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INTRODUCTION

Infrastructural development is essential for quality education. In the Philippines, DepEd uses the National School Building Inventory (NSBI) via the LIS-EBEIS system to monitor school infrastructure and guide planning and resource allocation (Anderson & Benner, 2019). While the system digitizes data entry on building conditions and facilities, challenges like usability issues, training gaps, and data reliability persist. Accurate infrastructure data is crucial for equitable education and is influenced by digital literacy, internet access, and institutional capacity. These factors highlight the need to assess user experience to improve system efficiency (Jones & Taylor, 2021).

This study aims to profile school personnel involved in NSBI implementation in Tandag City's public schools, focusing on school level, designation, years of service in DepEd, and NSBI experience. Understanding these demographics will help guide capacity-building efforts and policy improvements for more effective NSBI use (Magsino & Bautista, 2021). Employing a descriptive-evaluative quantitative research design, the study surveyed 129 personnel from 31 schools, including school heads, ICT coordinators, LIS coordinators, and administrative officers directly involved in NSBI encoding. A structured survey questionnaire was developed, validated by field experts, and pilot-tested to ensure reliability. The instrument collected data on demographic characteristics and ICT-related training backgrounds to assess the respondents' capacity and engagement with the NSBI system.

DISCUSSION OF RESULTS

Demographic Information

a. School level

The study revealed that the majority of NSBI system implementers in Tandag City came from elementary and integrated schools, comprising 32.6% and 21.7% of the respondents respectively. Junior High and Senior High levels followed with 17.0% and 13.9%, while a smaller portion represented combined JHS/SHS levels (9.3%) and other categories (5.43%). This distribution suggests that elementary and integrated schools are more actively engaged in NSBI encoding, possibly due to their larger student populations or more frequent infrastructure updates. Their significant representation highlights the importance of focusing support and training efforts on these school levels to enhance system implementation.

a. Respondents' Designation and Positions

Among the 129 respondents, the most represented positions were School Heads/Principals (24.0%), ICT Coordinators (20.2%), and LIS Coordinators (19.4%). Administrative Officers accounted for 14.7%, followed by Teacher-Encoders (10.9%), Physical Facility Coordinators (7.8%), and Project Development Officers (3.1%). This distribution indicates that leadership and technical roles are central to NSBI system implementation.

b. Years in Service in DepEd

The data showed that a substantial majority of respondents (65.2%) had served in the Department of Education for more than 10

years, reflecting a highly experienced workforce. Those with 4–7 years of service made up 21.7%, while 8.7% had 8–10 years, and only 4.3% had 1–3 years of service. No respondents had less than one year of experience. This long tenure suggests strong institutional memory and familiarity with DepEd systems, which are valuable assets in implementing and sustaining the NSBI system. The presence of seasoned personnel enhances the reliability and consistency of infrastructure data encoding.

c. Years in Using NSBI System

Experience with the NSBI system varied among respondents, with 43.4% having used it for more than five years, indicating a well-established user base. First-time users comprised 21.7%, while 17.5% had 3–4 years of experience and 17.4% had 1–2 years. This mix of experienced and new users reflects ongoing system adoption and turnover in personnel. While the experienced users contribute to operational fluency and data consistency, the presence of first-time users highlights the need for continuous onboarding and training to maintain system efficiency and accuracy.

d. ICT related Training Received

The majority of respondents had received foundational training, with 38.8% attending NSBI System Orientation and 28.5% participating in LIS/EBEIS Encoding Training. Basic ICT Skills Training was reported by 20.4%, while only 6.12% had undergone Intermediate or Advanced ICT Training. Another 6.12% had received no training, and notably, none had participated in DepEd's Tech4Ed program. This distribution reveals a significant gap in advanced ICT competencies among NSBI implementers. While foundational training is widespread, the lack of higher-level ICT training may hinder the ability of personnel to manage complex system tasks, especially in rural areas with limited technical support.

e. Implications of the Demographic and Professional Profile on NSBI Implementation Capacity

NSBI implementers in Tandag City are mostly experienced personnel from elementary and

integrated schools, with key roles like School Heads and ICT Coordinators ensuring data accuracy. While many have long service and system experience, only a few received advanced ICT training, revealing a skills gap. Targeted training based on user profiles is needed to improve system reliability and equity.

CONCLUSIONS AND RECOMMENDATIONS

The NSBI system in Tandag City is implemented by a highly experienced and engaged workforce, mainly from elementary and integrated schools. Most personnel have over a decade of service and significant experience with the system, contributing to reliable data encoding. However, limited access to advanced ICT training presents a skills gap, especially in rural areas, highlighting the need for ongoing and differentiated training. To improve NSBI implementation, the study recommends targeted capacity-building programs tailored to personnel roles and experience. These should include advanced ICT training, especially for key positions, and prioritize support for rural schools to enhance data accuracy and system reliability.

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This research bulletin summarizes the original study by Mr. Joel V. Cubio and is intended for academic reference. Findings are based on data from selected schools in Tandag City and may not reflect broader trends. For the full manuscript or inquiries, contact joel.cubio@deped.gov.ph.

The Role of Artificial Intelligence in Teaching and Administrative Tasks: Perspectives of DepEd Personnel

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INTRODUCTION

In recent years, Artificial Intelligence (AI) has become a powerful tool that is changing the way education works. AI offers new ways to improve how teachers teach and make school management easier (Dai & Wang 2024). Tools like Chat GPT, Grammarly, AI-based lesson planners, and chatbots can help teachers and school staff do their work faster and more effectively. These AI tools have the potential to make learning more personalized for students, help teachers save time, and support better decisions in schools. Here in the Philippines, the Department of Education (DepEd) is beginning to explore these tools to improve education and school management.

Clearly, AI in education brings both opportunities and challenges. For DepEd teachers and staff, it's important to learn about and adapt to these new tools so they can be used effectively in the classroom and in managing schools. This study hoped to understand the views of DepEd personnel about AI—how much they know, how often they use it, what benefits and problems they see, and what worries they have about ethics. The results helped create strategies to properly use AI in *Schools of Tandag City* and ensured that these technologies support the goal of giving quality education to all learners.

This study used a descriptive quantitative design to examine DepEd personnel's perceptions of AI in education. It enabled systematic data collection on current practices, attitudes, and experiences without altering variables, offering a broad view of AI

usage and challenges. A total of 174 DepEd personnel were selected through purposive sampling, including teachers, school heads, and administrative staff. Participants varied in age, gender, education, and years of service. Only active DepEd employees were included.

DISCUSSION OF RESULTS

Attitudes of DepEd Personnel towards the Future Use of AI in Education

Table 1. Distribution of Respondents on their Attitudes towards the future use of AI in Education

As shown in Table 1, DepEd personnel's attitudes toward the future use of AI in

Indicators	SA	A	N	D	SD
1. I would recommend AI tools to others.	14.4	55.7	26.4	1.7	1.7
2. AI-generated content (e.g., images, text) is as good as human-generated content.	9.2	43.1	35.6	9.8	2.3
3. I feel excited about the future advancements of AI.	12.1	50.6	31.6	4	1.7
4. AI tools are accessible and easy to use.	15.5	64.9	16.7	1.1	1.7
5. AI can improve healthcare and medicine.	4.6	35.6	39.1	15.5	5.2
6. I prefer human interaction over AI-powered chatbots or assistants.	16.7	43.7	34.5	3.4	1.7
7. I think AI should be used more in everyday life.	4.6	24.1	45.4	21.3	4.6

education varied across several indicators. The majority (55.7%, $n = 97$) agreed or strongly agreed that they would recommend AI tools to others, reflecting a generally positive view of AI's utility in education. Regarding AI-generated content, 43.1% ($n = 75$) believed that AI-generated content was as good as human-generated content, although 35.6% remained neutral, showing some hesitation about AI's quality in content

creation. When asked about the future advancements of AI, 50.6% (n = 88) expressed excitement, suggesting optimism for AI's evolving role in education. A larger proportion (64.9%, n = 113) agreed that AI tools were accessible and easy to use, aligned with research highlighting ease of adoption as critical for AI integration in education.

While AI's potential to improve healthcare and medicine was recognized by 62.1% (n = 108), 60% (n = 106) preferred human interaction over AI-powered assistants, reflecting concerns about AI's limitations in replicating human relationships. Finally, 45.4% (n = 79) were neutral about the increased use of AI in everyday life, while 24.1% (n = 42) agreed it should be used more often, indicating mixed feelings on AI's broader integration. Overall, while there was optimism about AI's potential, concerns about its practical application, quality, and balance with human interaction persisted, consistent with previous studies (Nguyen & Lee, 2020).

CONCLUSIONS AND RECOMMENDATIONS

The study concluded that DepEd personnel generally have a positive outlook on the integration of Artificial Intelligence (AI) in education. Most respondents were familiar with AI tools and recognized their potential to enhance creativity, innovation, and productivity. ChatGPT was the most widely used tool, although many reported using AI only occasionally. A significant gap was identified in formal training, with the majority lacking exposure to AI-related seminars or workshops.

Despite the optimism, concerns about job displacement, data privacy, and trust in AI-generated content were prevalent. Many respondents still preferred human interaction over AI-powered systems. These findings highlight the need for targeted professional development programs that focus on practical applications, ethical considerations, and data security. The study recommends continuous research and inclusive strategies to ensure responsible and effective AI integration in education, aligned

with the diverse needs of educators and learners.

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An Inquiry in the Implementation of Catch-up Fridays on Reading Proficiency

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INTRODUCTION

The Department of Education (DepEd) launched the Catch-Up Fridays initiative in response to the Philippines' low literacy ranking in the 2022 PISA results. This program dedicates Fridays to reading-focused activities such as *Drop Everything and Read (DEAR)*, aiming to address challenges like multilingualism, low parental involvement, and inadequate teacher-student ratios (Abril et al, 2022). In Tandag City, where functional literacy scores were below 50%, the program sought to improve foundational reading skills among elementary learners.

The study employed a *mixed-method explanatory sequential design*, combining quantitative surveys and qualitative interviews. Respondents included school heads, reading coordinators, and English teachers from elementary schools in Tandag City, selected via stratified random sampling using Cochran's formula. Ethical standards were upheld through informed consent, data privacy, and voluntary participation.

DISCUSSION OF RESULTS

a. Learner Participation

The implementation of Catch-Up Fridays in Tandag City has shown a high level of learner engagement in reading activities. Students actively participated in sessions, expressed enjoyment, and demonstrated increased confidence in their reading abilities. They collaborated well with peers and sought guidance from teachers, indicating a supportive learning environment. Although attendance was slightly lower than expected,

the overall response from English teachers, reading coordinators, and school heads was overwhelmingly positive, with grand means around 3.11, reflecting strong agreement on the effectiveness of the program in enhancing learner participation.

b. Resources

The availability and quality of resources used during Catch-Up Fridays were rated favorably by all stakeholders. Schools provided sufficient reading materials, access to technology, and supplementary tools such as charts and posters. The classroom environment was conducive to reading, and efforts were made to cater to diverse reading levels. However, some areas for improvement were noted, particularly in the regular updating of materials and communication regarding resource availability. Despite these minor concerns, the overall perception was that resources significantly supported the program's goals, with grand means averaging 3.12.

c. Teacher Training Support

Teachers received substantial support through professional development programs focused on reading instruction. Training sessions covered effective strategies, classroom management, differentiated instruction, and the integration of technology. Teachers felt equipped to assess individual student needs and adapt their teaching accordingly. While most indicators received high ratings, some school heads noted slightly lower scores in training related to student assessment. Nonetheless, the overall grand mean of 3.14 indicates that teacher training was a strong component of the program, contributing to its success in improving reading proficiency.

d. Administrative Support

Administrative support played a crucial role in the successful implementation of Catch-Up Fridays. School leaders actively promoted the program, allocated time and resources, and provided logistical assistance. Policies and guidelines were in place, and administrators encouraged collaboration among teachers. Feedback mechanisms were established to ensure continuous improvement. Although external stakeholder engagement and funding prioritization received slightly lower ratings, the overall grand mean of 3.17 reflects strong administrative commitment to the program's objectives.

e. Community Partnership and Engagement

Community involvement was a standout feature of the Catch-Up Fridays initiative. Parents, local businesses, libraries, and community leaders actively supported the program through resource contributions, advocacy, and participation in literacy events. Partnerships enhanced the availability of reading materials and created a culture of reading beyond the classroom. While volunteer participation and event organization could be strengthened, the overall grand mean of 3.20 highlights the significant role of community engagement in fostering reading proficiency among learners.

CONCLUSIONS AND RECOMMENDATIONS

The Catch-Up Fridays program is effectively implemented across Tandag City, with strong support from educators, administrators, and the community. It fosters student engagement, improves foundational reading skills, and promotes a culture of literacy.

To further enhance the effectiveness of the Catch-Up Fridays program, it is recommended that the Department of Education strengthen its alignment with existing policies, particularly DO 013, s. 2023, which supports the National Reading and Mathematics Programs. Adequate funding should be allocated to ensure the availability of essential reading materials and technological resources that support diverse

learning needs. Continuous professional development must be provided to teachers, focusing on differentiated instruction and gamified strategies that foster engagement and improve reading outcomes. Expanding partnerships with libraries, local businesses, and community organizations will help sustain the program and enrich its resource base. Lastly, implementing standardized tools for monitoring student progress will ensure consistent evaluation and data-driven improvements in reading proficiency across schools.

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Exploring the Impact of Social, Psychological, and Environmental Factors on Secondary Learners' Poor Numeracy Achievement

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INTRODUCTION

Poor numeracy achievement among Filipino secondary learners has become a pressing concern, especially following the country's low performance in the 2018 PISA assessment. The study by Abeysekera investigates the underlying social, psychological, and environmental factors contributing to this issue. The research aims to identify how family dynamics, peer relationships, self-esteem, and learning environments affect students' numeracy skills and academic success.

The onset of COVID-19 pandemic made it worse on the part of the learners. The shift to modular distance learning from the usual face to face interactions made it more challenging especially to our young learners.

Several numeracy assessments were conducted to elementary and secondary learners to determine their numeracy level. Results revealed that majority of them failed to master the basic numeracy skills that must be mastered in the elementary leading to a growing concern about their mathematics achievement in later years.

Using a descriptive survey design, the study focused on Grade 7 learners identified as non-numerates in five public secondary schools in Tandag City. A total of 164 respondents participated. Data were collected through a researcher-made questionnaire and analyzed using frequency counts, percentages, Likert scales, and inferential statistics. Ethical considerations such as informed consent and confidentiality were strictly observed.

DISCUSSION OF RESULTS

Results of the survey conducted at the beginning of the school year showed that teachers in Surigao del Sur Division experienced "very challenging" tasks in the delivery of quality assessment. 47% of teachers reported experiencing "very challenging" tasks in the delivery of authentic performance assessments to measure learners' understanding. Since there was an absence of face-to-face interaction between teachers and students in distance learning, 30.4% of teachers claimed that it was very difficult to design and deliver authentic performance tasks to learners.

Moreover, 18.5% of teachers reported that provision of a wide range of assessment tools to learners and the development of flexible assessment tools in distance learning delivery was "difficult."

Through a thematic approach, teachers were able to develop performance assessments. PAG-ASA originally followed 15 steps during the pilot implementation, however, adjustments and revisions were done after evaluation of the processes. Feedbacks of teacher-developers from focused group discussions and document analysis resulted in trimming down from 15 steps to 12 steps. The following are the steps:

1. Review the most essential learning competencies, content standards, and performance standards.
2. Identify common grounds among learning contents and tasks.
3. Think about where the contents and tasks can be experienced in real life.
4. List down the possible learning experiences.

5. Determine and agree on the themes.
6. Group the learning areas with learning experiences that naturally flow with the theme.
7. Connect the learning experiences to thematic experiences.
8. Decide on specific activity/ies for learners to do.
9. Prepare authentic performance guide sheets for learners.
10. Develop general and specific scoring rubrics for authentic performance.
11. Assure the quality of authentic performance guide sheets and scoring rubrics.
12. Pack the authentic guide sheets for learners.

To ensure that challenges of teachers during the start of the school year were addressed, a year-end survey was conducted, and the results provided promising findings in the delivery of assessment. The results showed a reduction from 47% to 16.41% of teachers experiencing “very challenging” tasks in the delivery of authentic performance assessments to measure learners’ understanding. During the random interview, teachers claimed that the provision of capacity building and mentoring sessions on the development of theme-based assessment reduced the challenges they experienced in the delivery of authentic performance assessment to measure learner’s understanding.

According to teachers during the interview, since thematic assessment provided a wide range of assessment tools to learners, they found it helpful in ensuring that learners are given the tasks to freely show their knowledge, skills, and values in the targeted outputs. This was evidenced through a reduced percentage from 18.5% to 3.15% of teachers experiencing difficulties in providing a wide range of assessment tools.

Lastly, interviews from teachers revealed that thematic assessment provided flexible

assessment tools to learners since learners are allowed to choose experiences within their homes and their communities and transform these experiences into tangible

outputs and products. From 30.4% of teachers claiming difficulties in designing and delivering flexible assessment materials, the year-end survey closed a decreasing 21.14%.

CONCLUSIONS AND RECOMMENDATIONS

This study showed gaps and challenges encountered by teachers in delivering quality assessment in distance learning were addressed by PAG-ASA intervention. The thematic assessment helped teachers design authentic assessment that measures learner’s understanding of the competencies. The thematic assessment also reduced the number of performance tasks designed by teachers and the number of outputs required for learners since learning area requirements are merged.

To make assessment better in distance learning, schools must innovate varied thematic assessment methodologies to ensure quality delivery of authentic assessment to diverse learners. Teachers must also design varied thematic assessment materials that will provide options/choices for learners suited to their capacity/proficiency level.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Mr. Correos and supplements his research presentation during the Virtual Research O’clock last September 1, 2021 under the topic, “Assessing Learners in Distance Education”. To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.

USING QR CODE-BASED ATTENDANCE MONITORING SYSTEM TO IMPROVE DAILY ATTENDANCE OF GRADE 10 LEARNERS AND FEEDBACK MECHANISM TO PARENTS

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INTRODUCTION

Absenteeism, tardiness, and cutting classes have long been a concern at Mainit National High School and other schools that contributed to poor academic performance. These issues were most prevalent in Basic Education Curriculum (BEC) sections, prompting concern from teachers and parents. The school's SIP identified attendance as a priority area, aligning with DepEd Order No. 8, s. 2015, which mandates academic penalties for excessive absences. To address this, the researchers implemented a QR Code-Based Attendance Monitoring System to improve student accountability and strengthen parental engagement.

The study aimed at identifying the effectiveness of QR Code-Based Attendance Monitoring System in alleviating Absenteeism, tardiness, and cutting classes and determine if there is a significant difference on the performance of the learners. The study employed a one-group pretest-posttest quasi-experimental design involving 176 Grade 10 students from STE, SPA, and BEC sections. Data on grades, absences, and tardiness were collected before and after the intervention. Ethical protocols included informed consent and administrative approval. The system featured QR code scanning for real-time attendance, automated SMS alerts to parents, and dashboards for teachers to monitor trends and intervene promptly.

FINDINGS / RESULTS AND DISCUSSION

The implementation of the QR Code-Based Attendance Monitoring System at Mainit National High School yielded significant improvements in student attendance, punctuality, and academic performance. The system's integration of real-time QR scanning and automated SMS alerts to parents created a culture of accountability and transparency among Grade 10 learners.

Table 1. Academic Performance Before and After the Intervention

Program	1st Quarter Grade	2nd Quarter Grade
STE	91.61	92.75
SPA	88.86	90.27
BEC	83.98	85.21

Table 1 shows that students in all program classes—STE, SPA, and BEC—showed notable gains in their grades between the first and second quarters. STE students consistently performed best, with average grades rising from 91.61 to 92.75. SPA students improved from 88.86 to 90.27, while BEC students, who initially had the lowest scores, increased from 83.98 to 85.21. These improvements suggest that better attendance and punctuality, supported by the QR system, positively influenced learning outcomes.

Table 2. Extent of Absenteeism and Tardiness Before and After the Intervention

Program	Absences (Q1 → Q2)	Tardiness (Q1 → Q2)
STE	0.08 → 0.00	0.04 → 0.00
SPA	0.71 → 0.08	0.68 → 0.16
BEC	3.67 → 2.05	5.63 → 3.33

The use of QR Code-Based Attendance Monitoring System effectively reduced absenteeism and tardiness across all sections as reflected in Table 2. STE students achieved perfect attendance and punctuality in the second quarter. SPA students reduced their absences from 0.71 to 0.08 and tardiness from 0.68 to 0.16. BEC students, who had the highest rates of absenteeism and tardiness, showed substantial improvement—absences dropped from 3.67 to 2.05, and tardiness from 5.63 to 3.33.

Further, using the Wilcoxon Signed Ranks Test, researchers found statistically significant improvements in grades, absences, and tardiness between the first and second quarters. The effect sizes were large: Grades: $r = 0.73$, Absences: $r = 0.83$, Tardiness: $r = 0.84$. These results confirm that the intervention had a meaningful and transformative effect on student behavior and academic outcomes.

As to significant relationship between students' second quarter grades and their number of absences using Spearman's rho correlation test, the analysis reveals a correlation coefficient of -0.858 with a p -value of 0.000 , indicating a significant and strong negative correlation. This means that students' grades tend to decrease as absences increase—and vice versa.

CONCLUSION AND RECOMMENDATION

The QR Code-Based Attendance Monitoring System significantly improved attendance, punctuality, and academic

performance among Grade 10 students. The system fostered student accountability and strengthened school-home communication through real-time SMS alerts. Sections with previously high absenteeism and tardiness—particularly in the BEC program—showed marked improvement.

Recommendations:

- Expand the QR Code system school-wide to division-wide to promote discipline and academic excellence.
- Align implementation with DepEd's Digital Rise Program and SDG No. 4 (Quality Education) to modernize school operations and promote inclusive learning.
- Division-wide utilization of the QR Code-Based Attendance Monitoring System.

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OPTIMIZING THE PERFORMANCE OF ICT-CSS GRADE 11 LEARNERS IN INTERPRETING BIOS ERROR BEEP CODES WITH ABBEG (ARDUINO-BASED BIOS BEEP ERROR GENERATOR)

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INTRODUCTION

Grade 11 students studying the ICT-CSS (Information and Communication Technology-Computer Systems Servicing) track are expected to have a basic understanding of computer hardware, including the BIOS (Basic Input/Output System). BIOS is an essential software component in personal computers that performs various hardware initialization processes. One way to identify any issues with the hardware initialization process is by interpreting the BIOS beep codes. Interpreting BIOS beep codes is essential for troubleshooting hardware issues in personal computers. However, learners often find it challenging to master the different beep codes from various BIOS manufacturers.

Among the Grade 11 and Grade 9 ICT-CSS learners of Claver National High School in the school year 2022-2023, configuring BIOS, specifically the interpretation of BIOS error beep codes in troubleshooting computer faults, has been identified as one of the least learned competencies. Out of 54 Grade 9 learners, 32 or 60 percent of the total population failed to reach mastery of the competency. 35 or 63 percent of the total 56 Grade 11 learners also struggled to master competency. This prompted the researchers to conduct action research using ABBEG (Arduino-based BIOS Beep Error Generator) to improve the learners' performance.

This action research employed a quasi-experimental design involving 54 Grade 11

ICT-CSS learners randomly assigned to control and experimental groups. Additionally, the study aims at identifying the performance level of the learners and the significant difference on the performance level of the participants before and after the intervention. Ethical clearance was secured from school authorities, and all participants were informed of the study's purpose and procedures.

FINDINGS / RESULTS AND DISCUSSION

Table 1 highlights key differences in performance between the control and experimental groups in three main areas: accuracy of BIOS beep code interpretation, troubleshooting process, and consistency in performance. The accuracy of interpretation shows a significant improvement in the experimental group, which scored an average of 96.2 compared to 81.7 in the control group. This 14.5-point increase suggests that learners using the Arduino-Based BIOS Beep Error Generator (ABBEG) were better equipped to recognize and diagnose BIOS beep codes accurately.

Table 1. Performance Level of the Learners
Before and After the Intervention

Group	Mean ($\bar{X}$)	Standard Deviation (SD)
Control	81.7	10.5
Experimental	96.2	7.8

Further, a t-test revealed a statistically significant difference ($t = -5.65$, $p < 0.001$), confirming ABBEG's effectiveness.

REFLECTION AND SUSTAINABILITY

The study concludes that ABBEG significantly enhances learners' ability to interpret BIOS error beep codes, improving both accuracy and consistency. The intervention provides a practical, technology-driven approach to teaching computer hardware diagnostics.

With the findings of the study, it is highly recommended to integrate ABBEG into the ICT-CSS curriculum across schools offering the strand, disseminate findings through SLAC sessions and division-level presentations to encourage adoption in other schools. It is also recommended to use ABBEG as a preparatory tool for TESDA NC II certification and align implementation with DepEd's ARAL Program, which promotes remediation and mastery of foundational skills in technical-vocational education.

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UTILIZATION OF POWERPOINT-BASED JEOPARDY GAME TO ENHANCE THE COMMUNICATION SKILLS OF SHIELDED METAL ARC WELDING (SMAW) STUDENTS

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“Needs Improvement” (control: 1.87,

INTRODUCTION

The COVID-19 pandemic disrupted education, particularly affecting communication skills among Grade 11 Shielded Metal Arc Welding (SMAW) students at San Francisco National High School. The shift to modular distance learning led to a decline in Oral Communication grades from 83.50% in 2019–2020 to 78.65% in 2022–2023, with students struggling in grammar, vocabulary, and pronunciation. This study aimed to evaluate the effectiveness of a PowerPoint-based Jeopardy Game in improving these skills. It addressed two questions: What is the communication performance level of SMAW students? and is there a significant difference in performance before and after the intervention?

The study used a quasi-experimental design with fifty (50) Grade 11 SMAW students, clustered into control group with 25 students exposed to traditional teaching and experimental group with 25 students subject to the intervention - Jeopardy Game. Conducted in Surigao del Norte, data were collected using pretests, posttests, and rubrics assessing accuracy, organization, delivery, vocabulary, responsiveness, and cooperative work. Mean and ANCOVA analyzed quantitative data, while ethical measures ensured informed consent and confidentiality.

FINDINGS / RESULTS AND DISCUSSION

Both groups initially showed low communication performance, scoring

experimental: 1.78) on pretests across assessed categories. Post-intervention, the experimental group, using the Jeopardy Game with 20 questions across five categories, achieved an “Excellent” mean score of 3.39, compared to the control group’s “Satisfactory” score of 2.97. The game enhanced grammar, vocabulary, and pronunciation through group-based, interactive exercises.

Table 1. Communication Performance Before and After Intervention

Group	Pretest (Mean Interpretation)	Posttest Mean (Interpretation)
Control	1.87 Needs Improvement	2.97 Satisfactory
Experimental	1.78 Needs Improvement	3.39 Excellent

ANCOVA results confirmed a significant performance difference ($p\text{-value} = 0.000 < 0.05$), with the Jeopardy Game driving improvements. The pretest had no significant effect ($p\text{-value} = 0.945$), indicating the intervention’s direct impact. Table 1 shows the performance shift, with the experimental group excelling in clear delivery and precise vocabulary, supporting findings by Ariani (2022) on game-based learning. The findings also conforms to the findings in the study conducted by Paguay's (2021) wherein, the experimental group outperformed the control group in a computer game like Jeopardy, leading to a more effective strategy than conventional methods of

teaching English language acquisition. The experimental group's students were encouraged and entertained by the use of strategy of learning English through engaging instructional computer games.

REFLECTION AND SUSTAINABILITY

The PowerPoint-based Jeopardy Game significantly improved SMAW students' communication skills, fostering engagement and mastery in grammar, vocabulary, and pronunciation. This aligns with DepEd Order No. 34, s. 2022, supporting the return to face-to-face learning.

The research findings would serve as the basis on the creation and implementation procedures for the instructional development in teaching Oral Communication to the SMAW Senior High School students. Utilization of the intervention strategy "PowerPoint-based Jeopardy Game" to the instructional process to enhance communication skills is highly recommended as it was proven effective in the communicative learning instruction. Further, there is a need to integrate the Jeopardy Game into the Oral Communication curriculum, conduct Learning Action Cell sessions to train teachers on game-based strategies, and present findings at research congress to promote innovative teaching.

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Enhancing Students' Phil-IRI Results Through Modified Reading Hub Engagement

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INTRODUCTION

Reading is a fundamental skill that underpins all areas of learning. In the Philippine education system, the Philippine Informal Reading Inventory (Phil-IRI) serves as a diagnostic tool to assess students' reading proficiency, categorizing them into independent, instructional, and frustration levels. These assessments are crucial in identifying learners who require targeted support to meet grade-level expectations.

At San Roque National High School, a significant number of Grade 7 students were found to be performing at the frustration level in both word recognition and reading comprehension. This alarming trend prompted the need for an innovative and responsive intervention that could address the root causes of reading difficulties and foster a more engaging learning environment.

The Modified Reading Hub Engagement was conceptualized as a strategic response to this challenge. Unlike traditional reading programs that often rely on passive reading tasks, the reading hub offers a multisensory, interactive, and student-centered approach. It integrates phonics sound videos, flashcards, short story booklets with comprehension questions, and word games—all designed to stimulate interest, reinforce literacy skills, and build confidence among struggling readers.

This action research aimed to evaluate the effectiveness of the Modified Reading Hub in improving students' Phil-IRI results, while also exploring its impact on learners' motivation and attitudes toward reading. By creating a space that is both educational and

enjoyable, the intervention seeks to transform reading from a source of anxiety into a gateway for academic success and personal growth.

DISCUSSION OF RESULTS

The implementation of the Modified Reading Hub Engagement produced notable improvements in students' reading proficiency. Initially, all ten participants were categorized under the frustration level in both word recognition and comprehension. These learners struggled with decoding words, understanding texts, and maintaining interest in reading activities.

After several months of consistent engagement with the reading hub, post-test Phil-IRI results revealed a significant shift. All students progressed to either instructional or independent levels. Specifically, three students reached independent status in word recognition, and one achieved independence in both domains. The remaining learners moved to instructional levels, indicating substantial growth in their reading abilities.

This transformation was supported by both quantitative and qualitative data. The Phil-IRI scores showed statistically significant gains, while student feedback highlighted increased motivation, enjoyment, and confidence. Learners reported that the phonics videos helped them decode unfamiliar words, while flashcards and word games made vocabulary acquisition fun and memorable. The short story booklets provided meaningful reading experiences, and guided questions helped deepen

comprehension.

Teachers observed that students became more willing to participate in reading tasks, asked questions more frequently, and even began reading voluntarily during free time. The reading hub fostered a sense of ownership and pride in learning, which translated into improved classroom behavior and academic performance.

Moreover, the intervention promoted collaborative learning. Students engaged in peer mentoring, quizzed each other using flashcards, and shared their thoughts during book club discussions. This social dimension of reading helped reduce anxiety and build a supportive learning community.

The success of the Modified Reading Hub underscores the importance of contextualized, engaging, and inclusive literacy interventions. It demonstrates that with the right tools and environment, even the most reluctant readers can develop the skills and confidence needed to thrive.

REFLECTION AND SUSTAINABILITY

The implementation of the Modified Reading Hub Engagement has proven to be a transformative initiative in addressing the reading challenges faced by Grade 7 students at San Roque National High School. The intervention not only improved students' Phil-IRI scores but also positively influenced their attitudes toward reading. Learners who were previously categorized under the frustration level showed remarkable progress, with many advancing to instructional and independent levels. This shift highlights the effectiveness of a multisensory and interactive approach to literacy instruction.

The reading hub created a safe and stimulating environment where students could explore reading through phonics videos, flashcards, story booklets, and word games—tools that catered to diverse learning styles and helped build confidence.

Moreover, the collaborative nature of the activities fostered peer support and strengthened classroom relationships. Teachers observed increased participation, enthusiasm, and a willingness among students to engage in reading tasks beyond the classroom. These outcomes affirm that when reading is made enjoyable and accessible, learners are more likely to develop the skills and motivation necessary for academic success. The experience also emphasized the importance of continuous monitoring, stakeholder involvement, and adaptability in sustaining literacy programs. Moving forward, the reading hub stands as a model for inclusive and responsive education, capable of being replicated and scaled to benefit more learners across different contexts.

Here are some sustainability strategies:

1. Institutionalizing the Reading Hub
2. Monthly Literacy Activities
3. Capacity Building for Teachers
4. Community and Stakeholder Engagement
5. Monitoring and Evaluation
- 6.

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Efficiency and Practicability of Online-based Examination System in the Division of Surigao del Sur

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INTRODUCTION

Most schools today are migrating to technology-mediated assessments to reduce paper consumption, minimize time-consuming test reproduction, and enable faster collection and analysis of data.

While the traditional paper-and-pencil test remains applicable at present, it poses disadvantages in terms of efficiency in generating results. In the Division of Surigao del Sur, the conduct of the unified quarterly assessment in Grades 3, 6, 10, and 12 required considerable time for schools to prepare, administer, and report assessment results. Generating and reporting assessment data alone took an average of 25 calendar days to complete. However, according to DepEd Order No. 34, s. 2022, assessment results must be reported within 15 days after the conduct of the quarterly assessment.

Furthermore, the Philippine Professional Standards for Teachers (PPST), as mandated by DepEd Order No. 42, s. 2017, emphasizes that feedback from assessment results must be both timely and relevant. Thus, generating and reporting assessment data must be carried out efficiently so that teachers can design timely and appropriate remediation based on least-learned competencies, and schools can craft intervention plans for low-performing learning areas. Any delay in generating and reporting assessment data consequently delays the formulation of relevant plans and strategies to address learning gaps.

The development of an online-based assessment system aims to reduce test production and printing costs, maximize efficiency, and ensure a cost-effective test administration and reporting process. Hence, this research was conducted.

DISCUSSION OF RESULTS

Resources Expended. The implementation of online-based tests completely eliminates the use of paper in the conduct of examinations, as test questionnaires are converted into Google Forms that students can answer online. Instead of relying on paper, printers, and risographs, internet-connected computers, tablets, and laptops are utilized for test preparation, administration, review, and data reporting. Consequently, this maximizes the use of school-based technologies.

Time Expended. In the preparation of test materials, soft copies of the Grade 12 examinations were utilized and converted into Google Forms. Accordingly, 30 minutes were allocated for every subject to be tested. With a total of 17 core, applied, and specialized subjects, the overall time spent in preparing the Google Forms amounted to 510 minutes, or 8.5 hours.

During the conduct of the test, each subject was allotted one hour of test-taking time. The implementation was divided into two days: the first day was designated for core subjects, while the second day was for applied and specialized subjects. With an average of eight subjects per semester for Grade 12, based on standardized subject loading, students were given a total of eight hours to complete their exams.

Scores were generated in real time as soon as students submitted their exam forms. This marked an improvement over the system initially implemented during the pilot phase, as it allowed students to receive immediate feedback on their scores. Furthermore, a spreadsheet containing all student scores was made available in real time, enabling teachers to monitor submissions and record scores for

grading and data analysis.

Preparation of Test Materials: Practical and Time Saving. The implementation of the online-based assessment system offers practicability, as schools no longer need to print bulk copies of test materials, resulting in more efficient preparation from reproduction to the packaging of test materials.

Implementation of the Test: Easy and Unique. The implementation of the online-based assessment system was considered by teachers and school heads as convenient, since the total elimination of paper-and-pencil tests allowed schools to focus on planning strategies for scheduling and grouping learners.

Generating and Reporting of Test Results: Real-time and Reliable. The implementation of the online-based assessment system was regarded by school heads and teachers as fast and reliable, as it provided a real-time dashboard that enabled teachers to monitor student submissions and track their scores.

The challenges and possible adjustments can be done to improve the implementation of online-based testing. The challenges encountered primarily centered on students' vulnerability to cheating and the potential risk of system hacking. Given these vulnerability issues, control points were maximized during the system's development.

In support of the study of Harmon et al. (2010), cheating in online-based tests can be minimized through various strategies, such as: (1) using multiple versions of a test so that students do not receive identical questions, (2) randomizing both question order and response options, (3) avoiding the reuse of identical questions from previous semesters, and (4) strengthening proctor vigilance. These measures can further reinforce the authentic implementation of the online-based assessment system.

The challenges identified in this study serve as the basis for addressing gaps and improving the system to ensure its smooth and effective implementation.

CONCLUSIONS AND RECOMMENDATIONS

The use of online-based assessment is both efficient and practical, as it saves time and resources in the preparation, administration, and generation of test results. It also supports schools in conducting faster analyses and ensuring the reliability of assessment data. Moreover, it represents a promising practice in embracing the digitization of assessment processes.

However, implementing the system on a wider scale poses vulnerabilities to cheating and hacking. To mitigate these potential drawbacks, it is recommended that the online-based examination system be implemented at the school level. School-based implementation is considered the most viable approach, as it allows for greater control over issues and other possible online-related concerns.

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This Research Bulletin is an abridged version of the full manuscript of Mr. Correos and supplements his research presentation during the Virtual Research O'clock last September 1, 2021 under the topic, "Assessing Learners in Distance Education". To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.

Audio Lessons in Regular Classes in the Division of Surigao del Sur

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INTRODUCTION

The shift to distance learning during the COVID-19 pandemic prompted the creation of audio lessons as part of Radio-Based Instruction (RBI) to ensure educational continuity in areas with limited digital access, such as Surigao del Sur. However, with the return to in-person classes, these materials risk being underutilized despite significant investments by the Department of Education (DepEd). This study aimed to evaluate the efficacy of repurposing these audio lessons for regular classroom settings to enhance student engagement and performance. The research questions focused on assessing the effectiveness of RBI materials during distance learning, their impact in traditional classrooms, and the challenges and best practices for their implementation.

The study adopted a mixed-methods approach, combining quantitative and qualitative methods. Data were collected from 60 Grade 11 students (30 in a control group using traditional methods and 30 in an experimental group using audio lessons) and 36 teachers across six secondary schools in Surigao del Sur (Carrascal, Madrid, Anibongan, Barobo, Tagbina, and Hinatuan). Quantitative data included pre- and post-test scores in Earth and Life Science, Oral Communication, and General Mathematics, analyzed using t-tests. Qualitative data were gathered through semi-structured interviews with ten RBI implementers and focus group discussions with teachers, analyzed thematically. Ethical considerations included informed consent, participant anonymity, and compliance with the Data Privacy Act.

DISCUSSION OF RESULTS

The study addressed several research questions, with key findings summarized below:

The findings indicate that audio lessons significantly improved Mathematics performance, likely due to clear verbal explanations and step-by-step guidance. In Science and English, audio lessons were as effective as traditional methods, suggesting their potential as a supplementary tool. Challenges like production constraints highlight the need for better infrastructure and training.

CONCLUSIONS AND RECOMMENDATIONS

The study demonstrates that audio lessons are a viable, sustainable tool for enhancing classroom instruction, particularly in General Mathematics, where they significantly improved student outcomes. They foster inclusivity, support diverse learning needs, and align with curriculum goals, making them valuable for regular classrooms in resource-limited settings like Surigao del Sur.

To maximize their impact, DepEd should integrate audio lessons into the Learning Resource Management and Development System (LRMDS) under the Enhanced Basic Education Program. Recommendations include: (1) aligning audio lessons with the curriculum for subjects like Mathematics, (2) providing teacher training on interactive audio strategies, (3) investing in recording

equipment and dedicated production roles, and (4) establishing a monitoring system to refine materials based on feedback. These steps will ensure the sustained use of RBI materials, enhancing educational equity and outcomes.

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Improving Students' Participation in Answering Summative Assessments through Nearpod

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INTRODUCTION

In response to the COVID-19 pandemic, Madrid National High School shifted to modular distance learning, a method under the Department of Education's distance learning approach. While this allowed students to continue learning from home, it also presented challenges in assessment. Many students failed to submit answer sheets on time due to busy parents, misplaced materials, or lack of motivation.

To address these issues, the researcher introduced Nearpod, a digital platform aimed at improving student engagement and assessment efficiency. According to the Center on Response to Intervention (n.d.), progress monitoring is essential for tracking academic performance and evaluating instructional effectiveness.

In Grade 10 – Section Newton, 8 out of 31 students consistently missed deadlines for submitting answer sheets. Nearpod was implemented to help solve this problem. Compatible with Android and iOS, Nearpod allows teachers to create interactive lessons, conduct real-time assessments, and receive immediate feedback. It supports summative assessments and reduces reliance on paper-based tests, enabling teachers to adjust instruction based on student performance and participation.

By integrating Nearpod, teachers at Madrid National High School were able to enhance the assessment process, promote timely submission, and foster a more engaging learning environment despite the limitations of distance learning.

DISCUSSION OF RESULTS

The study explored the effectiveness of Nearpod in improving student participation in summative assessments during modular distance learning at Madrid National High School. Before the intervention, students faced multiple challenges that hindered the timely submission of assessments. These included lack of support at home, difficulty understanding the content, and low engagement with traditional paper-based modules. These issues were particularly evident among Grade 10 Newton students, where a significant number consistently failed to submit their assessments on time.

The introduction of Nearpod brought a notable shift in student behavior and engagement. As a digital platform designed to make learning interactive and accessible, Nearpod allowed students to complete online assessments, receive immediate feedback, and interact with content more dynamically. This helped address the previously identified barriers to participation. Students who had struggled with motivation and comprehension found the platform more engaging and easier to navigate, which contributed to improved submission rates.

The increase in participation was not only quantitative but also qualitative. Students reported feeling more involved in the learning process and appreciated the instant feedback provided by the platform. This feedback loop enabled teachers to identify misconceptions early and provide timely interventions, which is critical in a distance learning setup where face-to-face interaction is limited.

Moreover, students expressed positive

perceptions of Nearpod's impact on their learning. Many agreed that the platform helped them gain knowledge and skills more effectively, improved their attentiveness during assessments, and made communication with teachers more seamless. The accessibility of the platform—being compatible with most devices and requiring only basic internet connectivity—also contributed to its success, especially in a rural setting where technological limitations can be a concern.

While some students remained neutral about whether Nearpod directly improved their test scores, this was largely attributed to the time-bound nature of the assessments, which limited opportunities for external help or reference materials. Nonetheless, the overall sentiment was that Nearpod made the assessment process more transparent, organized, and student friendly.

Statistical analysis confirmed a significant improvement in participation levels after the implementation of Nearpod, reinforcing its effectiveness as an intervention tool. This outcome highlights the potential of integrating educational technology in addressing persistent challenges in remote learning environments.

In reflection, the study underscores the importance of adapting teaching strategies to meet students' evolving needs, especially in times of disruption like the COVID-19 pandemic. By leveraging tools like Nearpod, educators can foster a more inclusive, responsive, and engaging learning experience that supports both academic achievement and student well-being.

CONCLUSIONS AND RECOMMENDATIONS

Learners in this modular distance learning modality may have valid reasons for failing to submit their answer sheets on time. Whatever their reasons are, whether valid or invalid, genuine or fabricated, they will undoubtedly have an impact on their

academic performance and skill acquisition. The feedback, intervention, and reinforcement activities will be completed late if the teacher is unable to measure students' learning on time for some reasons, such as the possibility that they will not reach the proficient level. Furthermore, student achievement will suffer as a result.

Teachers, as second parents, subject teachers, or advisers, should meet the needs of students all the way through, not just halfway. As a result, attempts are made to provide actions to phases in the learning modality that are insufficient and suffice the desired strategy for them to advance.

According to the findings of this study, the use of Nearpod had to produce a positive result for other teachers to consider but it may not produce the desired results for everyone.

Teachers are encouraged to adapt and implement new practices that recognize both the art and science of learning. They recognize that the essence of education is a close relationship between a knowledgeable, caring adult and a confident, motivated child. They understand that their most important role is to get to know each student as an individual so that they can understand his or her unique needs, learning style, social and cultural background, interests, and abilities. (Lanier, Judith Taack)

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This Research Bulletin is an abridged version of the full manuscript of Mr. Ilogon and Ms. Ariate. To request a copy of their manuscript, send an email to ps.prd@deped.gov.ph.

Navigating Tomorrow: A Comprehensive Exploration of Senior High Students' Preparedness for Employment, Entrepreneurship, and Higher Education Opportunities

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INTRODUCTION

One key feature of Republic Act No. 10533, or the Enhanced Basic Education Act of 2013, is the introduction of Senior High School (SHS), covering Grades 11 and 12. SHS aims to equip students with essential knowledge, skills, and values for higher education, employment, or entrepreneurship.

The SHS program offers various tracks and strands tailored to students' interests and school resources. However, a report by the Philippine Chamber of Commerce and Industry (PCCI) claimed that early SHS graduates lacked job readiness, while DepEd Secretary Leonor Briones maintained they were prepared. These conflicting views highlight the need for evidence-based assessment of graduate readiness.

In Surigao del Sur, 88 out of 109 secondary schools offer SHS. Of these, 33 offer the General Academic Strand, 20 Humanities and Social Sciences, 10 Accountancy and Business Management, 15 STEM, and 72 Technical-Vocational-Livelihood.

A tracer study for SY 2023–2024 showed that 82.59% of SHS graduates pursued college, 6.3% sought employment, 1.53% aimed for middle-level skills, 1.18% chose entrepreneurship, and 8.2% were undecided. Despite high college enrollment, no study has yet assessed students' preparedness for their chosen paths. Thus, this research—*Navigating Tomorrow*—seeks to explore SHS graduates' readiness for employment, entrepreneurship, and higher education to inform future interventions and policy.

DISCUSSION OF RESULTS

This study examined the preparedness of 2,200 Grade 12 Senior High School (SHS) students in Surigao del Sur for three key curricular exits: employment, entrepreneurship, and higher education. Findings reveal that 60.14% of students are enrolled in the Academic track, indicating a strong preference for academic-oriented education, while 39.86% are in the Technical-Vocational-Livelihood (TVL) track. Within the Academic track, the Humanities and Social Sciences (HUMSS) strand is the most popular (38.17%), followed by General Academic Strand (GAS) at 34.39%, Science, Technology, Engineering, and Mathematics (STEM) at 20.86%, and Accountancy, Business, and Management (ABM) at 6.58%. In the TVL track, Home Economics leads with 38.20%, followed by Agri-Fishery Arts (28.85%), Industrial Arts (22.12%), and Information and Communication Technology (ICT) at 10.83%.

Across both tracks, higher education is the most preferred curricular exit, with 67.42% of Academic and 52.45% of TVL students planning to pursue college or further studies. This reflects a strong aspiration among SHS learners to continue their education beyond high school. In terms of employment preparedness, students rated themselves as "Prepared" with a mean score of 3.07, showing strength in attitude, social skills, and basic workplace competencies such as respectful service orientation, proper work attire, and adherence to safety protocols. However, gaps were noted in more advanced technical skills like machine operation, troubleshooting, and workplace problem-solving.

Entrepreneurial preparedness was rated as moderate, with a mean score of 2.89. While students demonstrated basic competencies in business planning and small business operations, scores ranging from 2.70 to 3.04 suggest the need for more robust training and practical exposure. On the other hand, higher education preparedness was relatively strong, with a mean score of 3.16. Indicators such as commitment to college goals, sustained motivation, and goal-setting were rated as “Highly Prepared,” reflecting students’ confidence in pursuing post-secondary education.

Statistical analysis showed no significant difference in overall preparedness between students in the Academic and TVL tracks ($p = 0.288$) or among academic strands ($p = 0.082$). However, a significant difference was found among TVL specializations ($p = 0.000092$), indicating that readiness levels vary notably across fields such as Agri-Fishery Arts, Home Economics, ICT, and Industrial Arts.

Qualitative data highlighted several challenges that hinder student preparedness across all exits. These include financial constraints, skills mismatch between academic training and labor market demands, limited access to career guidance and mentorship, low self-confidence and self-efficacy, and time constraints due to competing academic, personal, and work responsibilities. These findings underscore the need for targeted interventions to support SHS students in successfully navigating their post-secondary pathways.

CONCLUSIONS AND RECOMMENDATIONS

The study shows a strong preference for the Academic track among Grade 12 students, with HUMSS being the most popular strand, while Home Economics leads in the TVL track. Higher education is the most preferred exit across both tracks, indicating students’ aspirations for college or further studies. Students are generally prepared for employment, especially in attitude and

basic workplace skills, though technical competencies need improvement. Entrepreneurial readiness is moderate, with basic skills present but requiring further development. Preparedness for higher education is relatively strong, marked by high motivation and goal-setting. Challenges such as financial constraints, skills mismatch, limited career support, and low self-confidence affect readiness. Students emphasized the need to improve communication, time management, self-efficacy, critical thinking, and technical skills to better prepare for their chosen paths.

To better prepare Senior High School students for their chosen paths, it is recommended to conduct regular career guidance sessions in Grades 10 and 11 to support informed track and strand selection. Schools should enhance technical skills through workshops and work immersion, especially in areas like troubleshooting and machine operation. Core competencies such as communication, time management, and critical thinking should be integrated into daily lessons. Entrepreneurship initiatives within schools can offer practical experience in business planning and management. Lastly, partnerships with local government units, industries, and alumni can provide mentorship, career talks, and training to address skills gaps and boost student confidence.

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Craftopia (Crafty Eutopia): The Multi-Sensory Artistry Intervention to Improve Fine Motor Skills of Kindergarten Pupils

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INTRODUCTION

In early childhood education, the development of fine motor skills plays a pivotal role in preparing young learners for academic and daily life tasks. These skills—such as grasping, manipulating objects, drawing, and writing—are essential for fostering independence, confidence, and readiness for formal schooling. However, many kindergarten pupils face challenges in mastering these foundational abilities, which can hinder their overall learning progress and self-esteem.

At Bacolod Primary School, the Philippine Early Childhood Development (PECD) Checklist revealed that 11 kindergarten pupils exhibited delays in fine motor development, with 81.8% classified as “significantly delayed” and 18.2% as “slightly delayed.” These findings prompted the need for a targeted, engaging, and developmentally appropriate intervention.

The research titled “Craftopia (Crafty Eutopia): The Multisensory Artistry Intervention to Improve Fine Motor Skills of Kindergarten Pupils” was designed to address these developmental gaps. Craftopia is a teacher-crafted compendium of multisensory activities that integrate artistry, play, literacy, and numeracy. It includes activities such as clay dough modeling, paper mosaics, lacing, tracing, puzzle solving, and interactive games like “Hop, Read, and Write” and “Toy Car Racing.” These activities were implemented during designated play and remedial periods, with parental involvement through take-home tasks.

The intervention aimed not only to improve

fine motor skills but also to enhance learner engagement, creativity, and parent-child interaction. This study explores the effectiveness of Craftopia in transforming developmental delays into measurable progress, contributing to the broader discourse on inclusive and responsive early childhood education.

DISCUSSION OF RESULTS

The implementation of Craftopia over an eight-week period yielded compelling results. Prior to the intervention, none of the 11 participating pupils demonstrated average or advanced fine motor development. The majority were significantly delayed, struggling with tasks such as holding writing tools, drawing basic shapes, and performing self-care activities like opening containers or tying shoelaces.

Post-intervention data revealed a dramatic shift: 10 out of 11 pupils (90.91%) progressed to the “average development” category, while only one remained “slightly delayed.” This transformation highlights the effectiveness of Craftopia in addressing developmental challenges through structured, engaging, and multisensory learning experiences.

Statistical analysis using a paired t-test confirmed the significance of this improvement. The mean score increased from 2.09 to 11.18, with a t-value of 11.49 and a p-value of 0.004, indicating a statistically significant difference at the 0.05 level. These results validate the hypothesis that Craftopia has a measurable impact on fine motor skill development.

Beyond quantitative data, qualitative feedback from parents provided rich insights into the intervention's broader effects. A survey revealed that 91.82% of parents strongly agreed that Craftopia positively influenced their child's motor skills, confidence, and school engagement. Parents observed improvements in handwriting, drawing, and object manipulation, and reported increased enthusiasm for school activities.

Moreover, Craftopia fostered stronger parent-child relationships. Parents felt more equipped to support their children's learning and appreciated the opportunity to participate actively in their development. This collaborative approach reinforced the importance of home-school partnerships in early education.

The reflection on these outcomes underscores the value of integrating artistry and play into learning. Craftopia not only addressed developmental delays but also created a joyful, inclusive, and supportive learning environment that empowered both learners and their families.

REFLECTION AND SUSTAINABILITY

The success of Craftopia offers valuable lessons for educators, administrators, and policymakers. First, it demonstrates that early intervention—when tailored to the developmental needs and interests of young learners—can yield significant improvements in foundational skills. Second, it highlights the importance of multisensory and play-based approaches in fostering engagement and skill acquisition. Third, it affirms the role of parents as active partners in the educational process.

To ensure the sustainability and scalability of Craftopia, the following strategies are recommended:

1. Curriculum Integration- Embed Craftopia activities into the regular kindergarten curriculum, aligning

them with learning competencies in literacy, numeracy, and motor development.

2. Teacher Capacity Building- Conduct training workshops for kindergarten teachers across the district to familiarize them with the Craftopia framework and implementation strategies.
3. Parental Involvement Programs - Develop structured programs that encourage ongoing parental participation, including home-based activities, progress monitoring, and feedback sessions.
4. Monitoring and Evaluation Tools- Utilize the developed tracking forms and pupil portfolios to assess progress, identify areas for improvement, and ensure consistency in implementation.
5. Replication and Dissemination- Share the Craftopia model with other schools through research congresses, academic conferences, and journal publications. Explore opportunities for district-wide adoption.
6. Resource Mobilization- Secure funding through school MOOE, local government support, or educational grants to reproduce materials and sustain the intervention.

Craftopia has proven to be more than just an intervention—it is a transformative educational experience that nurtures creativity, confidence, and competence in young learners. With continued support and strategic planning, it can serve as a model for inclusive, responsive, and joyful early childhood education across the region.

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Contextualized Comic-Themed Booklet as Supplementary Material in Enhancing Hydrometeorological Hazard Literacy for Grade 11 Students at Hinatuan National Comprehensive High School

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INTRODUCTION

Extreme weather events and climate-related phenomena, like tropical cyclones, thunderstorms, tornadoes (or ipo-ipo), droughts, and floods, pose significant hydrometeorological hazards. These events are a serious threat to communities around the globe, especially for schools. Students must develop a deep understanding of these hazards, particularly in areas like Hinatuan, and Surigao del Sur, where natural disasters are becoming more frequent and severe in the Philippines. To help with this, a comic-themed booklet was created as a supplementary resource aimed at meeting the specific educational needs of students at Hinatuan National Comprehensive High School, ultimately fostering greater awareness and literacy about hydrometeorological hazards.

Existing literature highlights the effectiveness of visual learning tools, such as comic strips, in enhancing students' comprehension and retention of complex concepts. Kennepohl & Roesky (2018), stated that visual tools play a crucial role in conveying information effectively, particularly when integrated into meaningful learning contexts. Tatalovic (2019) emphasizes that comics, whether digitally presented or traditionally printed, resonate with the media preferences of the younger generation.

Despite the recognized benefits of using comics in education, there is a noticeable lack of targeted comic-themed materials specifically designed to teach hydrometeorological hazards within the

context of local disasters, such as tropical storm Sendong in 2012, which had a profound impact on the Hinatuan community.

DISCUSSION OF RESULTS

The comic-based booklet received a high weighted mean of 4.85, indicating it is highly acceptable among students and effective in enhancing hydrometeorological hazard literacy. Its alignment with curriculum goals and use of visuals and dialogues support better understanding through dual coding and cognitive load theories. The booklet promotes disaster preparedness and real-life application, guided by social cognitive and contextual learning theories. Overall, it proves to be an engaging and effective supplementary material for science education, confirming prior research on the educational value of graphic novels.

The comic-themed booklet also achieved a high overall weighted mean of 4.8, indicating it is "Highly Acceptable" as a teaching tool for hydrometeorological hazards. It was especially effective in engaging learners and clarifying content through visual-verbal integration, supporting Mayer's Multimedia Learning Theory. While it fosters autonomous and interactive learning aligned with Vygotsky's Social Constructivism, a slightly lower score in content alignment (4.6) suggests room for improvement in adhering closely to curriculum standards.

The students rated the visual effectiveness of the comic-themed booklet with a perfect

weighted mean of 5.0, highlighting its success in enhancing understanding and interest through well-balanced visuals and organized content. This supports the role of visual literacy in science education, as emphasized by Mayer (2009), and reinforces the value of comics in accommodating diverse learning styles. Consistent with Casumpang and Enteria's (2019) findings, the booklet demonstrates how comic-based materials can significantly improve scientific skills like inference and communication, particularly in environmental and hazard-related topics.

The comic-themed booklet significantly improved Grade 11 students' hydrometeorological hazard literacy at Hinatuan National Comprehensive High School, with scores rising from 53.44% to 89.24%, demonstrating its effectiveness in simplifying complex geophysical concepts. This aligns with previous studies, such as those by Syaflita et al. (2022), Yani et al. (2021), and Sujinah et al. (2023), which affirm the value of comics in making disaster education engaging, inquiry-based, and conducive to critical thinking. Overall, well-designed comic materials, especially those tailored to local contexts bridge theoretical learning with practical hazard awareness, making them powerful tools in science education.

The pre-test score of 53.44% showed that students had a basic understanding of hydrometeorological hazards, but with room for growth. After using the comic-themed booklet, a high normalized gain of 0.769 (Hake, 1999) confirmed its strong impact on improving student comprehension. This substantial increase highlights the booklet's effectiveness as a supplementary material in enhancing hazard literacy among Grade 11 students at Hinatuan National Comprehensive High School.

The paired samples test revealed a statistically significant improvement in students' hydrometeorological hazard literacy after using the Contextualized

Comic-Themed Booklet, with a mean difference of -17.90, a p-value of .000, and a 95% confidence interval that excluded zero. These results confirm the booklet's effectiveness as a reliable and impactful supplementary learning tool for enhancing student understanding of hydrometeorological hazards.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that the Contextualized Comic-Themed Booklet is a highly effective supplementary material for enhancing hydrometeorological hazard literacy among Grade 11 students at Hinatuan National Comprehensive High School. With a significant increase in post-test scores, a high normalized gain, and strong statistical results from the paired samples test, the booklet has demonstrated its capacity to simplify complex scientific concepts through engaging visual narratives. The results support Mayer's Multimedia Learning Theory and Vygotsky's Social Constructivism, confirming that the integration of images and texts fosters better comprehension, learner autonomy, and motivation.

The comic-themed booklet should be used regularly in science classes to improve student engagement and understanding. It makes lessons more enjoyable and easier to grasp. The booklet can also be used in community disaster education programs. This will help raise awareness and prepare people for real-life emergencies. It's simple and visual format makes information easier to remember and apply.

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Interactive Comic Engagement (I.C.E): Strategy to Improve Proficiency in the Least Learned Competency in Science 8

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INTRODUCTION

The Global Competitiveness Report (Schwab, 2018) consistently ranks the Philippines low in Math and Science education, indicating that many Filipino students underperform compared to their international peers. A key reason is the lack of mastery in learning competencies. Javier (2013) found that the spiral approach in science is poorly managed, especially in addressing learner competencies.

At Carrascal National High School, during the second quarter of SY 2022–2023, a specific Science competency was identified as the least learned among Grade 8 Mendel students. 14 out of 31 students scored below proficiency in the summative assessment, highlighting the need for remediation. Setyowati (2022) identified factors affecting scientific literacy, including lack of support, poor attitudes toward science, and limited use of media and materials.

Given the impact of instructional materials, comics have been shown to improve Science learning (Selvarajan & Vasantagumar, 2012; Casumpang, 2019). Comics use visuals and storytelling to enhance understanding and engagement.

Thus, this study explores the use of comics as an intervention tool to help Grade 8 students master their least learned competency. It aims to encourage Science teachers to develop visual materials like comic strips to improve student performance and deepen conceptual understanding.

DISCUSSION OF RESULTS

The implementation of the Interactive Comic Engagement (ICE) strategy demonstrated a notable improvement in the proficiency levels of Grade 8 Mendel students in their least learned Science competency: explaining how typhoons develop and how they are affected by landmasses and bodies of water. This intervention was designed to address the learning gaps identified in the second quarter of SY 2022–2023, where 45% of students were initially classified as below proficient, with a grand mean score (GMS) of 13.5 in the pretest.

Following the ICE intervention, the posttest results revealed a GMS of 15.7, which falls within the proficient range. The percentage of students who achieved proficient and highly proficient levels increased to 58% and 36%, respectively. This represents a 16% increase in overall performance, clearly indicating the effectiveness of the interactive comic as a learning tool.

The success of the intervention can be attributed to several key features of the ICE strategy. The comic format, which included cartoon characters and interactive dialogue, allowed students to engage more deeply with the content. Learners were not passive recipients of information; instead, they actively participated in the storyline by responding to prompts and questions embedded within the comic. This student-material interaction fostered active learning, increased motivation, and supported the development of independent learning skills.

These findings are consistent with prior research, such as Raiyn (2016), which

emphasizes the role of visual learning in enhancing conceptual understanding and higher-order thinking skills. Similarly, Sinco et al. (2020) highlighted that strategic intervention materials significantly improve posttest scores, reinforcing the value of well-designed instructional tools.

Despite the overall positive outcome, the study also noted that two students remained below proficient after the intervention. Their mean score of 12.4 suggests that while ICE was effective for most learners, it may not fully address the needs of students with deeper learning challenges. This underscores the importance of differentiated instruction and the need for further analysis to design more personalized interventions.

In light of these results, the researcher recommends the continued use of Interactive Comics as remediation materials, especially for students performing below proficiency. Moreover, conducting parallel studies across different Science topics and learner profiles could provide more robust evidence of the strategy's effectiveness. Such efforts may encourage teachers, curriculum developers, and school administrators to integrate interactive comics into broader instructional practices—not only for least mastered competencies but across the entire Science curriculum.

REFLECTION AND SUSTAINABILITY

The results of the study affirm the effectiveness of the Interactive Comic Engagement (ICE) strategy in improving student proficiency in the Science topic Understanding Typhoons. The intervention not only enhanced conceptual understanding but also fostered active participation, motivation, and independent learning among Grade 8 Mendel students. The comic's interactive format allowed learners to engage with the material in a meaningful way, making the learning experience more enjoyable and impactful.

Reflecting on the outcomes, it is evident that ICE can serve as a valuable remediation tool, especially for students who struggle with traditional instructional methods. The increase in posttest scores and the shift in proficiency levels demonstrate that integrating visual and interactive materials into Science instruction can bridge learning gaps and support mastery of competencies.

However, the study also highlighted that a few students did not meet the desired proficiency level, indicating that one-size-fits-all interventions may not be sufficient. This calls for further analysis of individual learning needs and the development of differentiated strategies to ensure that all learners benefit from the intervention.

To sustain the gains achieved through ICE, it is recommended that teachers and curriculum developers continue to explore and create interactive comics tailored to various Science topics. These materials can be used not only for remediation but also as supplementary resources in regular instruction. Moreover, conducting parallel studies across different grade levels and learner profiles will help validate the broader applicability of the strategy.

In the long term, the integration of interactive comics into the curriculum could promote a more inclusive and engaging learning environment. School administrators and education leaders are encouraged to support initiatives that develop and utilize such innovative materials, ensuring that students are equipped with the tools they need to succeed in Science and beyond.

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Developing a Safe and High-Quality School Activity in Lianga National Comprehensive High School through School Marshal Program

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INTRODUCTION

School plays a vital role in the intellectual, social, and emotional development of children and teens (Genari et al., 2022). For many students, it is the center of their daily lives, offering academic and extracurricular opportunities that contribute to their future success and well-being (Willms, 2003).

To support students during the pandemic, the Department of Education emphasized the importance of activities beyond the classroom, which have been shown to benefit students' physical and mental health (DepEd, 2022). LNCHS actively participates in these events to celebrate student achievements and promote educational excellence.

However, some students display behaviors that disrupt these activities, such as inattentiveness or skipping out. To address this, the School Marshal Initiative was launched. Student marshals are assigned to monitor attendance and ensure proper conduct during school events, helping maintain a safe and focused learning environment. This initiative also encourages student leadership and accountability, as marshals take an active role in supporting school-wide discipline. It reflects the school's commitment to creating a culture of responsibility and respect during all learning engagements.

This study explores how stakeholders perceive the program's effectiveness in promoting discipline and enhancing school activities. It also aims to guide other schools in implementing similar strategies. As Cobb (2021) notes, such initiatives provide valuable

insights for shaping policies that improve school safety and student engagement.

DISCUSSION OF RESULTS

The School Marshal Program at Lianga National Comprehensive High School (LNCHS) was introduced as a strategic response to recurring issues in school activities, such as lack of discipline, poor organization, and safety concerns. Prior to its implementation, both students and staff reported frequent disruptions during events, including inattentiveness, crowd control problems, and class cutting. These challenges not only compromised the quality of school programs but also placed additional stress on teachers and advisers.

The introduction of the School Marshal Program marked a significant shift in the school's approach to managing activities. By assigning trained student marshals from Grades 11 and 12 to oversee events, LNCHS was able to instill a sense of order, responsibility, and leadership among students. Marshals were tasked with ensuring attendance, maintaining discipline, assisting with venue preparation, and supporting ceremonial functions. Their presence helped reduce behavioral issues and created a more structured and respectful environment during school activities.

Stakeholder feedback revealed a strong consensus on the program's positive impact. Teachers noted improvements in student behavior and participation, while students expressed feeling safer and more engaged. The program also contributed to reducing class

cutting and enhancing the overall organization of events. Marshals played a key role in crowd control and emergency preparedness, which helped foster a sense of security among attendees.

Beyond logistical improvements, the program promoted student empowerment and leadership. Marshals were not only enforcers of discipline but also role models who demonstrated accountability and commitment to school values. Their involvement in planning and executing school events helped build a culture of cooperation and mutual respect.

Participants also emphasized the importance of sustaining and improving the program. Recommendations included regular training for marshals, clear guidelines and responsibilities, institutional support, and financial resources. These enhancements are seen as essential to maintaining the program's effectiveness and expanding its reach across all grade levels.

The reflections gathered from students, teachers, and school leaders highlighted the transformative effect of the School Marshal Program. It addressed long-standing issues in school activity management and created a safer, more organized, and inclusive environment. The program's success at LNCHS serves as a model for other schools seeking to improve the quality and security of their educational activities.

In conclusion, the School Marshal Program has proven to be a valuable initiative that not only improves school operations but also cultivates leadership, discipline, and a stronger sense of community among students. Its continued development and institutionalization will be key to sustaining its benefits and adapting to the evolving needs of the school.

CONCLUSIONS AND RECOMMENDATIONS

The School Marshal Program at LNCHS has proven to be an effective solution to long-standing issues in school activity

management. Before its implementation, school events were often disrupted by poor discipline, low participation, and safety concerns. Through the involvement of trained student marshals, the school successfully fostered a more organized, secure, and respectful environment.

The program not only improved the conduct of students during activities but also empowered marshals to take leadership roles, promoting accountability and teamwork. Stakeholder feedback affirmed the program's positive impact and emphasized the need for continued support, training, and institutional recognition to sustain its success.

The following are the recommendations:

1. Institutionalize the School Marshall Program
2. Provide Regular Training and Capacity Building
3. Develop Clear Guidelines and Roles
4. Ensure Administrative and Financial Support
5. Promote Inclusive Education
6. Monitor and Evaluate the Program Regularly
7. Strengthen Collaboration with Stakeholders

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The Relationship Between Adaptive Teacher Support and Student Engagement in School: A Basis for Learning and Development Program in Lianga District, Surigao del Sur Division.

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INTRODUCTION

This study explores the relationship between adaptive teacher support and student engagement in Lianga I District. It aims to provide insights for school leaders to improve engagement strategies. Adaptive teacher support refers to how teachers adjust their methods based on students' understanding, a practice shown to enhance learning (Hardy et al., 2019; Van de Pol et al., 2010; Wood et al., 1978).

Student engagement, vital for academic success, is influenced by personal and environmental factors (Fredricks et al., 2004). However, many students, especially in low-income areas, show declining interest in school (Balfanz & Byrnes, 2012; Finn, 1989), which affects their future prospects. In Lianga I, school leaders report high absenteeism, low test scores, and student disinterest.

Adaptive teacher support may be a key factor in reversing this trend. Research shows that targeted interventions can improve academic performance, behavior, and attendance (Appleton et al., 2008; Shernoff & Schmidt, 2008). Yet, more research is needed to identify the most effective approaches (Parsons et al., 2018).

This study will survey 353 elementary and secondary students, selected via Slovin's formula and stratified random sampling. Data will be collected using a validated instrument measuring perceptions of teacher support and analyzed through descriptive and inferential statistics.

Findings will inform strategies and policies to

enhance student engagement and educational outcomes in Lianga I District and similar contexts.

DISCUSSION OF RESULTS

The study revealed a strong presence of adaptive teacher support in Lianga District, with teaching strategies involving high levels of regulation receiving the highest ratings from students. These strategies were perceived as more responsive to students' learning needs, helping them navigate challenges more effectively. Overall, adaptive support was found to be more impactful than non-adaptive methods in fostering student engagement.

Student engagement was generally high across all measured dimensions – affective, behavioral, and cognitive. Among these, behavioral engagement, particularly in terms of effort and persistence, emerged as the most prominent. This suggests that students are actively participating in their learning tasks and are motivated to succeed. Affective engagement, which reflects students' emotional connection to learning, was slightly lower but still within a high range, indicating room for improvement in making learning more enjoyable and meaningful.

Statistical analysis confirmed a significant relationship between adaptive teacher support and student engagement. Notably, adaptive support with much regulation and non-adaptive support with little regulation had the strongest positive influence on students' interest in education. These findings suggest that both structured guidance and encouragement for independent learning play

important roles in maintaining student interest.

Regression analysis further highlighted that specific types of support—particularly adaptive support with much regulation and non-adaptive support with little regulation—significantly influenced students' interest in education. Other forms of support, while still relevant, showed less statistical impact, indicating that not all support strategies are equally effective.

These findings underscore the importance of tailoring teaching strategies to meet students' individual needs. They suggest that school leaders and educators should prioritize professional development programs that equip teachers with skills in adaptive support. By doing so, schools can create more engaging and supportive learning environments that promote sustained student interest and improved academic outcomes.

CONCLUSIONS AND RECOMMENDATIONS

Adaptive teacher support significantly influences student engagement and interest in education within the Lianga District. Educators demonstrate a strong preference for adaptive teaching strategies, and students show high engagement across affective, behavioral, and cognitive dimensions. The relationship between adaptive teacher support and cognitive engagement highlights its pivotal role in fostering positive outcomes. Adaptive support also positively affects students' interest in education, emphasizing the need for tailored strategies to enhance learning experiences.

To strengthen adaptive teaching practices, it is recommended to explore specific strategies through qualitative methods such as interviews and focus groups (Xerri, 2018). Interventions aimed at improving teacher support should be studied longitudinally to assess their impact on student engagement (Siddiqi, 2018). Customized interventions

aligned with teacher preferences should be prioritized for effective implementation (Johnson et al., 2014). Additionally, understanding the causes of varied engagement levels can guide holistic strategies to boost student motivation and participation.

In addition, a comprehensive Learning and Development Program is proposed for the Lianga District, aiming to leverage the identified connections between adaptive teacher support, student engagement, and students' interest in education to foster positive educational outcomes. The Learning and Development Program is as follows:

1. Adaptive Teaching Excellence
2. Student Engagement Enhancement
3. Monitoring and Evaluation Framework
4. Lifelong Love for Learning Initiative

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A Structural Equation Model on the Application of Total Quality Management in Relation to Caring Leadership, Organizational Citizenship Behavior, and Work Ethics of SBM Level 3 Schools of Surigao Del Sur Division

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INTRODUCTION

School-Based Management (SBM) and Total Quality Management (TQM) are strategic approaches that aim to enhance educational outcomes through leadership, stakeholder involvement, and continuous development. SBM decentralizes decision-making, empowering schools to manage resources and make decisions tailored to their specific needs. TQM, on the other hand, emphasizes service quality, stakeholder satisfaction, and a culture of continuous improvement (Pamatmat, 2016; Jonah, 2018).

Research supports the effectiveness of both approaches in driving school improvement and leadership development. However, implementation challenges remain. Issues such as poor leadership, limited delegation, resistance to change, and weak work ethics among staff often hinder progress (Oswald, 1995; Suleman & Gul, 2015; Talib et al., 2011). In some cases, SBM is perceived merely as a compliance requirement rather than a transformative strategy (DepEd CARAGA Region, 2020).

Despite these obstacles, SBM and TQM have demonstrated significant benefits. These include enhanced learning outcomes, empowered and committed teachers, improved student achievement, and stronger school leadership (Nir, 2002; Saputra, 2020). When effectively implemented, they contribute to a more responsive and accountable educational system.

This study explores the application of TQM in

relation to Caring Leadership, Organizational Citizenship Behavior (OCB), and Work Ethics within SBM Level 3 schools in the Surigao del Sur Division. It aims to assess the levels of these variables and examine their influence on TQM implementation, addressing the ongoing need for improved educational quality and leadership in public schools.

A quantitative, non-experimental, descriptive-correlational research design was used. Data were collected from 477 respondents across 11 SBM Level 3 schools using validated survey instruments. Ethical standards such as informed consent, confidentiality, and voluntary participation were strictly observed. Statistical analyses included mean, Pearson r, regression, and Structural Equation Modeling (SEM) to determine relationships and predictive influences among the variables.

DISCUSSION OF RESULTS

The study revealed that both School-Based Management (SBM) and Total Quality Management (TQM) are essential frameworks for improving school leadership, governance, and educational outcomes. SBM promotes decentralization and empowers school stakeholders, while TQM fosters continuous improvement and accountability.

However, several challenges hinder their effective implementation. These include poor leadership practices, limited delegation of authority, resistance to change, and lack of commitment among staff. Teachers' limited understanding of SBM and TQM principles, along with weak organizational citizenship

behavior, further complicate implementation efforts.

Despite these barriers, high-performing SBM Level 3 schools demonstrate that effective leadership, strong stakeholder engagement, and consistent application of quality management principles lead to improved student performance, teacher motivation, and overall school effectiveness. The role of the school head remains central in driving both SBM and TQM initiatives.

The findings also highlight the need for stronger support in operationalizing DepEd policies at the school level. Document analysis and discussions within the Surigao del Sur Division show that while policies exist, their practical application remains inconsistent. School-to-school partnerships, as mandated by DepEd Order No. 44, s. 2016, offer a promising strategy for sharing best practices and elevating the performance of aspiring SBM Level 3 schools.

CONCLUSIONS AND RECOMMENDATIONS

BM and TQM are powerful tools for enhancing school leadership and educational quality. When effectively implemented, they contribute to improved learning outcomes, teacher empowerment, and organizational efficiency. However, their success depends heavily on the commitment of school leaders, the engagement of stakeholders, and the consistent application of policies and practices.

The study concludes that while SBM Level 3 schools in Surigao del Sur have made significant strides, challenges remain in scaling these practices across the division. Addressing leadership gaps, strengthening policy implementation, and fostering a culture of continuous improvement are critical to sustaining progress.

Recommendations

1. **Capacity Building:** Conduct regular training for school heads and teachers on SBM and TQM principles to deepen understanding and improve implementation.
2. **Leadership Development:** Strengthen leadership competencies among school administrators to promote effective delegation and participatory decision-making.
3. **Policy Support:** Enhance support mechanisms for operationalizing DepEd policies at the school level, including monitoring and evaluation systems.
4. **School-to-School Partnerships:** Encourage collaboration between high-performing SBM Level 3 schools and lower-performing schools to share best practices and mentor peers.
5. **Stakeholder Engagement:** Promote active involvement of teachers, parents, and community members in school governance to build ownership and accountability.
6. **Research Expansion:** Further studies should explore the long-term impact of TQM in basic education and identify scalable models for replication across other divisions.

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Disclaimer:

This Research Bulletin is an abridged version of the full manuscript of Mr. Loren and supplements his research presentation during the Second Quarter Stakeholders Forum for CY 2024 under the topic, "School-Based Management. To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.

Evaluation Of Research Program Implementation in Caraga Region Using CIPP (Context, Input, Process, Product) Model

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INTRODUCTION

The Department of Education (DepEd) in Caraga Region annually allocates Php 2,000,000 for the Basic Education Research Fund (BERF), supporting research projects by teaching and non-teaching personnel. Despite these investments, challenges remain with the completion and utilization of research due to workload and technical support gaps, leading to unutilized funds and underexploited findings. This study aimed to evaluate the implementation of the research program in DepEd Caraga, focusing on four key dimensions—Context, Input, Process, and Product (CIPP)—to identify strengths and opportunities for improvement. The core research questions examined how DepEd meets research needs (Context), assesses program strategies (Input), adheres to research management guidelines (Process), and achieves stated program objectives (Product).

To address the above, the study employed a mixed-methods descriptive research design conducted in 2019. Purposeful sampling involved Senior Education Program Specialists (Research Coordinators) across six Schools Division Offices and researchers funded under the BERF from 2016–2018. Quantitative data were collected through a 49-item Likert-scale questionnaire adapted from Pantin (2018), while qualitative insights were gathered via focus group discussions and one-on-one interviews. Ethical procedures were followed rigorously—consent was obtained,

respondent anonymity ensured, and data confidentiality maintained.

DISCUSSION OF RESULTS

The study assessed the research program across the four CIPP components, with key findings summarized below:

Context: Respondents strongly agreed (mean: 3.80) that DepEd meets the needs of research management, with objectives aligning well with improving teaching practices through data-driven decisions. The timeline and structure for action research were deemed adequate.

Input: Capability-building efforts, such as training on action research, were rated highly (mean: 3.23), but publication support was only very satisfactory due to limited plagiarism checks.

Process: Research management guidelines were consistently followed (mean: 3.18), with strong quality assurance through organized data analysts and editors. However, partnerships with higher education institutions and NGOs need enhancement.

Product: The program significantly improved researchers' confidence and skills (mean: 3.69–3.74), but the utilization of research findings in schools and offices was less effective (mean: 2.96 for classroom teaching strategies).

CIPP Component	Mean Score	Qualitative Rating
Context	3.62	Excellent
Input	3.07	Excellent

Process	3.00	Excellent
Product	3.49	Excellent

CONCLUSIONS AND RECOMMENDATIONS

The evaluation revealed that DepEd Caraga's research program is well-structured, with strong support for research management and capability building. However, the limited utilization of research findings and weak external partnerships highlight areas for improvement. These findings underscore the program's potential to enhance educational practices while identifying gaps in translating research into actionable outcomes.

To strengthen the BERF program and align with DepEd Order No. 16 s. 2017, the following recommendations are proposed: (1) Develop operational guidelines for incorporating research findings into School Improvement Plans (SIPs) to ensure long-term utilization; (2) Strengthen collaborations with higher education institutions to enhance technical and financial support; (3) Conduct a qualitative cost-benefit analysis to evaluate program outcomes. These steps will enhance the program's impact on DepEd's goal of promoting a robust research culture in basic education.

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This Research Bulletin is an abridged version of the full manuscript of Dr Guerta and supplements her research presentation during

the Virtual Research Congress last _____2019 under the topic, " Evaluation of Research Program Implementation using the CIPP Model". To request a copy of his manuscript, send an email to ps.prd@deped.gov.ph.