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The Lived Experience of Kindergarten Teachers in Packaging Mathematics Learning in Early Childhood Classrooms

Genely Bacus[1], Annabel P. Pepe[1], Angelica L. Trucio[1]
[1]Master of Arts in Education, Major in Early Childhood Education - Cebu Technological University, Cebu City, Philippines

Email: angelica.trucio@deped.gov.ph

ABSTRACT

This study explored kindergarten teachers' lived experiences in designing and delivering mathematics learning in early childhood classrooms and used the findings to inform a Detailed Learning Plan with Activity Sheets. Employing a qualitative Husserlian descriptive phenomenological design, the study involved 50 kindergarten teachers from five public elementary schools in Mandaue City, Cebu, during School Year 2025–2026. Participants were selected through purposive-random sampling, and data from validated, researcher-developed semi-structured interviews were analyzed by identifying significant statements, formulating meanings, and clustering themes. Findings revealed that teachers embedded mathematics in daily routines, play-based activities, storytelling, and hands-on use of manipulatives. They prioritized number recognition, shapes, basic operations, measurement, and simple data organization, using differentiated support to address varying developmental readiness. Teachers identified limited attention spans, diverse learning abilities, and insufficient materials as challenges, while training, collegial support, and available resources facilitated instruction. They also described increased patience, creativity, reflection, and confidence through classroom experience. Overall, the findings portray mathematics teaching as a flexible, context-responsive process shaped by children's needs and classroom conditions. The study recommends implementing and evaluating the Detailed Learning Plan with Activity Sheets, strengthening instructional resources and teacher collaboration, and providing continued professional development. Its five-school scope and reliance on teacher interviews limit transferability and do not establish effects on children's learning outcomes. The study contributes locally grounded guidance for sustainable, developmentally appropriate early mathematics instruction, supporting SDG 4 (Quality Education) through strengthened teaching practice and foundational learning opportunities.

Keywords: *Early Childhood Education, Kindergarten Teachers, Learning Plan, Mathematics Instruction, Phenomenological Research, Play-Based Learning, Teacher Experiences*

1. INTRODUCTION

Early childhood mathematics education establishes foundational competencies in numeracy, problem-solving, spatial reasoning, and mathematical thinking. Kindergarten teachers play a central role in developing these competencies by designing learning experiences that connect mathematical concepts with children's everyday activities. Clements et al. (2023) emphasized the importance of developmentally appropriate instruction, learning trajectories, and meaningful engagement in early mathematics education. Similarly, Skene et al. (2022) demonstrated the educational benefits of guided play for early mathematical learning. Teachers' beliefs also influence how mathematical activities are organized and implemented. Mart and Burghes (2025) highlighted the relationship between early childhood educators' mathematical beliefs and instructional decisions, while Jabagat et al. (2025) examined the relationship between mathematics beliefs and teaching practices among Filipino pre-service teachers. Within this context, the present study explored the lived experiences of kindergarten teachers in packaging mathematics learning in five public elementary schools in Mandaue City, Philippines, during School Year 2025–2026. The investigation focused on teachers' instructional experiences, expectations, strategies, challenges, decision-making, and professional development, providing a basis for developing a detailed learning plan with activity sheets.

Research Problem

Although early mathematics education emphasizes developmentally appropriate and learner-centered instruction, teachers encounter challenges in translating mathematical concepts into meaningful classroom experiences. These challenges involve differences in learners' developmental readiness, limited instructional resources, and the need to balance curriculum expectations with play-based and hands-on activities. Cutting and Lowrie (2023) emphasized that children's mathematical development is influenced by learning contexts and opportunities for exploration. Similarly, Clements et al. (2023) highlighted the importance of instructional strategies that respond to children's mathematical thinking and developmental needs. Teachers' beliefs and professional experiences also influence instructional decisions. Mart and Burghes (2025) demonstrated the relevance of educators' beliefs in shaping early mathematics learning, while Guler and Celik (2023) found that relationships between teachers' beliefs and actual classroom practices can be complex. In the Philippine context, Ignacio Jr. and Paras (2025) identified distinct dimensions of prospective teachers' beliefs, reinforcing the importance of understanding teacher perspectives in educational practice. However, the lived experiences of kindergarten teachers in designing, adapting, and delivering mathematics learning activities within the selected Mandaue City schools remain insufficiently documented in the reviewed literature. Accordingly, the study examined how teachers experience mathematics instruction, establish learning expectations, design activities, respond to instructional challenges, select teaching strategies, and reflect on their professional growth.

Assumptions of the Study

The study was guided by the ontological, epistemological, axiological, and methodological assumptions of qualitative descriptive phenomenology. Ontologically, it recognized that kindergarten teachers may experience mathematics instruction differently according to their classroom environments, professional experiences, and learners' needs. Epistemologically, knowledge about packaging mathematics learning was understood through teachers' firsthand descriptions and reflections. Axiologically, the study acknowledged that teachers' beliefs, values, and experiences could influence their instructional decisions and the meanings they assign to classroom practices. These assumptions are consistent with research recognizing the complex relationship between teachers' beliefs and instructional practices (Guler & Celik, 2023; Mart & Burghes, 2025). Methodologically, the study adopted Husserlian Descriptive

Phenomenology to describe participants' lived experiences while minimizing researcher-imposed interpretations. Bracketing and epoché provided procedures for examining teachers' narratives with reflexive awareness of prior assumptions. Ash (2025) emphasized the importance of methodological clarity and systematic bracketing in descriptive phenomenological research. These philosophical assumptions guided the investigation of teachers' experiences, instructional decisions, and professional development in early childhood mathematics education.

Objectives of the Study

The primary objective of the study was to explore the lived experiences of kindergarten teachers in packaging mathematics learning in early childhood classrooms at Opao Elementary School, Paknaan Elementary School, Umapad Elementary School, Labogon Elementary School, and Leonard Wood Elementary School in Mandaue City during School Year 2025–2026. Specifically, the study sought to describe teachers' experiences in teaching mathematics to kindergarten learners; identify their expected learning outcomes based on mathematics content standards; examine how they design learning experiences to develop foundational mathematical competencies; determine the opportunities and challenges encountered in preparing mathematics instruction; explore the considerations influencing their selection of teaching methods, approaches, techniques, and strategies; and describe how their experiences influence professional growth and teaching practices. The findings served as the basis for developing a detailed mathematics learning plan with activity sheets.

Theoretical or Conceptual Basis

The study was grounded in Husserlian Descriptive Phenomenology and perspectives on early mathematics pedagogy, teachers' beliefs, and developmentally appropriate learning. Ash (2025) emphasized bracketing and reflexivity in understanding participants' lived experiences. Clements et al. (2023) highlighted the importance of learning trajectories and meaningful instruction, while Cutting and Lowrie (2023) and Skene et al. (2022) emphasized play-based learning and guided exploration in developing early mathematical competencies. Teachers' beliefs also influence instructional decisions and classroom practices (Mart & Burghes, 2025; Jabagat et al., 2025). These perspectives align with the MATATAG Curriculum's emphasis on competency-based and learner-responsive education (Department of Education, 2024). The study's central phenomenon encompasses kindergarten teachers' instructional experiences, learning expectations, teaching strategies, challenges, pedagogical decisions, and professional growth. Through phenomenological analysis, the findings provide a basis for developing a Detailed Learning Plan with Activity Sheets.

The study primarily supports SDG 4 (Quality Education), particularly Target 4.2 on quality early childhood education and Target 4.c on teacher development. UNESCO and UNICEF (2024) emphasized the importance of early childhood education in establishing foundational learning competencies. By examining teachers' instructional experiences, the study contributes to educational and institutional sustainability through developmentally appropriate mathematics instruction, professional development, and continuous improvement. The proposed Detailed Learning Plan with Activity Sheets provides a practical resource for strengthening foundational numeracy, addressing diverse learning needs, and supporting sustainable early childhood mathematics education.

2. METHODOLOGY

Research Design

The study utilized Husserlian Descriptive Phenomenology to examine how kindergarten teachers experienced, understood, and organized mathematics instruction in early childhood classrooms. This qualitative approach emphasized participants' firsthand descriptions of their instructional practices, learning expectations, challenges, pedagogical decisions, and professional growth. Bracketing and epoché were employed to minimize preconceived assumptions and maintain openness to participants' experiences. The research followed an input-process-output framework, connecting teachers' lived experiences with phenomenological analysis and the development of a detailed learning plan with activity sheets.

Research Locale or Study Setting

The study was conducted in five public elementary schools in Mandaue City, Cebu, Philippines, during School Year 2025–2026. These included Opao Elementary School, Paknaan Elementary School, Umapad Elementary School, Labogon Elementary School, and Leonard Wood Elementary School. The selected schools provided diverse early childhood classroom environments where kindergarten teachers implemented mathematics instruction through developmentally appropriate, contextualized, and learner-centered activities. These settings enabled the researchers to examine teachers' experiences in designing and delivering mathematics learning for children with varying developmental needs.

Participants or Data Sources

The study involved 50 kindergarten teachers from the five selected public elementary schools, with 10 participants representing each school. The methodology identified a purposive-random sampling technique for selecting teachers directly involved in kindergarten mathematics instruction. Participants provided firsthand accounts of their teaching experiences, expected learning outcomes, instructional strategies, opportunities and challenges, pedagogical considerations, and professional development. Their narratives constituted the primary qualitative data for the investigation.

Research Instruments or Materials

The study utilized a researcher-developed, semi-structured interview guide designed to elicit detailed descriptions of kindergarten teachers' lived experiences in packaging mathematics learning. The instrument contained open-ended questions aligned with the research objectives, allowing participants to explain their classroom practices, instructional decisions, challenges, and professional reflections. The interview guide underwent expert validation involving the research adviser and selected panel members with relevant expertise. The evaluation focused on clarity, relevance, coherence, and alignment with the research objectives. Necessary revisions were incorporated before data collection.

Data Gathering Procedure

Data collection involved three phases. Before gathering data, the researchers secured permission from the concerned public schools district supervisor and school principals and coordinated the interview schedules with participating teachers. During data collection, participants received an orientation explaining the study's objectives, procedures, voluntary participation, and confidentiality provisions. The researchers subsequently administered the semi-structured interviews, provided necessary instructions, and allowed sufficient time for participants to describe their experiences. Following data collection, the responses were organized, reviewed, and prepared for qualitative analysis. Relevant statements and recurring

meanings were identified to support the development of themes reflecting participants' lived experiences.

Data Analysis

The study employed qualitative phenomenological analysis consistent with Husserlian Descriptive Phenomenology. Interview transcripts were repeatedly reviewed to develop a comprehensive understanding of participants' experiences. Significant statements relevant to kindergarten mathematics instruction were identified and extracted, followed by the formulation of meanings and organization of similar experiences into thematic clusters. The resulting themes were synthesized into an exhaustive description of how teachers designed, implemented, and reflected on mathematics learning. Bracketing and epoché were applied throughout the analytical process to minimize researcher-imposed assumptions. Reflective journaling and continuous self-awareness supported the researchers' efforts to represent participants' experiences accurately.

Ethical Consideration

The study observed ethical principles concerning voluntary participation, informed consent, privacy, confidentiality, participant welfare, and research integrity. Participants were informed about the study's objectives and procedures and were assured that participation was voluntary. Their identities and responses were treated confidentially to protect personal information and encourage open communication. Participants were permitted to disclose only information they were comfortable sharing, and the researchers considered potential risks associated with participation. Data were used exclusively for academic purposes, while accuracy, objectivity, and originality were maintained in analyzing and reporting the findings.

3. RESULTS AND DISCUSSION

3.1 Lived Experiences of Kindergarten Teachers in Teaching Mathematics

3.1.1 Integration of Daily Routines, Manipulatives, and Play-Based Instruction

The findings revealed that kindergarten teachers integrated mathematics into daily classroom routines, hands-on activities, and play-based instruction. Teachers described using attendance counting, calendars, and counting songs to reinforce number recognition (R1). They also utilized blocks, counters, toys, and other manipulatives to make mathematical concepts concrete (R2). Games, storytelling, and movement activities were employed to sustain learners' attention and participation (R3). These experiences demonstrate that teachers commonly presented mathematics through familiar, interactive, and developmentally appropriate activities. The findings emphasize the importance of connecting mathematical concepts with children's everyday experiences. Clements et al. (2023) highlighted the relevance of learning trajectories and meaningful instructional activities in early mathematics education. Similarly, Disney and Li (2022) demonstrated how teachers can incorporate mathematical learning into imaginative play, while Skene et al. (2022) identified positive effects of guided play on early mathematical competencies. These studies support the instructional approaches described by participants, particularly the integration of concrete experiences, purposeful play, and teacher guidance.

3.1.2 Responding to Learner Diversity and Experiencing Professional Fulfillment

Teachers reported that kindergarten learners demonstrated different levels of mathematical readiness, requiring individualized guidance, repeated explanations, and encouragement (R4). Participants also described professional fulfillment when learners developed confidence and successfully applied mathematical concepts. Teaching mathematics was associated with

patience, creativity, and satisfaction in observing children's progress (R5). These experiences highlight the relationship between responding to learners' needs and teachers' perceived professional fulfillment. The findings suggest that effective early mathematics instruction requires flexibility and responsiveness to individual learning differences. Maryani et al. (2023) identified differentiated instructional approaches as relevant to accommodating children's varying readiness and learning conditions. Likewise, Papic and Papic (2026) emphasized the importance of teachers' mathematical beliefs, confidence, and pedagogical knowledge in supporting preschool mathematics instruction. The participants' accounts demonstrate how instructional challenges and perceived learner progress contribute to the meaning teachers attach to their professional roles.

3.2 Expected Outcomes of Mathematics Learning Acquisition

3.2.1 Development of Shape Recognition and Foundational Numeracy

The findings indicated that teachers expected kindergarten learners to recognize and describe basic shapes, colors, sizes, and object attributes (R6). Participants also emphasized number recognition, counting sequences, and the ability to associate numerical symbols with corresponding quantities (R7). These expectations reflect the importance teachers placed on developing foundational mathematical understanding through observation, comparison, classification, and practical counting activities. These expectations are consistent with the developmental progression of early mathematical competencies. Clements et al. (2023) emphasized that early mathematics instruction should connect learning objectives with children's existing understanding and progressively developing abilities. Cutting and Lowrie (2023) likewise highlighted the importance of recognizing mathematical learning progressions within play-based contexts. The findings suggest that teachers conceptualized successful mathematics learning as the gradual development of meaningful relationships among numbers, quantities, shapes, and familiar objects.

3.2.2 Understanding Basic Operations, Measurement, and Data Organization

Teachers expected learners to develop introductory understanding of money, addition, subtraction, and simple part-whole relationships through concrete objects (R8). They also emphasized comparing length, weight, and capacity using familiar materials and informal measurement tools (R9). Furthermore, participants expected learners to classify objects, count items within categories, and represent simple information through visual displays (R10). These outcomes demonstrate teachers' expectations that early mathematics learning should extend beyond memorization toward practical application and basic mathematical reasoning. The findings reflect the importance of introducing mathematical concepts through age-appropriate and meaningful experiences. Petrou and Panaoura (2022) emphasized the relevance of everyday activities and play-based experiences in developing early mathematical thinking. Similarly, Clements et al. (2023) identified the value of connecting mathematical content with children's developmental learning pathways. These perspectives support the participants' emphasis on concrete experiences, informal measurement, classification, and practical numerical relationships as foundations for further mathematics learning.

3.3 Designing Mathematics Learning Experiences

3.3.1 Contextualized, Play-Based, and Manipulative-Supported Learning

The findings revealed that teachers designed mathematics activities using familiar situations, real-life objects, games, puzzles, storytelling, and concrete learning materials. Participants described connecting mathematical concepts with everyday experiences to make lessons understandable and relatable (R11). Play-based activities were employed to encourage exploration of numbers, shapes, and patterns (R12), while manipulatives were used to provide opportunities for touching, moving, and examining objects (R13). These experiences illustrate the teachers' preference for contextualized and interactive instructional approaches. The findings are supported by Disney and Li (2022), who demonstrated how teachers' participation in children's play can create opportunities for intentional mathematical instruction. Göncü and Main (2023) likewise emphasized flexible teacher guidance, children's interests, and meaningful classroom interactions within constructivist early childhood education. Skene et al. (2022) further identified the benefits of guided play for selected early mathematics outcomes. Together, these studies reinforce the relevance of combining purposeful instructional guidance with exploratory and child-centered learning experiences.

3.3.2 Differentiated Instruction and Repeated Mathematical Practice

Teachers reported adjusting mathematics activities according to learners' developmental readiness and understanding. Some children required additional explanations, guided practice, and individualized assistance, while others could complete tasks more independently (R14). Participants also incorporated repeated counting, number identification, shape recognition, and sorting activities into classroom routines (R15). These practices reflect teachers' efforts to accommodate different learning needs while providing consistent opportunities for mathematical reinforcement. The findings indicate that differentiated instruction and repeated practice were important components of the teachers' instructional design. Maryani et al. (2023) emphasized the relevance of adjusting teaching strategies, learning materials, and classroom activities according to children's developmental and instructional needs. Cutting and Lowrie (2023) similarly demonstrated that mathematical learning progressions must be understood within the contexts where children engage in learning. The participants' experiences suggest that combining differentiated support with familiar activities allows teachers to respond to varying levels of mathematical readiness.

3.4 Opportunities and Challenges in Designing Mathematics Instruction

3.4.1 Instructional Resources, Training, and Collegial Support

Teachers identified the availability of instructional materials as an opportunity for designing engaging mathematics activities. Participants described using available classroom resources to develop hands-on learning experiences (R16). Professional development activities, training sessions, and collaboration with colleagues also provided opportunities to improve lesson planning and the implementation of child-centered teaching approaches (R17). These experiences demonstrate that instructional resources and professional support were perceived as important factors in organizing mathematics learning. The findings highlight the value of institutional and collegial support in strengthening early childhood instructional practices. Göncü and Main (2023) emphasized that teachers' professional experiences and collaboration with educational communities contribute to their understanding of classroom practice. Papic and Papic (2026) likewise identified the importance of mathematical pedagogical knowledge and

professional learning in early childhood education. These studies support the participants' accounts of training, resource availability, and collaborative learning as opportunities for improving mathematics lesson design.

3.4.2 Limited Attention, Diverse Learning Needs, and Resource Constraints

The findings revealed three recurring instructional challenges: limited learner attention, differences in mathematical readiness, and insufficient instructional resources. Teachers reported difficulties maintaining children's concentration, particularly when introducing unfamiliar concepts (R18). They also described the additional time required to provide repeated explanations and individualized guidance (R19). Limited materials sometimes constrained hands-on instruction, prompting teachers to improvise using available classroom resources (R20). These experiences illustrate the practical challenges encountered in implementing developmentally appropriate mathematics activities. The findings suggest that the successful implementation of mathematics instruction depends on teachers' ability to adapt activities to classroom conditions. Maryani et al. (2023) identified resource limitations, instructional readiness, and classroom conditions as factors affecting differentiated teaching. Göncü and Main (2023) similarly emphasized the importance of adjusting teacher guidance to children's needs and educational contexts. These studies support the relevance of instructional flexibility, resource adaptation, and responsive classroom strategies in addressing the challenges described by participants.

3.5 Factors Influencing the Selection of Mathematics Teaching Strategies

3.5.1 Developmental Readiness, Learner Interest, and Curriculum Alignment

Teachers identified developmental readiness, learner interest, and curriculum expectations as key factors in selecting mathematics teaching strategies. They preferred concrete, simple, and play-based methods appropriate for kindergarten learners (R21). Games, songs, and storytelling encouraged participation (R22), while activities were aligned with competencies such as counting, shape recognition, and basic measurement (R23). These findings highlight the importance of balancing learners' developmental needs with curriculum standards. Clements et al. (2023) emphasized aligning instruction with children's mathematical understanding, while Disney and Li (2022) underscored the value of guided play. Similarly, Mart and Burghes (2025) highlighted the influence of teachers' beliefs on instructional practices. Collectively, these studies support the role of developmental readiness, learner engagement, and curriculum alignment in instructional decision-making.

3.5.2 Instructional Resource Availability and Individualized Learning Support

The findings showed that teachers adjusted their instructional approaches according to the availability of materials and learners' individual needs. Participants described selecting strategies based on accessible manipulatives, visual aids, and improvised learning resources (R24). They also provided additional assistance to learners experiencing difficulties while offering more advanced activities to those who demonstrated greater readiness (R25). These experiences indicate that teachers adapted instructional methods to available resources and differences in children's mathematical abilities. The findings emphasize the practical relationship between classroom conditions and instructional differentiation. Maryani et al. (2023) identified resource availability and learner readiness as important considerations in differentiated early childhood instruction. Papic and Papic (2026) further highlighted the need to strengthen teachers'

mathematical pedagogical knowledge rather than relying solely on instructional confidence. The participants' experiences reinforce the importance of flexible teaching strategies that consider both available classroom resources and individual learning requirements.

3.6 Influence of Mathematics Teaching Experiences on Professional Growth

3.6.1 Developing Patience, Creativity, and Reflective Teaching Practices

Teachers reported that mathematics instruction strengthened their patience, creativity, and reflective practices. They emphasized the need for repetition and encouragement (R26), creative play-based and hands-on activities (R27), and continuous adjustment of teaching strategies according to learners' needs (R28). These experiences reflected their perceived professional growth through classroom practice. The findings highlight the role of classroom experience and reflection in professional development. Göncü and Main (2023) emphasized the importance of reflective teaching, while Papic and Papic (2026) highlighted pedagogical knowledge and professional competence in early mathematics education. These studies support the teachers' reported development of more responsive and reflective instructional practices.

3.6.2 Strengthening Differentiated Instruction, Confidence, and Resourcefulness

The findings indicated that teaching mathematics helped participants develop greater awareness of learners' different learning paces and instructional needs. Teachers reported improving their ability to provide varied activities and individualized assistance (R29). They also described becoming more confident, resourceful, and innovative in using available materials to create meaningful mathematics learning experiences (R30). These experiences demonstrate that participants perceived improvements in their instructional adaptability and professional confidence. The findings highlight the relationship between classroom experience and teachers' perceived instructional competence. Maryani et al. (2023) emphasized the importance of flexible teaching practices in addressing children's differing learning requirements. Papic and Papic (2026) demonstrated that teachers' confidence and beliefs are relevant to mathematics instruction, although these attributes do not necessarily predict classroom quality. Accordingly, the present findings describe teachers' perceived professional growth without establishing independently measured improvements in teaching effectiveness.

3.7 Implications for the Mathematics Detailed Learning Plan and Activity Sheets

The consolidated findings revealed that kindergarten mathematics instruction involved routine-based, play-oriented, hands-on, and differentiated learning experiences emphasizing foundational numeracy, shapes, basic operations, measurement, and data organization. Teachers identified limited attention spans, varying learning readiness, and insufficient resources as major challenges. These findings informed the development of a Mathematics Detailed Learning Plan with Activity Sheets incorporating contextualized activities, manipulatives, guided play, and differentiated instruction. Clements et al. (2023) emphasized aligning instruction with children’s developmental progressions, while Disney and Li (2022) supported play-based mathematical learning. Similarly, Maryani et al. (2023) highlighted the importance of differentiated instruction. The proposed learning plan provides a structured and adaptable instructional resource, although its effectiveness requires future implementation and evaluation.

4. CONCLUSIONS AND RECOMMENDATIONS

The study revealed that the lived experiences of 50 kindergarten teachers in five public elementary schools in Mandaue City were characterized by play-based, hands-on, routine-oriented, and learner-centered approaches to mathematics instruction. Teachers emphasized the development of foundational numeracy, shape recognition, basic operations, measurement, and simple data organization through concrete and meaningful learning experiences. Their instructional decisions were influenced by learners' developmental readiness, interests, curriculum standards, individual differences, and available resources. Despite challenges involving limited attention spans, varying learning abilities, and insufficient instructional materials, teachers demonstrated adaptability, patience, and creativity in responding to classroom needs. Teaching experiences also contributed to their perceived professional growth through reflective practice, instructional innovation, and greater confidence in addressing learner diversity. Overall, the findings highlight the importance of developmentally appropriate, flexible, and contextualized mathematics instruction and provide a practical foundation for developing a Detailed Learning Plan with Activity Sheets.

Kindergarten teachers should continue integrating play-based, hands-on, and routine-oriented activities into mathematics instruction to strengthen foundational numeracy and promote meaningful learning experiences. Instructional activities should emphasize counting, number recognition, shapes, basic operations, measurement, and simple data organization using manipulatives, storytelling, games, and familiar real-life situations. Teachers should also differentiate learning activities according to children's developmental readiness and provide individualized guidance, repeated practice, and encouragement when necessary. School administrators should strengthen instructional support by providing appropriate learning materials, facilitating professional development, and encouraging collaboration through Learning Action Cell sessions and peer mentoring. The proposed Detailed Learning Plan with Activity Sheets should be implemented, refined, and periodically evaluated to ensure its relevance to curriculum standards and diverse classroom needs. Teachers should regularly monitor learners' progress and adjust instructional strategies accordingly. Future researchers may examine the implementation and effectiveness of the proposed learning materials in other kindergarten settings.

The study was limited to 50 kindergarten teachers from five selected public elementary schools in Mandaue City during School Year 2025–2026. Its qualitative, Husserlian descriptive phenomenological design focused on participants' lived experiences and perceptions, limiting the transferability of findings to other educational contexts. Data were obtained through researcher-developed, semi-structured interviews and reflected teachers' reported instructional practices rather than independently measured learner outcomes. Furthermore, the study examined mathematics instruction within specific institutional and classroom conditions. Future investigations may involve teachers from additional schools, incorporate classroom observations, and evaluate learners' mathematical development to provide complementary evidence on instructional practices and outcomes.

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