



## Journey of Early Childhood Mathematics Teachers in Dealing with Difficult Learners

### Article History:

Initial submission:	25 February 2026
First decision:	28 February 2026
Revision received:	25 March 2026
Accepted for publication:	30 March 2026
Online release:	07 April 2026

Jeric L. Espino<sup>1</sup>  
Prof. Carmee Lyn B. Paylangco<sup>2</sup>, ORCID No. 0000-0003-2480-5885

<sup>1</sup>BSE Math Student, College of Education Arts & Sciences, University of Southern Mindanao, Kidapawan City, Philippines

<sup>2</sup>Associate Professor IV, College of Education Arts & Sciences, University of Southern Mindanao, Kidapawan City, Philippines

### Abstract

Early mathematics education is a large tract of academe and practice in which teachers, and other professionals, organize and orchestrate activities and learning environments for young children with the aim of extending their understanding and growth of mathematics concepts and skills. This narrative inquiry study has explored the travails of early childhood mathematics teachers and digging deeper into the context. This was also gleaned from the theory of Cognitive Development in teaching math by Piaget's (1936), and the Inefficient Learner model by Twomey (2020). A voice recorder was utilized during the interviews to ensure not missing anything, the study involved a total of ten (10) participants, which is considered an adequate number for qualitative research. The data collected from the participants were transcribed, after which data reduction was applied to organize and condense the information. This process facilitated the identification of emerging themes relevant to the study. The data collected were transcribed and data reduction is applied to identify the themes. Results revealed five (5) essential themes for the travails and struggles of the informants: Inability of learners to identify numbers, managing attention seeking learners, dealing with diverse personality, coping up with hyperactive learners, and considering the attention span of the learners. While 6 essential themes for the coping mechanism were elicited: Determine the level of competence, Collaboration with the parents, indulging engaging activities, Instructional materials must be well prepared, using information and communication Technology or ICT, and Teaching strategies to easily deliver the topic. Findings revealed that teaching early childhood mathematics is a challenging experience and series of coping mechanism can be applied to solve the travails encountered. Based on these results, teachers should have professional development, enough teaching materials, and support from their schools to help them deal with, and get over the problems that arise with teaching mathematics to early childhood learners.

**Keywords:** narrative inquiry, journey, Early Childhood Mathematics, difficult learners, teachers' experiences, coping mechanisms



Copyright © 2026. The Author/s. Published by VMC Analytik's Multidisciplinary Journal News Publishing Services. Journey of Early Childhood Mathematics Teachers in Dealing with Difficult Learners © 2026 by Jeric L. Espino and Carmee Lyn B. Paylangco is an open access article licensed under [Creative Commons Attribution \(CC BY 4.0\)](https://creativecommons.org/licenses/by/4.0/). This permits the copying, redistribution, remixing, transforming, and building upon the material in any medium or format for any purpose, even commercially, provided that appropriate credit is given to the copyright owner/s through proper and standard citation.

## INTRODUCTION

Early childhood mathematics education significantly contributes to the cognitive and academic development of young learners. Educators, caregivers, and early childhood specialists design learning experiences that facilitate the development of essential mathematical concepts and skills in children. Jean Piaget argues that infants between the ages of two and seven are in the preoperational period, characterized by the emergence of symbolic thinking and nascent reasoning skills. During this developmental phase, children from preschool through Grade

1 are typically included in early childhood mathematics education, where fundamental mathematical understanding is established through structured learning experiences.

Studies emphasizes the importance of early engagement with mathematics in developing children's problem-solving and logical reasoning abilities (Purpura, Napoli, Wehrspann, & Gold, 2021). Nonetheless, despite the expanding corpus of research in early mathematics education, insufficient attention has been paid to the experiences of educators facing classroom obstacles, especially when handling challenging

students. In recent years, escalating behavioural problems among young children have posed additional obstacles for educators, affecting classroom management and the effectiveness of mathematical instruction.

In the Philippine educational landscape, early childhood education has been enhanced by initiatives such as the K-12 Basic Education Curriculum and regulations that prioritize basic learning in the early grades. Nonetheless, educators continue to encounter hurdles, including varied student needs, classroom behavioural problems, and insufficient instructional resources. Under these circumstances, it is essential to analyse the experiences of early childhood mathematics educators in managing challenging learners and the strategies they use to cope. Comprehending these experiences may facilitate the enhancement of pedagogical methods, the provision of suitable support for educators, and the improvement of the overall quality of early mathematics education. This qualitative research study explored and analyzed the journey in teaching early childhood mathematics. Moreover, this study determined the journey of early childhood mathematics teachers (ECMT) in dealing with difficult learners. Furthermore, this study also shows the contents of the journey of early childhood mathematics teachers dealing with difficult learners.

**Research Question.** This narrative inquiry study examined the journey of ECMTs. Specifically, it answered the following questions: What are the experiences of ECMTs in dealing with difficult learners? What are the coping mechanisms of ECMT?

**Theoretical Lens.** This research is gleaned from Theory of Cognitive Development in Teaching Mathematics, (Piaget's,1936), the first psychologist to conduct a thorough investigation of cognitive development, where he claims that there are children's four phases of cognitive growth. His dissertation explores not just how children acquire information, but also how they use it, but also with the nature

of intelligence.

Cognitive development refers to a student's conceptual comprehension as well as his or her capacity to think and reason. Moreover, cognitive processes consolidate information and ability procurement with the ability to adjust data to new settings. When a child learns adding and reduction, they might use what they learned to set aside money to help him save money for a new video game.

Also, the inefficient learner model, which is based on the theory of Twomey, 2020, offers a hopeful outlook for educational intervention. It contends that children with learning inabilities might learn assuming they are instructed and urged to apply appropriate mental and meta-mental strategies for their learning exercises. Moreover, the analysis of this study helped the researcher to thematized in more concrete variables that are present in the way of teaching an early childhood learner.

Teachers and students gain in a variety of ways when Piaget's theory is used in the classroom. Teachers have more noteworthy information on their understudies' psychological cycles. They can likewise match their instructing strategies to the mental capacities of their understudies (e.g. motivational set, modeling, and assignments). Measuring and identifying the cognitive development and reflecting it to journey in teaching mathematics to early childhood learners.

## LITERATURE REVIEW

**Current overview on early mathematics research education.** Numerous academics have highlighted recent advancements in early childhood mathematics education by analyzing current trends and future directions in the field. (Elia et. al., 2023) underscored that early mathematics education research concentrates on a variety of critical areas, such as the integration of technology in early mathematics instruction, the development of teachers' professional knowledge, mathematical

competencies across learning domains, and number sense. Their research emphasizes that both children's cognitive development and the instructional practices and pedagogical approaches employed by teachers impact early mathematics learning.

The authors also emphasized that creating meaningful learning environments that enable children to investigate mathematical concepts through guided activities, problem-solving, and interaction is a critical component of effective early mathematics instruction. These learning experiences foster inquiry and reasoning in young learners while also developing a solid foundational understanding of mathematics. The results suggest that instructors are essential to fostering children's mathematical thinking by creating developmentally appropriate learning activities and providing support throughout the learning process.

Nevertheless, the existing literature offers a wealth of information regarding the mathematical development and instructional practices of children. Conversely, there is a scarcity of research examining teachers' experiences in overcoming classroom obstacles when teaching early mathematics. It is imperative to investigate how educators manage challenging students and implement coping strategies to ensure that mathematics instruction is effective in early childhood classrooms.

In general, the literature review underscores the importance of early mathematics education in fostering children's cognitive development and mathematical thinking. The importance of instructional practices, learning environments, and teaching knowledge in promoting effective mathematics learning during early infancy has been emphasized in previous studies. However, there is still a lack of comprehension regarding the methods by which early childhood mathematics teachers address classroom obstacles, particularly when dealing with challenging students. To enhance teaching practices and better support

teachers, it is imperative to address this gap. Consequently, the objective of the current investigation is to examine the coping strategies that early childhood mathematics teachers employ to manage challenging students and their experiences in this regard.

**Early Mathematics Learning.** The ICME-13 monograph, *Contemporary Research and Perspectives on Early Childhood Mathematics Education*, underscores recent advancements in early mathematics pedagogy, focusing on critical domains including patterns and relationships, number sense, embodied learning, technology integration, and teacher training (Passiante, et al., 2020). Research indicates that children's comprehension of mathematical patterns and structures significantly contributes to the development of early numerical competence (Mulligan & Mitchelmore, 2018). Specifically, structuring abilities help learners establish logical linkages and mathematical concepts (Lüken & Kampmann, 2018). Research indicates that focused training on patterns and organization can markedly enhance arithmetic performance, particularly in underperforming kids.

Additional research emphasizes children's numerical cognition and their involvement in mathematics. Research on counting skills and number representation illustrates how young learners begin to understand quantities and groupings (Dorier & Coutat, 2016). Likewise, the utilization of finger representations and embodied activities enhances children's numerical comprehension and cognitive growth (Lüken, 2019). Research indicates that toddlers as young as 5 can handle basic multiplication and division problems when presented in familiar contexts (Young-Loveridge & Bicknell, 2016).

Moreover, numerous scholars underscore the significance of learning environments and pedagogical methods in early mathematical education. Classroom observations and studies on play-based learning demonstrate that supervised play and significant interactions improve children's mathematical reasoning and

involvement (Karsli, 2016). The incorporation of technology, including interactive technologies, enhances early mathematics education by facilitating visual and exploratory experiences. Nonetheless, effective instruction relies on educators' professional training and their capacity to meet the varied needs of learners within nurturing classroom settings (OECD, 2019).

**Early Mathematics Teaching.** Mathematics education research frequently emphasizes the learning opportunities and surroundings that enhance children's engagement and comprehension of mathematical concepts during early childhood. These environments offer young learners the opportunity to cultivate essential mathematical concepts through engagement and exploration. Nonetheless, understanding how youngsters perceive and use mathematical knowledge across diverse educational contexts is a multifaceted and multi-layered endeavor.

Blömeke et al. (2017) investigated the cognitive, educational, and psychological determinants that shape prospective preschool teachers' perceptions regarding mathematics and its significance in education. Their findings indicated that educators' beliefs toward mathematics are interrelated and influence their teaching methodologies. Moreover, variables such as health issues or learning disabilities may potentially affect kids' academic performance (Forness & Kavale, 2001).

**Managing Difficult Learners.** Many institutions are worried about students acting out in class more frequently. Teachers often have to deal with problems such as students not following the rules, not showing up to class, blaming others, and acting in ways that make it hard for everyone to learn (C.E.C.P., 1998). These actions can make teachers feel stressed and make it harder for them to manage the classroom and teach effectively. Furthermore, young learners, especially those in the initial grades, may still be deficient in the maturity and concentration abilities necessary for structured learning (Rabiner et al., 2016).

As a result, teachers may have to spend a lot of time addressing behavioral problems rather than teaching, which can harm both their performance and their students' learning outcomes (Sun & Shek, 2012). Several factors may cause students to act out, including how the classroom is managed, how lessons are taught, how parents influence their conduct, and how well teachers are trained (Tobin & Sugai, 1996; Attakorn et al., 2014). Suspension, verbal reprimands, and time-outs are among the traditional ways to address disruptive conduct. However, these reactionary techniques may not get to the heart of the problem (Geddes, 1997; Canter & Canter, 1993). Instead, Sun et. Al (2012) say that positive behavioral approaches and good teaching methods should be used to help students modify their conduct over time.

Researchers also stress that behavioral problems can be caused by factors such as teachers not receiving sufficient training, not receiving sufficient support with special education requirements, and events at home (Wilkinson, et al., 2020). To manage a classroom effectively, instructors need to provide supportive learning environments, use appropriate teaching materials, and collaborate with parents to meet students' academic and behavioral needs (Kadzera, 2006).

## METHODS

**Research Design.** The research used a qualitative research design, particularly a narrative inquiry that enables us to determine the journey of ECMTs. The researcher uses thematic content analysis to discover and examine the path of ECMTs coping with challenging students. Thematic analysis is a type of qualitative data analysis that entails examining a set of information (which includes recordings from in-depth interviews or focus groups) for patterns of meaning. Thematic analysis was extensively used in the field of psychology.

The study presents elements that enabled us to determine the journey of ECMTs, and the coping

mechanism of struggles encountered. To understand the study's findings, a thorough evaluation of related literature will be conducted.

**Research Materials.** An interview was conducted as the primary data collection method for this study. The interview guide consisted of two (2) main research questions and eight (8) sub-questions, which served as guiding questions to elicit detailed responses from participants regarding their experiences in teaching early childhood mathematics. The interview questions were designed to explore the challenges teachers face and the coping mechanisms they use when dealing with difficult learners. To ensure the validity and clarity of the research instrument, the interview guide was subjected to expert validation. The research questionnaire was reviewed and validated by research experts, namely Joy D. Aguilar and Michael E. Tacdoro, who provided feedback to improve its relevance, clarity, and alignment with the study's objectives.

The study involved a total of ten (10) participants. Five (5) participants took part in the in-depth interviews, while another five (5) participants participated in a focus group discussion (FGD) to support data triangulation and enrich the collected information. The responses obtained from the participants were recorded, transcribed, and carefully analyzed using thematic analysis to identify common patterns and themes related to the teaching experiences of early childhood mathematics teachers. The inclusion of 10 participants allowed the researcher to gather sufficient qualitative data to explore and understand teachers' journeys in handling the challenges encountered in early childhood mathematics teaching.

**Data Collection.** Upon conducting this study, the researcher seeks consent from the school administrators. Upon receiving the approval, the researcher presents the intention of the study and lets the informants and participants know about their roles. The researcher then discusses the scope of the interview process

through the Ethics Participation Consent Form (EPCF) and at the same manner with the Research Ethics Information Sheet (REIS) with control number 1362. The one-on-one interview was conducted by the researcher. The researcher will assess the data once it has been collected.

**Data Analysis.** The information was acquired from the participants' audio-recorded responses. The data were transcribed and data reduction applied by the researcher. Every study question is analyzed using thematic analysis to identify themes. The researcher then carefully reviewed the transcripts several times to become familiar with the data. Data reduction was subsequently applied to organize and focus on relevant information related to the research questions.

Following this process, thematic analysis was employed to analyze the qualitative data. The researcher first conducted initial coding by identifying significant statements and meaningful segments from the transcripts. These codes were then grouped according to similarities and patterns. Afterward, the related codes were categorized and organized into broader themes that reflect the participants' common experiences and perspectives. The identified themes were then reviewed and refined to ensure they accurately reflected participants' responses and addressed the study's objectives.

Finally, the themes were interpreted and presented to describe the experiences of early childhood mathematics teachers in dealing with difficult learners. This process allowed the researchers to identify patterns, insights, information and coping mechanisms shared by the participants.

**Ethical Considerations.** The researcher practiced the principle of respecting other person by asking permission from the management of the participating schools through presenting a letter of approval which their consent is necessary.

For the principle of beneficence, the researcher assured the security of accessing the material used for the study; the privacy of the management as well as the individuals behind the conduct of the study will also be secured. The researcher also protected and secured the information such as the names, age, address and status of the person that was involved in an in-depth interview that they would not be harmed, and this would not affect their personal lives.

For the principle of justice, the researcher assured that everyone involved and mentioned from the beginning up to the end of the process of the study was treated fairly without discriminating their differences against one another. Opinions, suggestions and choices were not assessed subjectively but it was objectively observed to avoid any offense in the conduct of the study and in order to give accurate and credible information as the basis in achieving good results for the researcher's study.

## RESULTS

In this study, the researcher put emphasis on the struggles of early childhood mathematics teachers in dealing with difficult learners as well as the coping mechanisms on the struggles they encountered. As the study conducted, it comes up with numerous numbers of pages of transcripts from the one-on-one interview and focused group discussion. Moreover, strict focus on the research purpose and examining committees' suggestions are applied.

The findings of the study resulted in five themes of travails and struggles of dealing with difficult learners while the coping mechanism and strategies revealed six established themes namely; determining the level of competence, collaboration with the parents, induce engaging activities, instructional material must be well prepared, using information and communication technologies or ICT, and teaching strategies to easily deliver the topic.

**Experiences/Travails of Early Childhood Mathematics Teachers in dealing with difficult learners.** Table 1 shows the five themes in the struggles or travails encountered of Early Childhood Mathematics Teachers in Dealing with Difficult Learners which are inability of learners to identify numbers, managing attention seeking students, dealing with diverse personality, coping up with hyperactive learners, considering the attention span of the learners, identifying teaching strategies fit to the learners.

There are five (5) major themes extracted from the analysis of data for research question 1 as shown in Table 1.

**Theme 1: Difficulty in Identifying Numbers.** The results showed that some students have trouble recognizing and writing numbers, which makes it harder for them to understand basic math concepts. This problem makes it hard for teachers to move on to more advanced arithmetic topics, as their students lack the basic numerical skills needed. This correlates with the research by Mohini Mohamed and Jacinta Johnny (2010), which found that many learners have a deficiency in number sense, particularly in understanding the significance and value of numbers.

**Theme 2: Managing Attention-Seeking Learners.** Teachers also struggle to deal with students who often seek attention during class discussions. These students often interrupt the lesson or draw the teacher's attention elsewhere, making it harder to keep the lesson going and manage the classroom. Pashler (1994) says that attention is restricted and that people cannot focus on more than one thing at a time. This makes it hard for teachers to manage behaviors that require a lot of classroom attention.

**Theme 3: Dealing with Diverse Learner Personalities.** Another problem the study found is the diverse learning styles and personalities of pupils. Some students pick up on math ideas quickly, while others need more help and direction. Because of this variation, teachers need to adjust their plans and offer students

alternative forms of education. Clewell and Villegas (2001) stressed that teachers need to understand how to handle different types of students and make sure that all students feel welcome in the classroom.

Table 1  
*Travails of Early Childhood Mathematics Teachers in dealing with difficult learners.*

ESTABLISHED THEMES	THEMATIC STATEMENTS
Students are unable to identify numbers	<ul style="list-style-type: none"> <li>• Like di siya kabalo mag count...di siya kabalo mag 1 to 10.                             <ul style="list-style-type: none"> <li>○ ("like he/she don't know how to count from 1 to 10") P3</li> </ul> </li> <li>• Di siya kabalo pa mag identify pag numbers.                             <ul style="list-style-type: none"> <li>○ ("he/she cannot identify numbers") P4</li> </ul> </li> <li>• encounter jud namo is dili jud sila ka identify.                             <ul style="list-style-type: none"> <li>○ ("what we encounter is he/she cannot identify") ##003.idi</li> </ul> </li> <li>• kasi kung di siya kabalo mag count.. di siya kabalo mag ana sa iyang kamot ohh..ana gud oh bisag 1 to 5.. mag ana ana lang siya pero di siya kabalo mag identify.                             <ul style="list-style-type: none"> <li>○ (" if he/she doesn't know how to count or even finger counts from 1 to 5 he/she cannot identify") P1</li> </ul> </li> <li>• Some of the students cannot identify numbers. P1</li> <li>• I think the common cause is that students will think that math is a difficult subject and they don't like numbers.P1</li> <li>• na encounter jud namo is dili jud sila ka identify because of the pandemic.                             <ul style="list-style-type: none"> <li>○ ("what we encounter is that they cannot identify because of the pandemic") P1</li> </ul> </li> </ul>
Managing attention seeking students	<ul style="list-style-type: none"> <li>• Really affects my teaching because I cannot focus very well on my class. P1</li> <li>• Can distract my focus on teaching them. P4</li> <li>• Disturbo kaayu maka concentrate ka sa iyaha ba ang uban..ma pasagdan na nimo. ("it's disturbing you put your attention to one then disregard the other students") P5</li> <li>• Gusto nila magka attention.                             <ul style="list-style-type: none"> <li>○ ("they want attention") P1</li> </ul> </li> </ul>
Dealing with diversified personality	<ul style="list-style-type: none"> <li>• Diversed man ang mga learners ("Learners are diverse") P2</li> <li>• Multiple Intelligence...lahilahi. ("different multiple intelligences") P5</li> <li>• Teaching can be difficult with this diverse learners. P5</li> </ul>
Coping up with Hyper Active learners	<ul style="list-style-type: none"> <li>• Ohh kanang hyper active. ("Yes those hyper active") P3</li> <li>• Hyper Active! P1</li> <li>• Hyper active.. ay sa akoo daghan... hyper active disorder. ("Hyper active, there many of them in my class Hyper active disorder") P2</li> </ul>
Considering the attention span of the learners	<ul style="list-style-type: none"> <li>• Kanang behavior nila..kanag usahay kanang itang attention span. ("their behaviour, sometimes their attention span") P2</li> <li>• Unya ang attention nimo. ("and then your attention") P5</li> <li>• Gusto nila magka attention. ("they want attention") P1</li> <li>• Lack of attention. P4</li> <li>• Having a very short attention span they can be easily distracted. P5</li> </ul>

**Theme 4: Coping with Hyperactive Learners.**

The results also reveal that hyperactive students make it harder to teach math to young children. Some students wander around too much and act up, making it hard for the rest of the class to study and keep things in order. Forness and Kavale (2001) say that hyperactivity is often linked to "Attention Deficit Hyperactivity Disorder" (ADHD), which can make it hard for a child to pay attention and obey the rules in school.

**Theme 5: Considering Learners' Attention Span.**

The study also discovered that students' short attention spans make it hard for them to stay interested in arithmetic sessions. Young learners have a hard time staying focused, especially when classes are long or when other activities are happening. DuPaul et al. (2001) and Rabiner et al. (2016) say that kids in the early grades are still learning to control their attention, which can affect their grades and behavior in class.

**The coping Mechanism of Early Childhood Mathematics Teachers in Dealing with Difficult Learners.** There are six (6) major themes extracted from the analysis of data for research question 2 as shown in Table 2.

**Theme 1: Determining Learners' Level of Competence.**

The results showed that teachers consider how well students understand arithmetic when teaching it to young children. Participants stressed that identifying what students can do and adjusting their teaching based on how well they understand can help them learn better. Teachers said they used several teaching methods appropriate to students' ages, IQs, and levels of thinking. This implies that acknowledging learners' competencies enables educators to deliver suitable education and assistance. This finding aligns with Attakorn et al.'s (2014) study, which showed that effective teachers use appropriate teaching and assessment methods to help students learn more deeply.

**Theme 2: Collaboration with Parents.**

Another way to deal with stress, the study found, is to work with parents to help their kids master math. Teachers said that parents helping their kids with schoolwork at home, even for a short time, can help them remember what they learned in class. Some participants said they sometimes help parents help their kids with fundamental learning tasks, such as writing numbers and filling out activity sheets. This shows that learning can happen outside of school when teachers and parents work together. This result corroborates with the research of Swap (1993), who highlighted that both educators and parents impact students'

academic achievement through collective accountability in the educational process.

Table 2  
*The coping Mechanism of Early Childhood Mathematics Teachers in Dealing with Difficult Learners.*

ESTABLISHED THEMES	THEMATIC STATEMENTS
Determine the level of competence	<ul style="list-style-type: none"> <li>• <i>Strategies in teaching according sa ilang level.</i> ("Strategies in teaching according to their level") P3</li> <li>• <i>Learning mathematics that is appropriate to their age, intelligences and level of thinking.</i> P4</li> </ul>
Collaboration with the Parents	<ul style="list-style-type: none"> <li>• <i>Usahay mag tudlo pud mi sa ginikanan kung unsaon.</i> ("Sometimes we also taught their parents on how to do it") P6</li> <li>• <i>Ipatawag ang ginikanan.</i> ("Request the presence of the parents") P10</li> <li>• <i>Tabang sa parents kung minsan.</i> ("Help of the parents sometimes") P8</li> <li>• Answer the activity with me or with their parents at home. P5</li> </ul>
Indulging Engaging Activities	<ul style="list-style-type: none"> <li>• <i>Learning by doing activities nila. Kay manipulative man jud ang dapat sa mathematics.</i> ("Learning by doing activities, because their mathematics should be manipulative") P6</li> <li>• <i>Pwede colors, numbers so atik atik lang na games pero learning gihapon to sha.</i> ("Colors, numbers as say it's a game and learning at the same time") P2</li> <li>• <i>Magiging play na sa ilaha pero wala sila kabalo, kabalo na sila mag addition na.</i> ("It's a play for them but they didn't know that its addition") P9</li> <li>• Browsing the internet on different interactive games. P5</li> <li>• <i>tapos about sa mga preparation sa mga instructional materials...kinahanglan jud prepare sha colored dapat...</i> ("then about the preparation of instructional materials.it should be prepared and colorful")P7</li> <li>• <i>Kinahanglan colorful materials...kuan sir... visual na sila.. di na sila pwede na blah blah lang...ohm</i> ("must be a colorful materials, they are more on visuals.")P7</li> <li>• <i>mao na ang isa jud..IM's... lami na kaayu imung explain explain naa juy bat ana murag...di jud kasabot.</i> ("IM's is the number one...you well explained but the learners cannot understand")P2</li> </ul>
Instructional materials must be well prepared	
Using Information and Communication Technologies or ICT	<ul style="list-style-type: none"> <li>• <i>May kuan pud nimo dire kanang show different kanang videos.</i> ("We have here a show a different video") P3</li> <li>• <i>Play ang video sa tv, kay gagamit man mig tv using ICT.</i> ("Play video in the tv we are using ICT") P2</li> <li>• <i>Kuan sir using videos.</i> ("Using videos sir")P3</li> <li>• Equipped with easy-to-understand video presentation. P5</li> </ul>
Teaching Strategies to easily deliver the topic	<ul style="list-style-type: none"> <li>• Knowing a strategy that will fit every learner.P2</li> <li>• <i>So pangitaan nimo shag way na kato ma cope up nimo ug makuha nila.</i> ("you have to find way to coup up and let them acquire knowledge") P3</li> <li>• <i>think the struggles that I encountered teaching early childhood mathematics is knowing a strategies that will fit to every learners since ano mana sir diversified man ang mga learners nay uban na mas dali makabalo nay uban dugay. So, struggle nimo is a knowing ah what are their strength and weaknesses in terms of mathematics. P2</i></li> </ul>

**Theme 3: Providing Engaging and Interactive Activities.** The study also showed that teachers use fun, interactive activities to address the

challenges they face when teaching early math. Participants emphasized incorporating games, tactile activities, and manipulative learning tasks to enhance students' engagement and enjoyment in mathematics. These activities get kids involved and help them learn arithmetic concepts more effectively by letting them experience them. The Department of Child Care and Early Childhood Education (DCCECE, 2017) supports this finding by emphasizing the value of child-centered activities that enhance learners' cognitive and motor skills while fostering meaningful learning experiences.

**Theme 4: Preparation and Use of Instructional Materials.** Another essential method the participants came up with is preparing and using the right teaching materials. Teachers stressed that materials that are bright and interesting to look at help young learners pay attention and make arithmetic ideas easier to understand. Participants said that using visual and concrete learning materials makes classes more interesting and helps students understand what they are learning. This finding supports Kadzera's (2006) study, which found that instructional resources are very important for making learning more engaging and helping teachers teach more effectively.

**Theme 5: Utilization of Technology and Effective Teaching Strategies.** Finally, the results demonstrated that teachers use technology and other instructional strategies to improve math lessons. Participants said they used video presentations, digital tools, and interactive exercises to keep students interested and make lessons more fun. Technology also helps teachers teach arithmetic more effectively by allowing them to demonstrate procedures visually. This finding aligns with research showing that Information and Communication Technology (ICT) can support math education by making communication easier, engaging students more, and helping them better understand math principles.

## DISCUSSION

Teaching is not an easy job, as a teacher you have to commit yourself to imparting

knowledge to every learner no matter what challenges you encounter on the journey of teaching. Early mathematics deals with simple, yet profound mathematical understanding that building blocks to understanding later a more complex mathematics.

As we work on this study, the researchers had the venture to deem on the struggles of teachers teaching early childhood mathematics, with different learning styles and teaching styles as a teacher you should always have a strategy to cope up the struggles you've encountered.

Moreover, this study has a significant implication to early childhood mathematics teachers who had encountered struggles in delivering mathematics course. The result of this study helps them with the strategies they can apply in order for them to effectively deliver the lesson or task to the learners.

**Conclusion.** This study examined the experiences of early childhood mathematics teachers in managing challenging learners by analyzing the obstacles they face and the strategies they utilize in their teaching practices. The results showed that teachers have significant trouble teaching early childhood math, especially when their students lack a strong math foundation, are hyperactive, have short attention spans, or are trying to get attention. These difficulties make it much harder to run a classroom and teach math effectively, underscoring how difficult it is to teach math to young children.

Even with these problems, the participants showed several ways to help students understand math. Teachers stressed the need to assess their students' skills so they can choose the best teaching methods. Working with parents also proved to be an important tactic, as it helped students learn outside the classroom. Teachers also used fun and interactive activities, created visually appealing teaching materials, employed information and communication technology (ICT), and employed adaptable teaching methods that worked for all

kinds of students. These coping strategies helped teachers keep the classroom a good place for learning and helped young children learn math in ways that were relevant to them.

The study emphasizes the need to provide early childhood mathematics educators with sufficient professional training, teaching materials, and institutional support. Improving teachers' instructional skills and providing them with the right educational tools and technologies can help address the challenges that come with teaching hard-to-teach students. Moreover, promoting collaboration between schools and families may enhance student involvement and improve mathematical learning outcomes. Future studies may further examine instructional interventions and professional development programs that help enhance teachers' ability to manage diverse and complex classroom conditions in early childhood mathematics education.

**Recommendation.** This study is focused on the narrative journey of early childhood mathematics teachers in dealing with difficult learners. Future research may consider the strategies and coping mechanism of teachers teaching early childhood mathematics in dealing with difficult learners. It's saddening that early childhood mathematics teacher's journey of dealing with difficult learners is underestimated, however I recommend for future research on early mathematics teaching journey to validate and assess the consistency of the findings.

**Conflict of Interest.** The authors declare no conflict of interest.

**Funding Source.** The research received no external funding.

**Artificial Intelligence use.** The research used Turnitin for plagiarism checking.

**Ethics approval statement.** Ethical approval was obtained from the Research Ethics Information Sheet (REIS), with control number 1362.

**Data Availability statement.** All data supporting the findings of this study are included within the manuscript and its supplementary materials.

**Publisher's disclaimer.** The views expressed in this article are those of the authors and do not necessarily reflect the views of the publisher. The publisher disclaims any responsibility for errors or omissions.

## REFERENCES

- Dorier, J. L., & Coutat, S. (2016). *Mathematical knowledge and practice in early childhood education*. Paper presented at the 13th International Congress on Mathematical Education, Hamburg, Germany. <https://doi.org/10.24452/sjer.38.1.4968>
- DuPaul, G. J., McGoey, K. E., Eckert, T. L., & VanBrakle, J. (2001). Preschool children with attention-deficit/hyperactivity disorder: Impairments in behavioral, social, and school functioning. *Journal of the American Academy of Child and Adolescent Psychiatry*, 40(5), 508–515. <https://doi.org/10.1097/00004583-200105000-00009>
- Elia, I., Baccaglini-Frank, A., Levenson, E., Matsuo, N., Feza, N., & Lisarelli, G. (2023). *Early childhood mathematics education research: Overview of latest developments and looking ahead*. <https://doi.org/10.4000/adsc.3113>
- Forness, S. R., & Kavale, K. A. (2001). ADHD and a return to the medical model of special education. *Education and Treatment of Children*, 24(3), 224–247. <https://psycnet.apa.org/doi/10.1080/13632752.2025.2577602>
- Geddes, B. (1997). *Powerful strategies for reducing classroom behavior problems: Discipline strategies that work*. Bureau of Education & Research. [https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/behavior\\_pg\\_092308.pdf](https://ies.ed.gov/ncee/wwc/Docs/PracticeGuide/behavior_pg_092308.pdf)
- Kadzera, C. M. (2006). *Use of instructional technologies in teacher training colleges in Malawi* (Doctoral dissertation). Virginia Polytechnic Institute and State University. <http://hdl.handle.net/10919/27728>
- Karsli, E. (2016). *Young children's embodied mathematical practices in a pre-K classroom*. Paper presented at the 13th International Congress on Mathematical Education, Hamburg, Germany. <https://openscholar.uga.edu/record/9036?v=pdf>
- Lüken, M. (2019). Using finger patterns—The case of communicating age. In *Eleventh Congress of the European Society for Research in Mathematics Education (CERME11)*. <https://hal.science/hal-02414901/document>
- Lüken, M., & Kampmann, R. (2018). The influence of fostering children's patterning abilities on their arithmetic skills in Grade 1. In I. Elia, J. Mulligan, A. Anderson, A. Baccaglini-Frank, & C. Benz (Eds.), *Contemporary research and perspectives on early childhood mathematics education* (pp. 55–66). Springer. [https://doi.org/10.1007/978-3-319-73455-0\\_4](https://doi.org/10.1007/978-3-319-73455-0_4)
- Mohamed, M., & Johnny, J. (2010). Investigating number sense among students. *Procedia - Social and Behavioral Sciences*, 8, 317–324. <https://doi.org/10.1016/j.sbspro.2010.12.044>
- Mulligan, J. T., & Mitchelmore, M. C. (2018). Promoting early mathematical structural development through an integrated assessment and pedagogical program. In I. Elia et al. (Eds.), *Contemporary research and perspectives on early childhood mathematics education* (pp. 17–33). Springer. [https://doi.org/10.1007/978-3-319-73455-0\\_2](https://doi.org/10.1007/978-3-319-73455-0_2)

- Mulligan, J., Oslington, G., & English, L. (2020). Supporting early mathematical development through a 'pattern and structure' intervention program. *ZDM – Mathematics Education*. <https://doi.org/10.1007/s11858-019-01088-9>
- OECD. (2019). *Teaching and learning international survey (TALIS) 2018 results (Volume I): Teachers and school leaders as lifelong learners*. OECD Publishing. <https://doi.org/10.1787/1d0bc92a-en>
- Pashler, H. (1994). Dual-task interference in simple tasks: Data and theory. *Psychological Bulletin*, *116*(2), 220–244. <https://doi.org/10.1037/0033-2909.116.2.220>
- Passiante, G., Margherita, A., & Elia, G. (2020). Digital technologies and firm performance: The role of digital organizational culture. *Technological Forecasting and Social Change*, *150*, 119–132. <https://doi.org/10.1016/j.techfore.2019.119791>
- Purpura, D. J., Napoli, A. R., Wehrspann, E. A., & Gold, Z. S. (2021). Causal connections between mathematical language and mathematical knowledge in early childhood. *Journal of Experimental Child Psychology*, *201*, 104992. <https://doi.org/10.1016/j.jecp.2020.104992>
- Rabiner, D. L., Carrig, M. M., & Dodge, K. A. (2016). Attention problems and academic achievement: Do persistent and earlier-emerging problems have more adverse long-term effects? *Journal of Attention Disorders*, *20*(11), 946–957. <https://doi.org/10.1177/1087054713507974>
- Sun, R. C. F., & Shek, D. T. L. (2012). Student classroom misbehavior: An exploratory study based on teachers' perceptions. *The Scientific World Journal*, *2012*, 1–8. <https://doi.org/10.1100/2012/208907>
- Swap, S. M. (1993). *Developing home-school partnerships*. Teachers College Press. <https://eric.ed.gov/?id=ED358220>
- Tobin, T., & Sugai, G. (1996). Patterns in middle school discipline records. *Journal of Emotional and Behavioral Disorders*, *4*(2), 82–94. <https://doi.org/10.1177/106342669600400202>
- Wilkinson, S., Freeman, J., Simonsen, B., Sears, S., Byun, S. G., Xu, X., & Luh, H. J. (2020). Professional development for classroom management: a review of the literature. *Educational Research and Evaluation*, *26*(3–4), 182–212. <https://doi.org/10.1080/13803611.2021.1934034>
- Young-Loveridge, J., & Bicknell, B. (2016). *Developing early Place-value Understanding: A Framework for Tens Awareness*. Poster presented at the 13th International Congress on Mathematical Education, Hamburg, Germany. <https://files.eric.ed.gov/fulltext/ED572346.pdf>