

Forum for Linguistic Studies

https://journals.bilpubgroup.com/index.php/fls

ARTICLE

Contextualizing Mother Tongue-Based Multilingual Education: Pedagogical Strategies in Kindergarten to Grade3 Classrooms in the Philippines

Rey R. Garrido , Roland A. Niez * 0

School of Arts and Sciences, Biliran Province State University, Naval Biliran 6560, Philippines

ABSTRACT

Mother Tongue-Based Multilingual Education (MTB-MLE) was institutionalized in the Philippines as part of the K to 12 curriculum reform, aiming to enhance learning by using learners' first language in early grade instruction. However, its implementation poses challenges, particularly in resource-limited and linguistically diverse contexts. This study investigates the emerging pedagogical practices in the implementation of the MTB-MLE program as mandated by the Department of Education. It focuses on how Kindergarten to Grade 3 teachers adapt instructional strategies to address diverse learner needs. Using a comparative case study design, the research involved purposively selected teachers from Kindergarten to Grade 3. Data were gathered through a validated researcher-made questionnaire and triangulated to ensure reliability. Results show that teachers consistently implement the MTB-MLE program and employ a variety of strategies to support learning. As grade levels progress, their approaches become increasingly creative and responsive. A notable divergence emerged between standardized instructional methods prescribed by the Department and the more flexible, adaptive strategies developed by teachers. These practices better accommodate contextual challenges and learner diversity. The study underscores the vital role of teachers in bridging policy and practice through pedagogical innovation, emphasizing the need to support teacher-led approaches for effective MTB-MLE implementation.

*CORRESPONDING AUTHOR:

Roland A. Niez, School of Arts and Sciences, Biliran Province State University, Naval Biliran 6560, Philippines; Email: rolandniez@bipsu.edu.ph

ARTICLE INFO

Received: 18 July 2025 | Revised: 8 August 2025 | Accepted: 21 August 2025 | Published Online: 11 October 2025 DOI: https://doi.org/10.30564/fls.v7i10.11139

CITATION

Garrido, R.R., Niez, R.A., 2025. Contextualizing Mother Tongue-Based Multilingual Education: Pedagogical Strategies in Kindergarten to Grade3 Classrooms in the Philippines. Forum for Linguistic Studies. 7(10): 959–974. DOI: https://doi.org/10.30564/fls.v7i10.11139

COPYRIGHT

Copyright © 2025 by the author(s). Published by Bilingual Publishing Group. This is an open access article under the Creative Commons Attribution-NonCommercial 4.0 International (CC BY-NC 4.0) License (https://creativecommons.org/licenses/by-nc/4.0/).

Highlights

- Presents innovative pedagogical approaches in implementing Mother Tongue-Based Multilingual Education (MTB-MLE) in the Philippines.
- Provides practical insights from the classroom practices of K–Grade 3 teachers.
- Offers evidence-based recommendations for enhancing MTB-MLE implementation.
- Highlights the role of administrative and institutional support in effective MTB-MLE delivery.

Keywords: Mother Tongue-Based Multilingual Education; Emerging Pedagogies; Early Grade Education; Comparative Case Study; Instructional Strategies; Teacher Innovation; Philippines

1. Introduction

Mother Tongue-Based Multilingual Education (MTB-MLE) is an educational approach that promotes the use of learners' first language (L1) as the primary medium of instruction in the early years of schooling. Grounded in decades of global research, MTB-MLE has been recognized as a transformative pedagogical model that fosters foundational literacy, learner engagement, and equitable access to education [1,2]. International organizations such as UNESCO [3] and UNICEF [4] emphasize the importance of mother tongue instruction in early childhood education, citing its benefits in improving comprehension, participation, and long-term learning outcomes. As a result, countries such as Bangladesh, India, Papua New Guinea, and Nepal have incorporated L1 instruction into their national education policies [5,6].

In the Philippines, the Department of Education institutionalized MTB-MLE through the Enhanced Basic Education Act of 2013, requiring instruction in the learner's mother tongue from Kindergarten to Grade 3 (K–3), followed by a gradual transition to Filipino and English in higher grades. Currently, twelve major regional languages are being used across the country, including Cebuano, Waray, and Iloko [7]. The program seeks to address issues related to high functional illiteracy and poor academic performance by making learning more accessible, contextually relevant, and culturally responsive [8,9].

Beyond its academic objectives, MTB-MLE has also been shown to strengthen cognitive development by enabling learners to build conceptual understanding in a language they already command, and to enhance socio-cultural development by fostering cultural pride, identity, and intergenerational knowledge transfer^[10].

Despite its promising framework, MTB-MLE implementation in the Philippines continues to face several challenges—most notably a lack of instructional materials, inconsistent teacher training, and unclear implementation guidelines, especially in linguistically diverse or underserved regions [11,12]. Teachers are often left to adapt or innovate with limited institutional support, leading to the emergence of unprescribed yet potentially effective classroom strategies. While several national-level studies have documented general MTB-MLE practices, little is known about the localized and adaptive pedagogies that teachers are employing on the ground—particularly in smaller, under-researched areas like Naval, Biliran.

Preliminary observations and a pre-survey conducted in two public elementary schools in Naval revealed that teachers actively use MTB-MLE approaches, yet the methods vary and often deviate from standardized practices. This suggests the presence of emerging pedagogies shaped by contextual realities. However, to date, no study has specifically investigated the pedagogical techniques teachers in this locality use, how they differ from conventional practices, and what makes them effective in their setting.

In response to this gap, the present study seeks to explore the question: What are the emerging pedagogical strategies used in the implementation of MTB-MLE in Kindergarten to Grade 3 classrooms in Naval, Biliran? More specifically, it investigates how MTB-MLE is taught in these classrooms, what strategies or techniques are employed by teachers, and how these approaches differ from the standard ones prescribed by the Department of Education. By examining these classroom-level innovations, the study aims to contribute to a deeper understanding of how teachers navigate policy demands and pedagogical realities—ultimately of-

fering insights that may be applicable to other MTB-MLE contexts across the country.

2. Literature Review

The growing emphasis on equitable, inclusive, and contextually responsive education has brought Mother Tongue-Based Multilingual Education (MTB-MLE) to the forefront of educational discourse, particularly in linguistically diverse nations such as the Philippines. Mother Tongue-Based Multilingual Education (MTB-MLE) is a pedagogical approach that promotes the use of learners' first language (L1) as the primary medium of instruction during the early years of schooling. This method has gained traction globally, particularly in multilingual and developing nations, as a means of enhancing educational equity, cognitive development, and cultural preservation^[13,14]. International organizations such as UNESCO^[3] and UNICEF^[4] have consistently advocated for mother tongue instruction, noting its positive impact on literacy, learning outcomes, and student engagement.

Studies show that early instruction in the mother tongue supports stronger foundational learning and improves second-language acquisition^[15,16]. In a review of longitudinal research by Thomas and Collier, Burton^[5] emphasized that learners who received instruction in their L1 exhibited better academic and language outcomes compared to those taught exclusively in a second language.

In the Philippine context, MTB-MLE marks a transformative shift from English-dominant instruction. Mahboob and Cruz^[17] described this policy reform as a paradigm shift, requiring systemic change in attitudes and practices. Subsequent research affirms that the policy enhances inclusivity and cultural relevance in education^[18–20]. However, scholars also highlight persistent challenges, such as stakeholder resistance and implementation inconsistencies^[21,22].

Effective MTB-MLE implementation requires adaptive and culturally responsive pedagogies. Alexander^[23] posits that teaching in multilingual classrooms involves a dynamic interplay of instructional strategies, language use, assessment, and classroom interaction. Philippine-based studies demonstrate how educators innovate through localized models. For instance, Corlet and Tarusan^[24] observed that teachers apply self-retooling, individual support, and community participation to bridge resource and training gaps. Similarly,

Lagura et al. [25] introduced the ISTIKKU model, which significantly improved early literacy in Grade 1 learners.

Translanguaging, code-switching, and the use of lingua francas are common strategies among MTB-MLE teachers [26]. Teachers also employ improvised materials and localized texts to enhance learner engagement. Nchang [27] underscores the importance of embedding cultural elements in instruction to foster learners' identity and motivation.

Despite these promising practices, several studies note obstacles such as inadequate teaching resources, inconsistent orthographic standards, and teacher training deficiencies [28–30]. Teacher attitudes are especially critical; Wa-Mbaleka [11] and Nolasco et al. [31] found that learners become more confident and expressive when teachers positively model and encourage mother tongue use.

Emerging pedagogical strategies in MTB-MLE are rooted in constructivist and sociocultural learning theories. Constructivism, inspired by Piaget^[32], views learning as an active process where learners build on prior knowledge through assimilation and accommodation. This approach advocates child-centered education, emphasizing play, exploration, and project-based learning aligned with developmental stages^[33]. Such methods remain influential in early childhood pedagogy and progressive education movements globally, including Montessori and Steiner schools.

Social constructivism, particularly Vygotsky's [34] theory, emphasizes the social nature of learning and the importance of language and cultural context. Central to this framework is the Zone of Proximal Development (ZPD), wherein learners achieve more with guided support than independently. Scaffolding, collaborative tasks, and teacher modeling are essential components of instruction grounded in this theory [35]. These practices align with the learner-centered reforms advocated in many developing countries, including the Philippines.

Bernstein's [36] distinction between visible (performance model) and invisible (competence model) pedagogies provides a useful lens for analyzing classroom practice. In visible pedagogies, teachers clearly structure lessons and expected outcomes, whereas invisible pedagogies emphasize informal, individualized learning experiences. Local studies also explore policy frameworks and pedagogical tensions in the Philippine implementation. Cansino [14] examines the ideological and utilitarian underpinnings of MTB-MLE, call-

ing for a balanced approach. De Jesus^[37] and Sanchez et al.^[38] highlight recurring instructional challenges such as translation, standardization, and content development, all of which require sustained institutional support.

Ultimately, effective MTB-MLE implementation depends on teacher preparedness, context-appropriate pedagogy, and ongoing stakeholder engagement. As the policy matures, continuous research and adaptive strategies are vital to ensuring its success and sustainability.

3. Objectives

This study aimed to determine the teachers' pedagogical preferences in the implementation of Mother Tongue-Based Multilingual Education (MTB-MLE) in Kindergarten to Grade 3 (K–G3) classrooms in Naval, Biliran. Specifically, it sought to:

- Examine how MTB-MLE was taught in K-G3 classrooms in Naval, Biliran.
- (2) Identify the pedagogical strategies or techniques used in teaching MTB-MLE in these classrooms.
- (3) Analyze how these pedagogical approaches differed from the standard strategies commonly employed in MTB-MLE classrooms.

4. Methodology

4.1. Participants of the Study

The study employed purposive random sampling to select research participants. Purposive sampling is a type of nonprobability sampling with the main objective of producing a sample that can be assumed to be logically representative of the target population^[39]. This method is often implemented by applying expert knowledge of the target population to select a sample in a nonrandom manner that represents a cross-section of the population.

The study collected data from Kindergarten to Grade 3 teachers from rural schools: Tamarindo Elementary School and Naval Central School SPED Center, both located in the central area of Naval, Biliran. The distribution of participants was consistent across Kindergarten and Grades 1 to 3.

The research was limited to teachers teaching in Naval, Biliran Province, specifically those who use Mother TongueBased Multilingual Education (MTB-MLE) in their class-rooms.

4.2. Instrument

The primary data-gathering tool was a researcher-developed questionnaire, crafted from an extensive review of relevant literature, including both published and unpublished works related to the topic. To ensure its validity, reliability, and clarity, the questionnaire underwent a series of validation and reliability tests prior to the actual data collection. During a pilot-testing phase, experts reviewed the instrument to assess the clarity, relevance, and appropriateness of the items. This phase also considered factors such as the time required to complete the questionnaire, the respondents' understanding of the instructions, and any issues encountered while answering the items.

Two instruments were administered: a pre-survey questionnaire and the main survey questionnaire. The presurvey, administered to teachers, included a checklist of various pedagogical strategies used in Mother Tongue-Based Multilingual Education (MTB-MLE). Teachers marked an "X" beside the strategies they commonly employed and could also write additional strategies under an "Others" category. Respondents who selected "Others" were later identified as potential interviewees due to their use of emerging pedagogical approaches. The main survey questionnaire gathered three sets of data: (1) how MTB-MLE was implemented in Kindergarten to Grade 3 classrooms in Naval, Biliran; (2) the emerging strategies and techniques teachers used; and (3) teachers' perceptions of the differences between DepEd-prescribed approaches and their actual classroom practices. This comprehensive approach provided insights into both standard and innovative practices in MTB-MLE instruction.

4.3. Validation of Research Instrument

The validity and reliability tests of the research instrument was performed prior to the conduct of the study to ensure the comprehensibility of all measures. At this stage, the researcher determined the clarity and relevance of the questions used in the survey questionnaire through the help and guidance of experts who checked the research instrument. The validity of the research instrument was conducted during the pilot-testing phase of instrument. Some of the factors or questions considered during the pilot run were the following: (1) How long does it take for the respondent to fill out the questionnaire? (2) Were the participants able to understand the directions clearly? (3) Were there any problems reported by those who used the questionnaire?

4.4. Design and Data Gathering Procedure

This study employed a comparative case study design, which allowed for an in-depth examination of differences in pedagogical strategies among teachers from Kindergarten to Grade 3. According to Devi^[40], comparative descriptive design is used to describe and analyze variations across naturally occurring groups without focusing on causal relationships. Aggrawal and Ranganathan^[41] further emphasized that this method is useful for outlining the distribution of variables among cohorts such as grade level or teaching experience. In this research, each grade level served as a distinct case, with teacher groups as the main participants.

The data collection process followed several structured stages. First, interview questions and survey instruments were developed, validated by field experts, and pilot-tested in two schools (School A and School B). The pre-survey helped identify teachers using additional MTB-MLE strategies not listed in the standard checklist. These teachers were then recruited as key informants. Formal permissions were obtained, and questionnaires were personally distributed, with sufficient time allotted for completion. After collecting the responses, in-depth interviews were conducted with selected Kindergarten to Grade 3 teachers to gain deeper insights into their emerging pedagogical practices in MTB-MLE instruction.

4.5. Data Triangulation Process

Triangulation refers to the use of multiple methods or data sources in qualitative research to develop a comprehensive understanding of phenomena [42]. Triangulation also has been viewed as a qualitative research strategy to test validity through the convergence of information from different sources. The aim of data triangulation is to enhance the credibility and trustworthiness of the research findings by reducing the potential for bias and increasing the rich-

ness and depth of the data. The specific techniques used in data triangulation can vary depending on the research question, data type, and research design, but may include within-method triangulation, between-method triangulation, and between-source triangulation, among others [43].

In this study, the credibility, validity, and trustworthiness of the study was determined by conducting interviews among K-G3 teachers of Naval Central School SPED Center, Atipolo Elementary School and Tamarindo Elementary School. Apart from the interviews, the researcher reviewed the lessons plans of the teachers to ascertain the utilization of MTB-MLE in their lessons. As a result, of the eight teachers interviewed in both aforementioned schools, 100 percent affirmed that they utilize MTB-MLE in their lessons. The lesson plans and the interviews concretizes the teachers' utilization of MTB-MLE in their lessons.

4.6. Data Analysis

The data analysis of the study followed the processes prescribed in a comparative case study design. The entire process has two steps; the Coding Process and the Interpretation, Analysis and Reflection Process.

- Coding Processes. This process involves obtaining codes or themes from the transcripts of interviews or conversations conducted with the teachers. The entire coding process consists of transcribing, coding, classifying the codes and finding themes, patterns and relationships^[44].
 - 1.1. Transcription process. The researcher transcribed 16 audio-recorded interviews of the study participants. The transcription process was done manually without the use of any transcribing software. This means that the researcher had to listen to each of the audio recording and type it, then re-listened and re-typed it several times until the researcher was satisfied with accuracy of the transcription. The process allowed the author to familiarize with the data and understand the context of the conversations in preparation for the coding process.
 - 1.2. Coding process. Coding is a qualitative data analysis strategy in which some aspect of the data is assigned a descriptive label that allows the researcher to identify related content across the

data^[45]. Coding qualitative data is a critical part of the analytical process of analyzing qualitative research as it allows the researcher to interpret, organize, and structure the observations and interpretations into meaningful theories. Coding in qualitative research allows one to be reflexive, critical, and rigorous with your findings^[46].

2. Interpretation, Analysis and Reflective Process. Comparative case study involves the analysis of similarities and differences across cases. The process of interpretation, analysis, and reflection in comparative case study involves various methods and techniques. According to Walsham^[47], the interpretation, analysis and reflection process are very subjective and depends largely on the perspective of the researcher. In this study, the gathered data were analyzed and used to answer the research questions. Overall, the analysis and interpretation of the data involved defining the research question, selecting cases, collecting data, analyzing data, reflecting on findings, and writing up the report.

5. Results and Discussion

This section presents a thematic analysis of the teaching approaches and pedagogical strategies employed by Kindergarten to Grade 3 (K–G3) teachers in implementing the Mother Tongue-Based Multilingual Education (MTB-MLE) program in Naval, Biliran. Drawing on qualitative data from interviews and classroom observations, the findings reveal how teachers navigate between prescribed Department of Education (DepEd) guidelines and localized instructional practices.

5.1. Teaching Approaches of MTB-MLE in K-Grade 3 Classrooms in Naval, Biliran

This section presents the teaching approaches employed by Kindergarten to Grade 3 (K–G3) teachers in implementing the Mother Tongue-Based Multilingual Education (MTB-MLE) curriculum in Naval, Biliran. These approaches include the structured approach, flipped classroom, drill and practice, explicit vocabulary instruction, and contextual learning, as outlined in **Table 1**.

KinderGrade 1Grade 2Grade 3Structured approachStructured approachStructured approachStructured approachFlipped classroomFlipped classroomFlipped classroomDrill and practiceExplicit vocabularyContextual learning

Table 1. Summary of MTB-MLE Approaches in K-G3 Classroom.

5.1.1. Kindergarten

As indicated in **Table 1**, Kindergarten teachers primarily follow a structured approach, guided by the Department of Education's (DepEd) Curriculum Guide and Most Essential Learning Competencies (MELCs). Teachers are expected to strictly adhere to the prescribed sequence of lessons, with provided worksheets and lesson plans dictating daily instruction. While this reduces flexibility, teachers still apply their interpretation and creativity in implementing lessons.

"Naa nay mga kuan gikan sa first grading hangtud sa fourth quarter kung unsaon pag-teach sa letter names ug sa mga letters and numbers..." [Lesson plans are already provided from the first grading to the fourth quarter on how to teach letter names and numbers.] -T1

Kindergarten teachers also employ the flipped class-room approach, using instructional videos or pre-prepared materials at home, allowing classroom time to focus on interaction and reinforcement^[48]. This strategy has been shown to enhance learner motivation and engagement across levels^[49,50].

Additionally, the drill and practice approach is employed to reinforce vocabulary mastery through repetitive exercises, flashcards, chants, and familiar routines. This repetitive exposure helps develop foundational literacy skills.

"Daily routine sir, hangtud nga maka kuan sila, maka-master na sila." [Our daily routine continues until the learners master the content.] – T1

5.1.2. Grade 1

Grade 1 teachers likewise adhere to the structured approach, following MELCs and curriculum-aligned lesson plans. During the pandemic, teachers utilized modular distance learning materials developed by DepEd, maintaining alignment with learning competencies.

"Kami na ang mag kuan unsay kuan sa mga bata nga mu fit sa ilaha sa ilang pag kuan understand." [We determine what instructional materials are suited to the learners' understanding.] – T1

The flipped classroom approach remains relevant, with visual materials aiding comprehension—particularly for learners with limited vocabulary. Teachers customize instructional materials to match learners' proficiency levels, a form of differentiated instruction^[51].

Moreover, explicit vocabulary instruction is applied in teaching local terms that are either unfamiliar or rarely used in the community^[52]. Teachers contextualize these terms using visual aids or real-life examples.

"Kami na ang mag discuss... kay naa baya uban terms pud nga mother tongue pero dili man na atong ginagamit..." [We discuss how learners will understand unfamiliar mother tongue terms not typically used locally.] – T3

5.1.3. Grade 2

Grade 2 teachers also consistently apply a structured approach, closely following DepEd-provided textbooks and curriculum schedules.

"Naa naman na syay guidelines kung unsaon namo ang step-by-step sa pagtudlo." [We are given step-by-step teaching guidelines.] – T1

"Mao may gi kuan sa DepEd, so muadapt nalang gyud ta sir." [That's what DepEd provides, so we follow it.] – T2

This approach ensures clear instructional design, sequential learning, and accountability, particularly beneficial for struggling learners^[53]. However, as noted by Darling-

Hammond et al.^[54], its rigidity may limit creativity and adaptability.

Although **Table 1** does not indicate a second approach for Grade 2, teachers reported occasionally integrating digital tools and blended methods^[55,56], particularly in vocabulary lessons for low-proficiency learners. Structured approaches—like syntactic tree structures—can aid vocabulary retention^[57].

5.1.4. Grade 3

Grade 3 teachers continue to follow a structured approach, consistently aligning lesson delivery with MELCs and sequence plans, similar to lower grade levels.

"Follow lang kung unsay naa sa MELC, mao lang among i-focus." [We simply follow what's in the MELCs and focus on those.] – T1

They also utilize the flipped classroom approach, preparing learners at home with visual materials, short readings, or recorded explanations, so that class time can be dedicated to interactive tasks such as storytelling and inquiry-based activities.

"...through story-telling and then after sa storytelling, inquiry-based nami." [We use storytelling, then shift to inquiry-based activities.]

An additional method at this level is contextual learning, which connects classroom lessons to real-world applications [58]. Teachers use pictographs, printed images, videos, and localized PowerPoint presentations to relate vocabulary to students' daily experiences.

"Interpret nila sa pictograph... mag print mi ug mga pictures." [They interpret pictographs, so we print visual materials.] – T1

In some cases, contextual learning is combined with performance tasks—for example, having learners role-play real-life scenarios or create simple projects reflecting local culture. According to Wismanto and Samsi^[59], contextual learning promotes deeper understanding by encouraging learners to apply academic content to everyday situations, which Grade 3 teachers in this study demonstrated effectively.

5.2. Pedagogical Strategies or Techniques Used in Teaching MTB-MLE

Pedagogical strategies refer to the innovative methods, approaches, and techniques utilized by teachers to foster meaningful learning experiences^[60]. These strategies go beyond the prescribed curriculum of the Department of Education (DepEd), introducing context-driven, inclusive, and

adaptive practices that cater to diverse learner needs. The goal is to create an engaging environment that enhances understanding, retention, and application of knowledge and skills, particularly in Mother Tongue-Based Multilingual Education (MTB-MLE).

Table 2 presents the range of pedagogical strategies employed by K–Grade 3 teachers in implementing MTB-MLE.

Table 2. Summary of Pedagogical Strategies in Teaching MTB-MLE in K-G3 Classrooms.

Kinder	Grade 1	Grade 2	Grade 3
Contextualized learning	Contextualized learning	Peer learning	Contextualized learning
Inclusive learning	Inclusive learning	Inclusive learning	Cooperative learning
Explicit teaching approach	Explicit teaching approach	Explicit teaching approach	Explicit teaching approach
Differentiated instruction		Differentiated instruction	Differentiated instruction
		Marungko	Bridging strategy
		Inductive method of teaching	Code switching
		_	Audio-based instruction

5.2.1. Kindergarten

Kinder teachers utilize four main strategies: contextualized learning, inclusive teaching, differentiated instruction, and explicit teaching. Contextualized Learning involves the integration of local terms and experiences. Teachers encourage learners to share weekend stories or sing local songs in their mother tongue. This increases learners' linguistic familiarity and cultural identity.

A teacher shared: "During sharing time, I ask them to use Bisaya to tell their weekend stories or when singing local songs. They relate easily because they hear those songs at home."

Inclusive Teaching is practiced by ensuring equal participation among students, allowing no one to be left behind. Cooperative learning, group sharing, and reflective activities support learners with varying needs [61].

"Murag makageneralize ka ba nga makasabot jud ba, di ka makaingun nga naay mabehind." [You would generalize teaching until they understand and you can say that no one is left behind.] – T1

Differentiated Instruction is used to address learners who struggle with content. Teachers provide one-on-one sessions or assign these learners to front seats for closer interaction^[62].

"Kanang mga luya luya gipanganhi la sa

atubangan para maka kuan kay dili man maka follow pud sa instruction." [I would transfer those who are slower to the front because they cannot follow instructions.] – T2

Explicit Teaching ensures step-by-step instruction until mastery is achieved. Lessons are repeated, and progression only occurs once all learners demonstrate understanding.

"Mu explain hangtod nga maka grasp raman sya." [I will explain until they are able to grasp the lesson.] – T1

5.2.2. Grade 1

Grade 1 teachers adopt contextualized learning, explicit instruction, and inclusive teaching. Visual aids, such as flashcards and tarpapel, are extensively used. Teachers provide direct translation of unfamiliar terms and use real-world examples to facilitate understanding.

"Maghatag ug examples para mas maintindihan gyud nila." [I would give examples for learners to really understand.] – T1

"Using gyud ug pictures kay naa man sad term pud sa Bisaya nga di pud kasabot ang bata bisag Bisaya na siya di gihapon maintindihan so need gyud talaga ug pictures." [Using pictures, really, because there are terms that even if they are Bisaya, the pupils would still not understand, so we really need pictures.] – T1

Teachers use groupings for collaborative work, storytelling, songs, and reporting:

"Kanang groupings... murag naay reporting." [Groupings help in collaborative work and allow them to report their answers.] – T2

5.2.3. Grade 2

In addition to strategies used in earlier grades, Grade 2 teachers employ peer learning, Marungko approach, and the inductive method.

Peer Learning involves assigning group leaders who assist struggling peers, thereby fostering collaboration and leadership^[63].

"Ang mga dili makamao, tabangan sa leader... ang leader na nilay mu tudlo." [Those who are having difficulty learning are assisted by their leader.] – T2

Marungko Approach is a phonics-based reading method effective in early literacy acquisition [64].

"Pag tudlo halimbawa atong kuan 'Marungko'... kadali lang sila ato nakamao." [It's easier for them to understand reading through the Marungko approach.] – T2

Inductive Teaching allows learners to derive general concepts from specific examples, reinforcing problem-solving and analytical skills^[65].

"Mugamit pud mig mga lain pud nga mga strategies nga mag role playing nga makakuha jud sila ba." [We also use role playing so they really understand.] – T2

Spelling activities combine English and mother tongue:

"We pick a word, then ask them to spell it in English and Bisaya. This builds vocabulary and understanding." – T3

5.2.4. Grade 3

Grade 3 teachers demonstrate a broader range of strategies, including code-switching, bridging, cooperative learning, audio-based instruction, and continued use of differenti-

ated, contextualized, and explicit teaching.

Code-Switching allows for seamless communication by alternating between mother tongue, Filipino, and English, enhancing concept retention and cognitive flexibility [66].

"Mag translate ko sa Bisaya ngadto ko sa Tagalog." [I would translate words in Bisaya and then I would translate it in Tagalog.] – T1

"Mag inenglish usa ko sir sa gin ginahubad ko nalang sir." [I would use the English term first, sir, then I would translate it.]

Bridging Strategy facilitates understanding by transitioning from familiar to unfamiliar languages, making complex concepts more accessible [67].

"Hubaron jud from sa atong pinulungan then to language 2 and 3..." [Translate from local dialect to other languages until they understand.] – T3

Cooperative Learning promotes active participation through group tasks such as storytelling, poem reading, and classroom reporting. Socialization and teacher encouragement foster a positive learning environment [68].

"Naay ginhatag nga usa ka pulong and then imong ipa identify kung naa ba sa palibot..." [I give them a word and ask them to identify it around them.] – T3

Audio-Based Instruction is employed to teach pronunciation and improve listening skills using audio materials and recorded lessons.

Grade 3 teachers also strengthen contextual learning by integrating local examples and real-world scenarios:

"Kung unsay naa sa community mao toy imong pilion..." [Choose examples they are familiar with in their environment.] – T1

Multilingual approaches, real-world problems, and community resources are utilized to make learning relatable and engaging. Teachers from Kinder to Grade 3 employ a variety of adaptive pedagogical strategies to deliver MTB-MLE effectively. These include contextualization, differentiated instruction, explicit teaching, and the integration of culturally relevant materials. Despite challenges such as dialectal

variation in textbooks, teachers innovate and customize instruction to support learner success.

5.3. Reasons Why These Pedagogic Strategies are Different from Standard MTB-MLE Approaches

Mother Tongue-Based Multilingual Education (MTB-MLE) is a program sanctioned by the Department of Education. The Department endorses specific approaches in implementing the program and how it should be delivered in Kinder to Grade 3 classrooms. DepEd provides curriculum

guides and Most Essential Learning Competencies (MELC) from where the lesson plans are obtained and followed by the teachers. On the other hand, there are the pedagogic strategies that teachers utilize to implement and enhance the standard approaches provided by DepEd. These strategies are the emerging pedagogies that this study intended to identify.

The third objective of this study is to determine what separates the standard approaches from the pedagogical strategies utilized by the teachers. **Table 3** presents the ideas gathered by the study.

Table 3. Summary of Differences Between Standard Approaches and Pedagogical Strategies in Teaching MTB-MLE in K-G3 Classrooms.

Kinder	Grade 1	Grade 2	Grade 3
Contextualized IMs	Highlights teachers' flexibility and strategies	Contextualized IMs	Translated
Application of concepts	Showcases teachers creativity		Relatable and experiential

5.3.1. Kinder

For the Kinder teachers, they find their strategies different mainly because their instructional materials are contextualized. The instructions in the textbooks are for general classroom implementation, such as Sinugbuanong Binisaya or Cebuano, without considering that there are different other variations of the Binisaya dialect and in every variation, the words and meaning can vary. Some words may not be used in other forms of Binisaya and when found in the Sinugbuanong Binisaya textbooks, the teachers and learners are not unfamiliar with the term. In such cases, the teachers would search for the words on the internet and determine its meaning so they can translate and explain the meaning of the word in class. Thus, the instructional materials are localized or contextualized to ensure learning.

"I-localized nalang siguro para sayon ra." [I just localize the lessons to make it easier.] -T2

Contextualized materials are instructional resources that are designed to be relevant and meaningful to learners based on their background, experiences, and environment [69]. These materials are tailored to meet the specific needs of learners in a particular context, and they draw on local knowledge, culture, and language. The goal of contextualized materials is to make learning more engaging, accessible, and effective by connecting it to the learners' lives and experiences.

Moreover, textbooks provided by DepEd only provides concepts. In MTB-MLE classrooms, they apply the concepts and make it relatable to learners. The actual application of concepts makes the pedagogical strategies different from the standard approaches.

5.3.2. Grade 1

The case of Grade 1 learners, the teachers shared that they view emerging pedagogic strategies different from the structured instructions of DepEd in a way that the teachers' strategies highlight their flexibility to adapt and perform well given the limitations of DepEd and the MTB-MLE program.

"Standard man jud na sya ang sa DEPED tapos pag abot diri sa classroom is reality man gyud sya so lahi man gud ang expectation sa DEPED between the reality." [DepEd provides standard curriculum guide, but inside the classroom, it is reality. There's a difference between DepEd expectation and reality.] -T2

The Grade 1 teachers shared that their flexibility allows them to tailor their lessons to the level of knowledge and understanding of their pupils. Strategies, such as differentiated approach where teachers tailor lessons to meet each students' individual interests, needs, and strengths ^[70], underpins their capacity to be flexible and consider the differences of each and every learning, including their mental development and capability to learn.

The pedagogic strategies of Grade 1 teachers offer opportunities for them to showcase their creativity and innovation to enhance the learning capacity of their pupils. Below is a sample text from a teacher respondent in Grade 1.

"ICT ug tarpapel, laminated flash cards...Kami napud naghimo ug reading materials." [ICT and tarpapel, laminated flash cards...We are the ones who create contextualized materials.] -T2

The creation of contextualized learning materials is an example how the teachers creativity and innovation promotes learning among the learners. Accordingly, when children learn in their MT, they are more likely to understand what they are learning and to retain the information [54]. This is because they are already familiar with the language and concepts, and can make connections between new information and what they already know. This can lead to improved comprehension, which in turn can lead to better performance in other subjects. Furthermore, the use of mother tongue is known to enhance cognitive development because when children learn in their MT, they develop cognitive skills that can be transferred to other areas of learning. For example, they learn to think critically, solve problems, and make connections between ideas. This can help to enhance their overall cognitive development, which can improve their academic performance in other subjects.

"Nag collect ko ug stories gipanghimuan ug pictures gi himu ug libro. Then kahuman mao na siya akong gigamit para mapractice ang bata sa reading comprehension." [I would collect stories and would ask them to make pictures and turn them into books. Then after that, I would use the books to practice the learners' reading comprehension.] - T2

The use of mother tongue in Grade 1 and in K-G3, in general, is also found to enhance learning as it promotes bilingualism and multilingualism. By learning in their mother tongue and gradually adding other languages, children can become bilingual or multilingual [71]. This can have many benefits, including improved communication skills, enhanced cultural awareness and understanding, and better job prospects in the future. Moreover, mother tongue is proven to strengthen cultural identity. When children learn

in their MT, they learn about their own culture and traditions. This can help to strengthen their cultural identity and sense of belonging, which can lead to improved self-esteem and motivation.

The findings of this study are supported by the study of Walter and Dekker^[72] in Lubuagan, a rural community in the Cordillera Mountains. After three years of the study, consistent advantages were noted for the children in the mother tongue schools. They scored significantly higher than students in the control schools in Math, Reading, Filipino, and English.

5.3.3. Grade 2

The Grade 2 teachers find the pedagogic strategies they use to be different from the standard DepEd teaching approaches because the instruction materials they utilize are contextualized. Also, while the standardized instructions of DepEd are generalized, their strategies are done in steps, using examples and materials relatable to the learners.

Contextualized materials can take many forms, such as textbooks, workbooks, multimedia resources, games, and activities. They may include examples, stories, and problems that are relevant to the learners' cultural, social, and economic context. In this study, the teacher respondents shared how they use contextualized materials in teaching MTB-MLE in various forms.

Contextualized materials are particularly important in mother tongue-based multilingual education (MTB-MLE), where learners' mother tongue and culture are used as a foundation for learning. By incorporating local languages and cultural content into instructional materials, contextualized materials can help learners connect with the subject matter and develop a stronger sense of identity and belonging. In essence, contextualized materials are an essential component of effective and culturally responsive instruction. They help to bridge the gap between learners' prior knowledge and experiences and the new concepts and skills they are learning, making learning more meaningful and relevant to their lives.

5.3.4. Grade 3

The Grade 3 teachers emphasized that the difference between the standard instruction from DepEd and the pedagogic strategies that they use is the translation. In addition, their pedagogic strategies are relatable and experiential. Below are sample texts from the interview.

"MTB bridging, ang sa other subjects dili naman ka mag bridging kay understandable na nila so this is unique kay imo pang hubaron kada pulong arun masabtan nila ang tanan nimong lesson." [MTB bridging, and other subjects, you don't need bridging because they are already understandable, but this is unique because you have totranslate every word in order for the learners to understand all the lessons.] -T3

According to the teacher-paricipants, the instructional materials provided by DepEd are generalized and has limited number of languages with each of the 19 languages has variations of their own and this variation may not be the same or even similar to the language being imposed on a particular region or area, such as in the case of Naval, Biliran whose binisaya is not entirely the same with that of Sinugbuanong Binisaya used in textbook of DepEd. The beauty in the pedagogic strategies is the unfamiliar words are translated to the actual terms used locally by the learners, as well as the teachers. Thus, translation makes it easier for young learners to understand the meaning and interpretation of local or foreign words, thereby promoting enhanced learning experience.

The findings of the study on translation and the use of different languages supports as aspects that separate the structured teaching approach of MTB-MLE and pedagogic strategies are supported by the findings of similar studies, such as the study of Burton^[5] which presents the benefit of translation resulting to increased understanding of learners in content areas, such as Math and Science. Furthermore, the teachers of Grade 3 emphasized that the pedagogic strategies that they use are relatable and experiential or as lived by the learners. Below is a sample text from the interview.

"Imong kaugalingon way jud of teaching no in MTB kanang ila jung ma experience sa adlaw adlaw nila nga activities so ithink that would make it unique." [It's your way of teaching in MTB, those that the learners experience in their everyday activities, so I think that's what makes MTB unique.] – T3

This approach is different from the standard teaching approaches of MTB-MLE in a way that they are contextual-

ized and with real-life application and examples. Since the learners can relate to the lessons, the pedagogic approaches of Grade 3 teachers promote the confidence and social skills of the learners. These important skills and abilities can be developed in-school with the right pedagogic strategies, such as incorporating cooperative learning, socialization with others, and other student-centered approaches.

Thus, given the right pedagogic approaches, MTB-MLE can make pupils more confident and socialize with others by providing a learning environment that is supportive, culturally relevant, and conducive to active participation and collaboration. MTB-MLE recognizes the value of pupils' mother tongue and uses it as a bridge to learning additional languages. By using the mother tongue as the medium of instruction in the early years of schooling, pupils are more likely to understand what they are learning and feel more confident in expressing themselves. This can help to improve their overall academic performance and build their confidence.

6. Conclusions and Recommendation

This study concludes that K–Grade 3 teachers in Naval, Biliran fully comply with the Department of Education's MTB-MLE policy through the creative use of pedagogical strategies responsive to the linguistic and cognitive needs of young learners. Techniques such as contextualized teaching, differentiated instruction, code-switching, and bridging enhance literacy and comprehension in the mother tongue. As grade levels progress, teachers demonstrate increased innovation, integrating culturally relevant content that complements DepEd's standardized frameworks. This highlights the critical role of teacher agency in shaping effective and inclusive classrooms.

To sustain and improve MTB-MLE implementation, it is recommended that the Department of Education institution-alize continuous professional development, strengthen the production of localized instructional materials, and invest in language research. Implementing structured language transition frameworks and conducting regular impact evaluations will further support evidence-based policy refinements. A national strategy that scales best practices, fosters inter-school collaboration, and aligns policy with grassroots classroom realities is essential for long-term success.

Author Contributions

R.R.G. conceptualized the study, guided the methodological framework, and supervised the overall research process. R.A.N. co-developed the research design, conducted the data collection, performed the analysis, and drafted the manuscript. Both authors contributed to refining the manuscript and approved the final version for submission.

Funding

This research received no external funding.

Institutional Review Board Statement

This research was carried out in full compliance with established ethical standards to safeguard the rights and welfare of all participants. Before the collection of data, participants provided informed consent after being clearly informed about the study's objectives, procedures, and their option to withdraw at any stage without repercussions. Measures were taken to preserve participants' privacy and anonymity, with all personal information kept confidential and securely stored, accessible only to the research team. The study followed the ethical protocols mandated by the Ethics Committee of Leyte Normal University and aligned with national research ethics guidelines, ensuring integrity, transparency, and respect throughout the entire process.

Informed Consent Statement

Not applicable.

Data Availability Statement

The datasets generated and analyzed during the current study are available from the corresponding author on reasonable request. The data is not publicly available due to privacy and ethical restrictions involving respondents from the Department of Education.

Acknowledgments

The authors would like to express their sincere appreciation to Biiran Province State University, Leyte Normal

University and the Department of Education for their invaluable support, particularly in providing administrative assistance in administering the data gathering and facilitating the overall implementation of the research.

Conflicts of Interest

The authors declare no conflict of interest.

References

- [1] Benson, C., 2004. Do not leave your language alone: The importance of mother tongue-based schooling for educational quality. Multilingual Philippines: Manila, Philippines.
- [2] Rumenapp, J.C., 2014. Mother-tongue-based multilingual education. In: Thompson, S. (ed.). The Encyclopedia of Diversity and Social Justice. Rowman and Littlefield: Lanham, MD, USA. pp. 532–533.
- [3] UNESCO, 2003. Education in a multilingual world. UNESCO Education Position Paper. UNESCO: Paris, France.
- [4] UNICEF, 1999. Education For All: Making the Right a Reality. In: The State of the World's Children 1999. UNICEF: New York, NY, USA. pp. 44–45.
- [5] Burton, L.A., 2013. Mother tongue-based multilingual education in the Philippines: Studying top-down policy implementation from the bottom up [Doctoral Dissertation]. University of Minnesota: Minneapolis, MN, USA.
- [6] Jacob, J.W., 2016. Mother tongue-based multilingual education in Bangladesh: Lessons learned in SHARE education program. SHARE: Dhaka, Bangladesh.
- [7] Monje, J., Orbeta, A., Francisco-Abrigo, K., et al., 2019. Starting where the children are: A process evaluation of the mother tongue-based multilingual education implementation. Philippine Institute for Development Studies (PIDS): Quezon City, Philippines.
- [8] Vincent, K., Joy, J., Ann, C., et al., 2019. A mobile-assisted learning application of mother tongue for Grade 3. International Journal of Computer Applications. 22(178), 15–18. DOI: https://doi.org/10.5120/ijca2019918949
- [9] Jaca, C., Soledad, G., 2022. Lesson exemplars using original Cebuano stories in teaching mother tonguebased multilingual education (MTB-MLE). International Journal of Education, Culture and Society. 7(1), 1–8. DOI: https://doi.org/10.11648/j.ijecs.20220701. 11
- [10] Cummins, J., 2000. Language, Power and Pedagogy: Bilingual Children in the Crossfire. Multilingual Matters: Clevedon, UK.
- [11] Wa-Mbaleka, S., 2014. Teaching English to speakers

- of other languages: The case of the Philippines. International Journal of Academic Research in Progressive Education and Development. 3(3), 64–78.
- [12] Borong, N., 2021. Morphological variations of languages in selected towns of the Fifth District of Leyte. International Journal of Research Studies in Education (IJRSE). 13(10). DOI: https://doi.org/10.5861/ijrse. 2021.a058
- [13] Tupas, R., 2015. Inequalities of multilingualism: Challenges to mother tongue-based multilingual education. Language and Education. 29(2), 112–124.
- [14] Cansino, J.A., 2023. The Philippines MTB-MLE program: Reconciling its utilitarian and ideological rationales. East Asian Journal of Multidisciplinary Research. 2(2), 780–798. DOI: https://doi.org/10.55927/eajmr.v2i2.2996
- [15] Barac, R., Bialystok, E., Castro, D.C., et al., 2014. The cognitive development of young dual language learners: A critical review. Early Childhood Research Quarterly. 29(4), 699–714. DOI: https://doi.org/10.1016/j.ecresq .2014.02.003
- [16] Hammer, C.S., Hoff, E., Uchikoshi, Y., et al., 2014. The language and literacy development of young dual language learners: A critical review. Early Childhood Research Quarterly. 29(4), 715–733. DOI: https://doi.org/10.1016/j.ecresq.2014.05.008
- [17] Mahboob, A., Cruz, P., 2013. English and mother-tongue-based multilingual education: Language attitudes in the Philippines. Asian Journal of English Language Studies. 1–19.
- [18] Lang-ay, P., Sannadan, J., 2021. Mother tongue based language education in Philippines and Cambodia: A comparative study. International Journal of English Literature and Social Sciences (IJELS). 6(1), 337–354. DOI: https://doi.org/10.22161/ijels.61.44
- [19] Paudel, J.R., 2018. Mother tongue based multilingual education (MT-MLE): Teachers' language ideologies. Journal of NELTA Surkhet. 5, 28–40. DOI: https://doi.org/10.3126/jns.v5i0.19483
- [20] Gatil, T.B., 2021. Translanguaging in multilingual English language teaching in the Philippines: A systematic literature review. International Journal of Linguistics, Literature and Translation. 4(1), 52–57. DOI: https://doi.org/10.32996/ijllt.2021.4.1.6
- [21] Reyes, C., 2021. Landscaping the Philippine languages: The implementation of multilingual education policy. Journal of English Language Teaching and Applied Linguistics (JELTAL). 11(3), 1–6. DOI: https://doi.org/10.32996/jeltal.2021.3.11.1
- [22] Aperocho, M.D., 2023. A policy reform framework for mother tongue-based multilingual education in the Philippines. International Journal of Multidisciplinary: Applied Business and Education Research. 4(3), 692–700. DOI: https://doi.org/10.11594/ijmaber. 04.03.02

- [23] Alexander, R.J., 2001. Culture and Pedagogy: International Comparisons in Primary Education. Blackwell: Oxford, UK.
- [24] Corlet, N., Tarusan, N., 2022. Lived experiences of mother tongue-based teachers in IP schools: Stories to tell. EPRA. 8(2), 254–259. DOI: https://doi.org/10. 36713/epra9627
- [25] Lagura, R., Jan, D., Natividad, L., et al., 2022. Effectiveness of Istiku in teaching MTB-MLE 1 to the pupils of Mmsu-les. American Journal of Multidisciplinary Research and Innovation. 3(1), 21–24. DOI: https://doi.org/10.54536/ajmri.v1i3.334
- [26] Lartec, J., Belisario, A., Bendanillo, J., et al., 2014. Strategies and problems encountered by teachers in implementing mother tongue-based instruction in a multilingual classroom. The IAFOR Journal of Language and Learning. 1(1).
- [27] Nchang, C., 2022. Instructional approaches for the integration of cultural elements in indigenous language classroom: A case study of the Bafut language. International Journal of English Language and Literature Research (IJELLR). 10(2), 1–14. DOI: https://doi.org/10.37745/ijellr.13/vo10.n2pp114
- [28] Dimaculangan, N., Gonzales, M., 2020. Revisiting stakeholders' attitude towards MTB-MLE and ELT. EPRA. 81–91. DOI: https://doi.org/10.36713/epra 5838
- [29] Banusing, R., Bual, J., 2020. The quality of Catholic education of diocesan schools in the Province of Antique. PSSJ. 2(3), 35–36. DOI: https://doi.org/10.52006/main.v3i2.150
- [30] Himoro, M., Pareja-Lora, A., 2022. Zamboanga Chavacano: A survey on written practices, reactions and impact of its (Standardised) orthography. Círculo de Lingüística Aplicada a la Comunicación. (91), 245–277. DOI: https://doi.org/10.5209/clac.71831
- [31] Nolasco, R.M.D., Datar, F.A., Azurin, A.M., 2010. Starting Where the Children Are: A Collection of Essays on Mother Tongue-Based Multilingual Education and Language Issues in the Philippines. Talaytayan MLE: Manila, Philippines.
- [32] Piaget, J., 1950. The Psychology of Intelligence. Routledge: New York, NY, USA.
- [33] Shah, R.K., 2019. Child-centered education: Criticisms. International Journal of Education. 8(1), 22–37.
- [34] Vygotsky, L.S., 1962. Thought and language. MIT Press:Cambridge, MA, USA.
- [35] Wood, D.J., Bruner, J., Ross, G., 1976. The role of tutoring in problem solving. Journal of Child Psychology and Psychiatry. 17(2), 89–100.
- [36] Bernstein, B., 2000. Pedagogy, Symbolic Control and Identity. Rowman & Littlefield: Lanham, MD, USA.
- [37] De Jesus, L.F., 2021. Exploring pedagogical difficulties in teaching mother tongue: Underpinnings of intervention program. Journal of Higher Education Theory and

- Practice. 21(15), 29-42.
- [38] Sanchez, G.G., Tomas, C.L., Pe, S.N., 2023. Mother tongue—based multilingual education: The case of Cervantes District. Sciences Studies. 5(4), 87–99. DOI: https://doi.org/10.32996/jhsss.2023.5.4.12
- [39] Lavrakas, P.J., 2008. Encyclopedia of survey research methods. Sage Publications, Inc.: Thousand Oaks, CA, USA.
- [40] Devi, B., 2022. Application of cross-national comparative research design in medical and nursing education. Journal of Health and Allied Sciences NU. 13(3), 306–312. DOI: https://doi.org/10.1055/s-0042-1757734
- [41] Aggarwal, R., Ranganathan, P., 2019. Study designs: Part 2 – Descriptive studies. Perspectives in Clinical Research. 10(1), 34–36. DOI: https://doi.org/10.4103/ picr.PICR_154_18
- [42] Patton, M.Q., 1999. Enhancing the quality and credibility of qualitative analysis. Health services research. 34(5 Pt 2), 1189–1208.
- [43] Mertens, D.M., Hesse-Biber, S., 2012. Triangulation and mixed methods research: Provocative positions. Journal of Mixed Methods Research. 6(2), 75–79. DOI: https://doi.org/10.1177/1558689812437100
- [44] Yusuf, M., Adams, C., Dingley, K., 2015. In-depth comparative case study in participation: Interpretative approach. In Proceedings of 15th European Conference on E-Government (ECEG), Portsmouth, UK.
- [45] Deterding, N.M., Waters, M.C., 2021. Flexible coding of in-depth interviews: A twenty-first-century approach. Sociological Methods & Research. 50(2), 708–739. DOI: https://doi.org/10.1177/0049124118799377
- [46] Saldana, J., 2009. The Coding Manual for Qualitative Researchers. Sage: London, UK.
- [47] Walsham, G., 1995. Interpretive case studies in IS research: Nature and method. European Journal of Information Systems. 4, 74–81. DOI: https://doi.org/10.1057/eiis.1995.9
- [48] Lo, C., Hew, K., 2017. A critical review of flipped classroom challenges in K-12 education: Possible solutions and recommendations for future research. Research and Practice in Technology Enhanced Learning (RPTEL). 12(1). DOI: https://doi.org/10.1186/ s41039-016-0044-2
- [49] Cheng, X., Lee, K., Chang, E., et al., 2016. The "Flipped Classroom" approach: Stimulating positive learning attitudes and improving mastery of histology among medical students. Anatomical Sciences Education. 10(4), 317–327. DOI: https://doi.org/10.1002/as e.1664
- [50] Kawinkoonlasate, P., 2019. Integration in flipped class-room technology approach to develop English language skills of Thai EFL learners. English Language Teaching. 12(11), 23. DOI: https://doi.org/10.5539/elt.v12n

- 11p23
- [51] Haelermans, C., 2022. The effects of group differentiation by students' learning strategies. Instructional Science. 50, 223–250. DOI: https://doi.org/10.1007/s11251-021-09575-0
- [52] McKeown, M.G., 2019. Effective vocabulary instruction fosters knowing words, using words, and understanding how words work. Language, Speech, and Hearing Services in Schools. 50(4), 466–476. DOI: https://doi.org/10.1044/2019 LSHSS-VOIA-18-0126
- [53] Yunus, M., Nordin, N., Salehi, H., et al., 2013. Pros and cons of using ICT in teaching ESL reading and writing. International Education Studies. 7(6), 119–128. DOI: https://doi.org/10.5539/ies.v6n7p119
- [54] Darling-Hammond, L., Flook, L., Cook-Harvey, C., et al., 2020. Implications for educational practice of the science of learning and development. Applied Developmental Science. 24(2), 97–140. DOI: https://doi.org/10.1080/10888691.2018.1537791
- [55] Hoa, P., 2020. Combined learning, a good solution for Vietnamese universities. Journal of Science. 1(9), 78–85. DOI: https://doi.org/10.46223/hcmcoujs.soci. en.9.1.273.2019
- [56] Hu, J., 2022. The connotation of flipped classroom and strategies for practice in higher education. In Proceedings of the 7th International Conference on Arts, Social Sciences, Humanities and Education Research (ASSEHR), July 2022. DOI: https://doi.org/10.2991/ assehr.k.220704.039
- [57] Lim, S., Nordin, N., Rashid, R., 2020. Effectiveness of using the syntactic tree structure approach in teaching vocabulary to low proficiency ESL learners. Journal of Behavioral and Social Dynamics (JBSD). 8(2), 37–42. DOI: https://doi.org/10.46754/jbsd.2020.09.004
- [58] Parr, B., Edwards, M., Leising, J., 2009. Selected effects of a curriculum integration intervention on the mathematics performance of secondary students enrolled in an agricultural power and technology course: An experimental study. Journal of Agricultural Education. 50(1), 57–69. DOI: https://doi.org/10.5032/jae. 2009.01057
- [59] Wismanto, A., Samsi, K., 2022. Development of a design for implementation learning of oriented on CTL model to news writing during the COVID-19 pandemic. KnE Social Sciences. 7(14), 443–451. DOI: https://doi.org/10.18502/kss.v7i14.11996
- [60] Cardino, J., Ortega-Dela Cruz, R., 2020. Understanding of learning styles and teaching strategies towards improving the teaching and learning of mathematics. LUMAT General Issue. 8(1), 4–23. DOI: https://doi.org/10.31129/LUMAT.8.1.1348
- [61] Ayaya, G., Makoelle, T., Merwe, M., 2020. Participatory action research: A tool for enhancing inclusive teaching practices among teachers in South African full-service schools. SAGE Open. 10(4), 21582440209.

- DOI: https://doi.org/10.1177/2158244020963576
- [62] Weselby, C., 2014. What is differentiated instruction? Examples of how to differentiate instruction in the classroom. Available from: https://resilienteducator.com/classroom-resources/examples-of-differentiated-instruction/ (cited 8 July 2025).
- [63] Lincoln, M., McAllister, L., 1993. Peer learning in clinical education. Medical Teacher. 1(15), 17–26. DOI: https://doi.org/10.3109/01421599309029007
- [64] Fabunan, S., Farin, E., 2022. Reading modules using Marungko approach of grade one pupils in the elementary schools of Zambales, Philippines. Journal of Education and Social and Behavioral Sciences (JESBS). 35(6), 1–11. DOI: https://doi.org/10.9734/jesbs/2022/ v35i630427
- [65] Shamim-ur-Rasul, N., Iqbal, N., Ghayyur, N., 2022. Inductive approach and grammatical awareness of student teachers. South Asian Journal of Education and Social Research. 5(4), 47–52. DOI: https://doi.org/10.36902/sjesr-vol5-iss4-2022(47-52)
- [66] Mangila, B.B., 2019. Pedagogic code-switching: A case study of the language practices of Filipino teachers in English language classrooms. English Language Teaching Educational Journal. 1(3), 115–133. DOI: https://doi.org/10.12928/eltej.v1i3.643

- [67] Bucjan, N., 2022. Sugbuanong Binisaya: A medium of instruction for grade two pupils. EPRA. 150–154. DOI: https://doi.org/10.36713/epra9917
- [68] Toro, V., Camacho-Minuche, G., Pinza-Tapia, E., et al., 2019. The use of communicative language teaching approach to improve students' oral skills. English Language Teaching. 12(1).
- [69] Jimenez, E.C., 2020. Contextualized E-Learning Resource: A tool for stronger academic platform. International Journal of Case Studies in Business, IT, and Education (IJCSBE). 4(2), 110–116. DOI: http://doi.org/10.5281/zenodo.4018344
- [70] Gentry, R., 2013. Differentiated instructional strategies to accommodate students with varying needs and learning styles. In Proceedings of the Urban Education Conference, Mississippi, United States, 18–20 November 2013; pp. 1–17.
- [71] Bialystok, E., 2017. The bilingual adaptation: How minds accommodate experience. Psychological Bulletin. 143(3), 233–262. DOI: https://doi.org/10.1037/ bul0000099
- [72] Walter, S., Dekker, D., 2011. Mother tongue instruction in Lubuagan: A case study from the Philippines. International Review of Education. 57(5–6), 667–683. DOI: https://doi.org/10.1007/s11159-011-9245-4