Mother Tongue-Based Education as a Predictor to Multi-Lingual Education

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ABSTRACT

This study employed a meta-synthesis approach to examine the role of mother tongue as a predictor of multilingualism, focusing on the challenges and implications of mother tongue-based instruction (MTBI) in multilingual education. Using the PRISMA framework, a comprehensive literature review of peer-reviewed qualitative studies from 2010 to 2023 was conducted across databases such as Scopus, ERIC, ProQuest, Science Direct, and Google Scholar. Content analysis identified major themes, including translanguaging, cultural relevance, multilingual teaching strategies, and curriculum adaptation. Findings revealed five overarching themes: moving to bilingualism, bridging learning and cultural understanding, linking language to teaching, negotiating partnerships for learning, and adapting to curriculum change. These insights underscored the need for educational policy reforms, teacher training, and professional development to enhance the effectiveness of MTB-MLE. The study highlighted both positive and negative perceptions of the program, emphasizing the importance of teacher empowerment, instructional material development, and inclusive pedagogical practices. Recommendations included integrating MTB-MLE across learning areas, fostering teacher collaboration, and refining curriculum policies to ensure sustainable multilingual education. Future research should further investigate the long-term impact of MTB-MLE and strategies for optimizing its implementation.

Keywords: Mother tongue-based instruction, multilingual education, meta-synthesis, translanguaging, curriculum adaptation.

I. INTRODUCTION

Learning in the mother tongue (MT) has always enjoyed support in the home and from global institutions. As one trend in the curriculum, its introduction provides help to the aim of eradicating illiteracy with an avenue to support language an important factor for communication (Vitalaru, 2020).

Nishanthi(2020) believed that the native language ensures enhanced cognitive development, and supports in the learning of other languages. Villaruz & Perez (2020) supported high functional literacy due to language use where they can immediately use it to construct and to explain their world, to articulate their thoughts and to add new concepts to what they already know (Capitol University, 2019). Gaylo (2020) supported the implementation, along with Monje et al.(2021), Gempeso & Mendez (2021), (British Council 2019) and Mohanty (2023) on the essence of the program to language improvement and lifelong learning; cognitive improvement centered on higher order thinking skills, and academic improvement.

Blankenbeckler (2020)believed on understanding the language context in terms of psycholinguistic, sociolinguistic, and sociopolitical understanding due to critical changes that may affect the implementation to teachers, parents, and learners. The Republic Act 10533, otherwise known as the Enhanced Basic Education Act of 2013, has recognized the MTB –MLE clarifying what the learners are and from what they already know, proceeding from the known to the unknown, affecting the way how the pupils learn as to cognitive ability, affective ability, and motor skills (Trujillo, 2020). However, Oliveros (2021) punctuated challenges on the implementation like the beliefs, practices, management and resources, hence, its implementation must be revisited in order to provide technical assistance. Bernardo, Aggabao, & Tarun (2018) found out also moderate difficulty on preparation of learning tasks, curriculum guide and school's MTB-MLE facilities such as textbooks and other printed materials, availability and adaptation of available MTB facilities affecting the realization of classroom instruction (Aperocho, 2023).

Esteron (2020) found out the opportunities that learners can gain when learning the mother-tongue to fit its cultural conditions. Yet, discussions are still largely remaining vague as there is a need to explore more based on qualitative sources its predictors to multilingualism.

Despite research studies, the qualitative research on MTB as predictor to multilingualism remains to be understood, thus, this study was conceptualized using different sources of information. At the outset of the study, the findings were determined with the hope of formulating a metasynthesis by using previous studies that included information relevant to the research study conducted. Throughout the years, the upsurge of studies relevant to MTB showed various perspectives, challenges, and opportunities, however, designs systematically showed common quantitative approach with findings relevant to MTB. Similarly, this to meet with the current trend of synthesizing information by unpacking qualitative papers based on existing studies on how mother tongue-based instruction becomes a predictor in multilingual education.

1.1 Related Literature

This study showed the process of meta-synthesis, it is vital that this research provides information that include mother-tongue-based education, MTBE in the K-12 curriculum, MTB implementation in the Philippines, challenges encountered among teachers and learners, multilingual education in the Philippines and curriculum, significant differences between MTB and MLE, and implications of the program to language learning. There is no specific number of studies that the researcher wants to read as such are dependent on the numerous articles that would come out in the online databases.

Mother Tongue-Based Education

The benefits of learning in a familiar language have long been recognized by schools and that there is a large body of evidence from diverse contexts demonstrating the positive effects of learning in the mother tongue-based education. Further, the intensification of this program/policy has increased based on its superiority, importance, and the challenges of its implementation.

Cabactulan & Pañares (2023)punctuated that mother-tongue-based education is a form of instruction where children are taught in their first language (L1) and gradually transition to a second language (L2) or foreign language at a specified time during primary school which is referred as multilingual education program. However, the MTB program allows children to learn the core concepts primarily in a language they are familiar with before learning the labels or vocabulary for those concepts in a new language. This approach is especially beneficial in early childhood programs, preschool, and early grades up to Grade 6, as they are still learning to read and gaining new concepts. When curriculum content is presented in an unfamiliar language, it can take time for children to learn how to understand, to speak, to read, and to write in the new language, which can be difficult and wasteful, taking away from valuable time that could be

spent on learning to read and gaining academic concepts in their first language (L1) (UNESCO,2019). Further, as punctuated by Khanyile & Awung (2023), the mother tongue is the language with which children construct their knowledge, skills and experiences from their community. This underscores the importance for children to learn in their mother tongue because it is the language that they speak and understand best. Gobana (2014) as cited by Khanyile & Awung (2023) further argued that "*in order to conceptualize content of the subject matter, in the first place, children have to understand the language of instruction*". The benefits of MTBE are obvious in the sense that children enjoy school more, they learn faster and better, their self-esteem increases and there is more parental participation in helping the children at home. This implies that other than the cognitive and psychological benefits of mother-tongue instruction, it also has social benefits for the learner.

Mother Tongue-Based Education in the K-12 Curriculum

In a call to arms that laid some of the groundwork for the Sustainable Development Goals, UNESCO (2019) declared a "*global learning crisis*" where 250 million children are not learning to read and write, including the half that have attended early primary grades. Progress is slow, and nearly 50% of children and youth are still not achieving minimum proficiency levels in reading and mathematics. With this challenge affecting the goal for learning, the organization emphasized the development of mother tongue-based education as foundational program to learning skills and holistic development in communication.

The Mother Tongue-Based Education as familiar concept used in this study was officially implemented in the Philippines in the School Year 2012-2013. The Republic Act No. 10533 or the Enhanced Basic Education Act of 2013 provided its primary legal basis signifying an end of the Philippines" long tradition of bilingual education (Adriano et al., 2021). UNESCO (2022) believed that a multilingual education based on the mother tongue or native language is essential for attaining an inclusive and quality education for all learners. It empowers mother languages and "*helps preserve the wealth of cultural and traditional heritage that is embedded in every language*".

The Department of Education (2020) pointed out that mother tongue education is the key to producing Filipino learners who are multilingual, multiliterate, and multicultural. Since knowledge and skills transfer across languages, it is best for learners to begin their education in the language that they are most familiar with. Once a strong foundation in the mother tongue is developed, learners are better disposed to learn through other languages. Furthermore, MTB-MLE (1) facilitates the integration of prior knowledge and new knowledge, (2) fosters critical thinking, (3) constructs a solid bridge toward fluency and oral proficiency in L2, (4) provides L2 support through the L1, (5) supports teaching for meaning and accuracy, and (6) builds confidence and proficiency development in all languages in the classroom, especially in the use of mother tongue.

Gaylo (2020) discussed that in 2012, DepEd Secretary, Brother Armin A. Luistro FSC released DepEd Order No. 16, s., 2012 for the pioneer schools involved in the initial years of implementation since 2012. DepEd believed that MTB-MLE can develop the following areas like language improvement and lifelong learning; cognitive improvement centered on higher order thinking skills; academic improvement which trained and prepared the children to obtain mastery of learning competencies in every subject area; and socio-cultural understanding which increased the tradition, custom, language and way of life of every learner (DepEd Order No. 16, s. 2012). Inclusion to that order was the mandate to use the 12 mother language tongue languages. The other seven mother tongue languages were added in 2013 (DO No. 28, s. 2013).

Mother Tongue-Based Implementation in the Philippines

Since the implementation of MTB-MLE in the Philippines in 2010, teachers were already trained in the cultural and authentic-based classroom learning experiences and activities where they design curriculum and formulate concrete objectives for language learning. These activities form part in the MTB implementation where everyone has the right to receive education in the first language. This further engages children at a young age to exercise their rights to L1 as it is a clear indication of promoting its primary language at school and home.

Monje et al. (2021) punctuated that the program is set on a sound pedagogical base and operates under the principles of learner-centered education directing to learning other languages which includes discovery learning, active learning, and language learning or language transfer. In essence, a child can use existing knowledge to learn or discover a new concept or idea, exercise higher-order thinking skills and peer interaction, such as group activities and improves linguistic development, such as scaffolding, constructive feedback, sequential instruction, and freedom in terms of language use.

Further, the exposure of the child to its first native language is vital to his development. In the article of Gempeso & Mendez (2021), the use of mother-tongue can develop a child's language involving auditory and oral abilities to communicate verbally his wants and needs, improve his skills on synthesizing, analyzing, reasoning, comprehending, applying, and evaluating, prepare to acquire mastery of competencies, and help him be aware of the societies and cultures of the target language, and therefore of the contexts the language is used in as supported by the British Council (2019) aand (Vitalaru, 2020) which enhances that sense of pride on heritage, language, and culture because of MTB use.

Because language is diverse so learners are also diverse in the way they learn, the use of mother-tongue in context involves learning to communicate appropriately in a multilingual context. Such learning involves awareness and acceptance of functional separation of languages into different domains, contexts and interlocutor-specific differentiation which involves developing a hierarchy of preferences in patterns of language use. In the study conducted by Mohanty (2023), as one child moves from the zone of immediate family/neighborhood, communication is getting wider from its local language to regional and even to more complex multilingual zones. As it becomes a form of mutual intelligibility, the use of mother-tongue is dependent largely on origin, identification, competence, and functionality, implying that one can have multiple MTs and that one's MT can change across time and context. In practical terms, it is the language or the total communicative repertoire usually acquired early in development, the language in which children are most competent and the language they usually identify with as part of the multilingual world. Panda (2019) supported that when school children are in a multi-state, multilingual border area are asked to identify their mother tongue or their ways of social interaction.

Challenges Encountered among Teachers

In the context of this study, the need to include the challenges encountered by teachers in an education environment, shows how the program works and influences the nature of teaching practices. This is an important theme which can shed light on the role of educators in the implementation of mother- tongue education, and the challenges involved with the implementation of the said policy. This is significant because teachers are the ones who know what happens in class and whether it is possible to implement mother- tongue education in a certain environment. They are therefore in a better position to understand the challenges involved in the implementation of the said policy.

Sanchez-Danday et al. (2021) supposed that any teacher must build on the experience and knowledge that learners bring into the classroom, and the instruction should always promote abilities and talents. This

assumption led to the implementation of the mother tongue-based multilingual education program asserting that a child's mother tongue is a rich linguistic and cultural heritage that reinforces learning. However, this brings a disadvantage as some teachers in advanced classes have these obstacles which include (1) expressive language disabilities, (2) mixed receptive-expressive language difficulties, and (3) social communication difficulties.

Language, materials, instruction, and the program itself becomes a problem among teachers in handling fast learners as it would hamper easy academic learning. In the study of Arispe et al. (2019), the use of mother tongue as a medium of communication and in the representation of it in some learning materials is difficult as it would demand time for understanding content, upgrading knowledge, standardizing concepts, and interacting people. With the bilingual policy also as implemented, learning is interrupted as learners thought differently in words and in concept. Moreover, language complication arises as learners would process information the other way and would experience the difficulty of instruction and academic issues like in Mathematics and Science.

In a study of Perfecto (2020), the need to consider the knowledge of content, quality of instruction, availability of resources, and preparedness is important since teachers faced different problems in the delivery of the instruction. Because of this, teachers utilized different trans-language strategies like direct translation, code-switching, metalinguistic comparison-contrast and metalinguistic explanation. These strategies used the various linguistic and semiotic resources of both students and teachers as mediating tools to allow more efficient teaching and learning and more active participation from students in the language learning activities.

Similar findings in the study of Tonio and Ella (2019) which examined the attitudes of the pre-service teachers in the use of Mother Tongue as a medium of instruction in Grades 1-3 and the perceived problems associated like the difficulty to express themselves clearly, uninteresting to pupils, difficulty in translation, teacher's low proficiency in Mother Tongue, pupils' low proficiency in Mother Tongue, degradation of English proficiency, and the lack of teacher's training in teaching Mother Tongue.

Challenges Faced by Learners

As direct beneficiaries of the program/policy, negative attitudes towards the MTB implementation are compounded by the fact that learners received difficulty in learning in a multilingual environment set-up. The program is therefore building gap between learners and teachers in some aspects as it shifts to education on L1. The researcher of this study therefore believes that it is necessary to consider the potential, educational, economic benefits and challenging factors of acquiring knowledge in one's mother tongue for learners. For a country battling for multilingualism, the needs among learners should be taken seriously considering the lack of knowledge among teachers and the continuously evolving dynamics of language. Parba (2018) on his study conducted in Bukidnon, Philippines, on the use of mother tongue as medium of instruction, showed that learners should not need to learn the mother tongue since the language is already practiced and used at home. The policy becomes redundant because even if the lessons are all in English for instance, they would still be explaining it in mother tongue to the learners for them to understand the lessons. This principle also strengthens the devaluation of language as emphasized by Quintero (2018) due to the lack of learning materials available in school and home written in the mother tongue as most of the materials available are written in Filipino or English which requires translation into the mother tongue. Tundag et al. (2020) also shared the dissimilar challenge that the translation of mathematical concepts or language in the mother tongue had been a serious problem to learners, while giving exercises and activities were regarded as moderate problem in a certain school in Dumaguete, Philippines. However, interventions

showed positive results based on the studies of Baquiller & Abellon Jr. (2021) like learners become familiar due to the resources used, allowing pupils to use their own preferred term and remain to use English translation/ term. For instruction, learned experienced translation, drills, code switching, and pictures.

Dealagdon (2021) pointed out that the difficulty in understanding *Chavacano* words, difficulty in comprehending instructions, lack of educational pictures, difficulty in translation became their primary struggles of learners in the mother-tongue based education. It was also found out that mothers assisted their child through seeking assistance from native *Chavacano* speakers, from someone who has more knowledge in *Chavacano,* from the teacher, using the translation provided as reference, searching on the internet, repetitive teaching, practice through conversation, involvement during discussions, translating *Chavacano* to their mother tongue, materials from the teacher, recording of classes, use of *infographics*, providing positive reinforcement and letting family members to assist.

Multilingual Education

Aimed at providing multilingualism and multiliteracy to learners, multilingual education as another type of language learning is designed in public and private schools for instructional settings where two or more languages (or dialects) are used for instruction. The program aims to provide teachers with the guidance and motivation needed to enable learners to effectively apply their multiliteracy skills in their daily lives. The guidelines and objectives for the successful implementation of Mother Tongue-Based Multi-Lingual Education (MTB-MLE) in the new K-12 Basic Education Program are intended to support the broader purpose of the language policy.

In the study of Ball & Smith (2023), UNESCO has championed MLE and identified essential components in planning, however, visible, collaborative national leadership, adequate financial and technical resources, and nondominant language speakers are critical to assure stakeholders its successful implementation. Similar perspective as discovered by Kirss, Säälik, Leijen, & Pedaste (2021) on their proposed framework on multilingual education that includes a) input factors such as policy/ideology, resources, leadership, curriculum; b) processes that outline school climate, attitudes, beliefs, practices, support, collaboration; and c) outcomes in the form of participation, achievements, results, post-school options.

Wright, Boun, & Chan (2022) in their qualitative study bared that the multilingual education curriculum should provide a number of short, colorful, high-quality, culturally relevant books and other teaching resources for students' use during mother tongue and even in instruction to ensure that multiculturalism and multiliteracy are achieved. For instance, Cambodia's standard math, Khmer reading, and social studies textbooks following the national its curriculum were used in grades 4–6, and in 3rd grade for math. While these textbooks were clearly being used in the classrooms, most lessons focused on the chalk/white board at the front of the classroom, where the teachers and learners engaged with selections from textbooks copied onto the board.

Multilingual Education in the Philippine Curriculum

With the aim to improve the use of English language and to resuscitate the 168 geographically-based language and other minority, the Department of Education (DepEd) issued DepEd Order No. 74, series of 2009 which positioned MTB-MLE as the official language policy of the basic education system in the Philippines. The studies on multilingual education have raised several questions regarding its interdependence and its implementation, however, as an integral part of any school activities, such contributes to and mirrors the overall effectiveness in consideration to what the multilingual education

benefits towards the learners.

In the study of Reyes (2021), the policy is helping the students easily comprehend lessons and instructions using the first and other languages used by teachers in schools. As implemented to a great extent, improvement on the orthography, academic performance, testing procedures, and maximum participation became evident due to the use of mother tongue and multilanguage. The findings also of Tunmer & Hoover (2019) exposed the integration of a familiar language which developed the idea of comprehension, mastery, intellectual skills, and familiarity with the topic. Additionally, as it lays the groundwork for learning, a child's mother tongue, along with learning others, aids in the development of early reading skills and comprehension. In light of this, the MTB-MLE fosters the learners' speaking and critical thinking abilities in order to increase their knowledge and competence (Rodriguez & Abocejo, 2018).

However, there have been a few studies that focused on summarizing the evidence on multilingual education variables. Most of these are not very recent but significant. As authors mentioned above including Reyes (2021), Tunmer & Hoover (2019), and Rodriguez & Abocejo (2018), multilingual education supported learning in a multicultural environment, but dependent on how it is being implemented.

Mother Tongue-Based and Multilingual Education

The two terms are used independently in this study. The use of mother-tongue offers children the opportunity to first learn to read in their native language, a skill which, theoretically, can then be more easily transferred to the new language, while multilingual education is considerably more challenging as it requires arrangement and learning for each or multiple languages.

In the study of Leighton (2022), these types of education employed in the delivery of instruction in classrooms usually bring problems like teachers' capacity, quality of localized materials and even the complexity of learning. Similar findings revealed in the study of Gempeso & Mendez (2021) that discrepancies, incongruences, and insufficiencies in the administration of assessments in the alignment of MT-MLE. These issues resulted in the underdevelopment of the four macro skills of the learners and caused misalignment of the classroom implementation to the language policy. The same is true with the implementation of MT as a medium of instruction in the classroom; however, the use of translation and code-switching of L1, L2, and L3 helped in the comprehension and participation of the students. However, Kerwin & Thornton (2021) believed interventions could help and support this defiance to address the local education setting problems like the details of program delivery to ensure substantial gains in reading and writing and the training to parents to facilitate the books in mother tongue-based and bilingual editions and other locally relevant languages (Knauer et al., 2020) and the constant follow-up at home.

Implications of MTB-MLE in Language Learning

With the issues confronting the program, the policymakers need to rigorously review and pay attention to it such that they could address the lapses of the implementation, which will directly contribute to its successful realization.

In the study of Gempeso & Mendez (2021), the MTB-MLE implications to language learning is broad and reflective as there is a multi-directional perspective that the program can give to learners, parents, and teachers. Although, as argued by some as ineffective due to stumbling blocks, such system could be improved, along with the significant elements like the teaching and learning activities, assessment, and curriculum standards. In their studies as emphasized that the effectiveness of the policy is largely dependent to teachers as they play an essential role in implementing the program, thus the conduct and manipulation of assessment and other activities that facilitate learning lie in their hands. The teachers must

learn and realize the importance of assessment and any other teaching and learning activities in the classroom as they greatly affect the success of the policy. With that, more seminars and workshops must be done in order to educate the teachers more not just about the policy but also how to implement it such that it will be aligned to the intended outcomes of the policy.

Philosophical Stances

Understanding the nature and design of this metasynthesis, the underlying philosophical assumptions influenced the research process. The philosophical stances based on Lincoln and Guba (2018) guided the practice of this research by regulating inquiry within a discipline through lenses, frames, and processes. These stances directed the researcher's perspective in formulating questions, planning investigations, selecting research design, and determining methods for data collection, analysis, and interpretation. In this study, the researcher considered key philosophical aspects, including ontology, epistemology, axiology, methodology, and rhetoric. Ontologically, the researcher embraced the idea of multiple realities from different sources (Denzin & Lincoln, 2018), incorporating diverse perspectives from journal articles on MTB-MLE to provide a comprehensive understanding. Epistemologically, the study adhered to Ponterotto's (2018) emphasis on objective exploration, employing PRISMA standards to minimize research bias. In terms of axiology, the researcher acknowledged how personal values influenced the scientific process, recognizing the significance of both subjective and objective information (Lincoln et al., 2017). Methodologically, an inductive and emergent approach was adopted, where specific findings, codes, and themes were analyzed before deriving synthesized interpretations (Zahle, 2016). Lastly, the rhetorical stance emphasized rich descriptions and precise language to ensure clarity and persuasiveness, adhering to systematic review procedures, transparent article analysis, and unbiased reporting of results.

Synthesis of Review. The review of related literature highlighted the critical role of Mother Tongue-Based Education (MTBE) and multilingual education in enhancing foundational learning, with various studies affirming their cognitive, social, and linguistic benefits. A key similarity among sources was the recognition of MTBE's effectiveness in the K-12 curriculum, particularly in the Philippines, where it fostered multiliteracy and academic comprehension. However, differences emerged in the challenges of implementation, such as teachers' language proficiency, resource availability, and subject-specific difficulties, particularly in mathematics and science. Some scholars emphasized MTBE's role in strengthening cultural identity, while others questioned its necessity when learners already spoke their mother tongue at home. Additionally, multilingual education was seen as an extension of MTBE, broadening linguistic adaptability but requiring careful implementation. The literature concluded that while both approaches had substantial advantages, their success depended on well-executed policies, adequate teacher training, and sufficient instructional resources to overcome practical barriers in diverse educational contexts.

1.2 Statement of the Problem

The study determined the literature search as a form of meta synthesis in knowing mother tongue as a predictor to multilingualism. Specifically, it sought answers to the following questions:

Core Question: With the challenges on mother tongue-based instruction, how do relevant studies support the implementation of multilingual education?

Specific Questions:

1. What are the themes revealed in the meta-synthesized articles both foreign and Philippines based on MTBI?

2.   What research and pedagogical implications can be drawn from the synthesized qualitative studies?
3.   What interpretation can be generated to explain the trends of MTB-MLE implementation?
4.   What school professional development program may be proposed based on the findings of the study?

II.METHOD

This study employed a meta synthesis approach, utilizing content analysis to systematically examine existing literature. The PRISMA framework guided the identification, screening, and analysis of relevant studies. A comprehensive search was conducted across databases such as Scopus, ERIC, ProQuest, Science Direct, and Google Scholar, focusing on studies published from 2010 to 2023. Content analysis was used to determine the presence and relationships of key themes within qualitative data. To ensure credibility, only peer-reviewed qualitative studies were included, and a Critical Appraisal Skills Program (CASP) evaluation was conducted. Additionally, data synthesis followed a three-phase approach: thematic analysis, synthesis, and interpretation, allowing for a structured examination of multilingual education research.

This research adhered to strict ethical guidelines, ensuring compliance with the Data Privacy Act through proper citation, confidentiality, and secure data handling. All data were coded and stored securely to prevent unauthorized access, with sensitive information destroyed post-analysis. The study acknowledged limitations, such as its restriction to peer-reviewed studies from 2019 to 2023, which may have excluded alternative perspectives. However, findings provided valuable insights into the impact of mother tongue-based education on multilingualism. The results emphasized the importance of policy reforms, teacher training, and curriculum enhancements in improving language learning outcomes. Future research was recommended to explore additional factors influencing multilingual education implementation in diverse contexts.

III. RESULTS AND DISCUSSIONS

This chapter presents the how the articles included in the systematic review through metasynthesis are analyzed and revealed results and interpretations which provide in-depth discussion of the study being conducted involving the analysis of words, themes and concepts. The process in this paper included the examination of relationships that exist within and across study finding, themes and interpretations. Following the presentation on its Statement of the Problem, this study discloses how the literature search becomes significant in knowing mother tongue as a predictor to multilingualism. The researcher used coding to label the relevant studies to support the topic.

Summary of Themes Revealed

As reflected in the table below, there were 5 qualitative studies screened to fit the study's metasynthesis which largely focused on the themes generated. All articles were summarized from 2010 which the program started up to present covering issues on:(1) mother-tongue based education, (2) multilingual education, (3) challenges faced by the learners and teachers on the MTB-MLE implementation, and (4) implications to language learning.

From the summary of findings of the qualitative researches included in the analysis of the study, an in-depth and comprehensive analysis, synthesis and interpretation of the data were conducted. Each qualitative study with metasynthesis was carefully read, and codes and themes were highlighted.

Shortly after beginning to read and study each article covering from 2010 up to present, it was possible to generate the themes as it emerged naturally from the research presentation which included translanguaging, impact of MTB-MLE to classroom teaching, role of translanguaging, attitudes towards translanguaging, enhancement of numeracy skills through language integration, importance of cultural relevance and cognitive enhancement, significance of contextualized adaptation for optimum impact, practical implications for educational policies and practices, translation from the target language to mother tongue, utilization of multilingual teaching, utilization of lingua franca, improvisation of instructional materials written in mother tongue, remediation of instruction, utilization of literary piece written in the mother tongue as motivation, frustrations with ineptitude, collateral complications, collaboration among teachers, improved student engagement, compassionate intervention, captivating the moment , thinking ingenuity, and training for reality.

Figure 4 below showed the collected themes from the articles chosen. The goal of this was to see how authors built accurately themes from interviews and analysis capturing the essence of MTB-MLE implementation. This was the first step of achieving accurate data collection to provide substantial input analyzed through reading carefully. On this part, the relationship of words and themes were considered and that data analysis became critical in providing the distinct concept of MTB-MLE as predictor to multilingualism including its subtleties and perplexities.

In this tudy, the researcher employed the process of synthesis by(1) locating themes developed in the articles; (2) analyzing these themes; (3) developing second-order themes based from its original themes developed; (4) synthesizing data across studies; (5) interpreting data; and (6) developing third order themes. Further, codes were categorized to come up with the primary descriptive themes and secondary order themes. Third order themes were generated from the interpretation of the preceding level of themes as illustrated below.

The synthesis of findings based on Table 4 yielded six (5) third order themes which included *moving to bilingualism, bridging learning and cultural understanding, linking language to teaching, negotiating partnership for learning, and adapting to curriculum change*.

In this study, these five themes were relevant in understanding the MTB-MLE as predictor to multilingualism. The articles as used in this study revealed the transformative idea in the way how the program was implemented and appreciated by the teachers and stakeholders. Given the varying differences of perceptions and barriers, authors believed that the program showed positive and negative impact.

Moving to Bilingualism

The first theme *moving to bilingualism* refers to how the MTB-MLE program completely connected to knowing, speaking the first language in use as discussed in the articles. This also includes the concepts of *language production, effective communication, language use, and code switching*. This theme further showed that bilingualism is an end-concept of the program which every individual simultaneously activated even in different context. As emphasized by Slevc et al. (2016), the program used different scripts or modalities, that is, that language can be learned directly or indirectly and that knowledge is not limited. As this for some might be difficult especially English speaking learners, learning may be switch costs – harder but meaningful. Supporting to this is the idea that the impact of managing two or more languages may also extend beyond the lexical level, as syntactic parsing strategies in one language can come to impact parsing in another (Salig, Valdés Kroff, Slevc, & Novick, 2021).

As this research unveiled the significance of MTB-MLE to expanding the concept of multilingualism, its implementation extends to understanding multilingual texts that can be found from different materials as

used in the delivery of instruction. In the study of Marian & Hayakawa (2021), the language experiences of individual bilinguals are equally diverse and characterized by unique contexts of acquisition and use that can shape not only sociocultural identity but also cognitive and neural function. Perhaps unsurprisingly, this variability in scholarly perspectives and language experiences has given rise to a range of methods in teaching for defining bilingualism, knowing its significant challenges, embracing concerted efforts to systematize and synthesizing researches across the field which may enable the construction of a valid and generalizable index of multilingual experience.

Further, the key element to this research theme as punctuated in the findings of Bialystok & Craik (2022) that behavioral differences between monolingual and bilingual learners reflect differences in the efficiency and deployment of attentional control between the two language groups. In support of this point where learners in the classroom vary in their way of learning and language use, the attentional control provides a more satisfactory account – a concentration to how the language was used and ignored once not understood. Supporting to this was the idea of Aronin (2019) on the academic impact, global importance, and social practices that the understanding of two or more languages when used in the classroom has to give.

Bridging learning and cultural understanding

The second theme *bridging learning and cultural understanding* refers to *teaching integration, applying contextualization, and showing sensitivity*. Babag (2022) believed that MTB-MLE is very beneficial to the learners for an easy understanding of the lessons because of the language used, as well as to the teachers in terms of teaching processes. The institutionalization of mother tongue based multilingual education requires the use of the learners 'first language as the medium of instruction for all subject areas in pre-kindergarten through grade three with Filipino and English being taught as separate subjects (Philippines Department of Education, 2009) with the provisions on government-issued materials used for teaching.

With MTB-MLE as an important program to producing learners adept with the language or another languages, its essence likewise sustains the idea of "safeguarding linguistic diversity" as one of the world's most pressing challenges. Tupas (2014) revealed that multilingual education is a practicable educational policy for (a) it empowers minority groups through the acknowledgment and "recognition" of their rights to speak, to preserve and to invest on "linguistic human rights"; (b) it preserves languages that are on the brink of danger or extinction "language maintenance" through the encouragement of their use in the community, public, and academic spaces; (c) it is an "anti-colonial" mechanism (against "the hegemony of the national language") that embraces the multilingual and multicultural contexts of societies; and (d) it is supported by numerous literature and researches around the world that affirm UNESCO's firm advocacy for Mother Tongue-Based Multilingual Education (MTB-MLE) implementation.

Further, in the Philippines, endeavors for multilingual education and sustaining it in the classroom started as early as the 1950s with Jose D. Aguilar's First Iloilo Experiment (Nolasco, 2018) who pioneered the use of Hiligaynon as medium of instruction for Grades 1 and 2 students. Findings revealed that learners outperformed their English-taught counterparts in reading, mathematics, and social studies, and even caught up with other students in their knowledge of English six months after initial instruction in Hiligaynon. Effort for MLE is necessary in the Philippines to maintain its rich linguistic diversity. Though quantitative data differ from one research to another, scholars reported many diverse languages in the country with 187 individual Philippine languages identified in 2015 with only 183 living, four gone extinct, 14 in trouble and 11 dying.

Linking language to teaching

The third theme *linking language to teaching* emanated from the second order themes which include *using lingua franca, diversifying teaching, and applying contextualization*. The emerging theme from the other sub- themes showed concepts of understanding it for instruction. As discussed by authors, contextualization as a common strategy for the program is very important for the learners to understand particularly difficult terms that are being used for instruction and lessons. Further, the program is a predictor to multilingualism as learning the first language and other languages used by the teachers inside the classroom promotes comprehensive learning outcomes by fostering critical thinking skills, engagement, and application of concepts in real-world contexts. Teachers' resilience and creativity in overcoming challenges contribute to the enrichment of students' learning experiences (Apolonio, 2022; Cabactulan, 2023).

The use of MTB-MLE in the classroom challenges teachers in its implementation, however, it is helpful for young learners' mother tongue(s) to explain concepts and deliver instructions for purposes of intelligibility or strategic code-switching. The language for teaching becomes significant as this bridges cognitive demands, support, and empowerment where teachers and learners need to speak out (Paz, 2018). In spite challenges, teachers to effectively deliver MTB-MLE must employ various coping strategies including self-training and study, asking help from a more knowledgeable faculty and shouldering the expenses of instructional material reproduction. Supporting this from Hunahunan (2019) where serious problems confronting its implementation must be considered. Concerned people should be informed and these people need to work collectively in formulating and designing appropriate intervention and sustainability plans for the program to thrive and subsequently attain its ultimate purpose of providing quality MTBMLE among primary graders.

Negotiating partnership for learning

The fourth theme *negotiating partnership for learning* emerged from the sub-themes like *inking partnership for learning and addressing challenges*. The need for partnership to support the learners with diverse linguistic background is essential to highlight connections and challenges. Practical strategies which could be an answer to teaching problems, such as interpreting or retelling stories in different languages, promote active engagement and motivation among students. Garcia and Kleifgen (2020) punctuated the significance of funds of knowledge in multilingual classrooms, emphasizing the importance of incorporating students' cultural practices and knowledge into instructional practices. This culturally responsive pedagogy enhances connections between subject content and students' lived experiences, fostering inclusive learning environments.

Support from parents and consultations from mainly seasoned and experienced in teaching MTB-MLE is critical. According to Geeraerts et al. (2018), each teacher learns differently from their colleagues. Innovative teaching methods and ICT skills are primarily acquired from younger colleagues, whereas practical information, classroom management skills, self- organization, and community building are acquired from older colleagues. Additionally, coworkers provide teachers with perspectives on teaching and teaching methods. According to Dias et al. (2017), teachers in their first year of teaching may experience stress, a lack of appropriate support, and anxiety, resulting in an unwillingness to manage students' academic aspects of education. Novice teachers overcome obstacles with the assistance of more experienced colleagues. Consultation with their colleagues is extremely beneficial in alleviating the fear and confusion associated with teaching MTB-MLE.

Adapting to curriculum change

The fifth theme *adapting to curriculum change* emanated from the concept of responding to the challenges. It is a common belief that accompanying the success of the MTB-MLE are the problems faced in its implementation. Malone (2021) disclosed the lack of qualified Mother Tongue teachers as contributing factor, difficulty in teaching and embracing the old ways and switching codes to the language used to, however, these barriers could be addressed which teachers play an important role in the implementation of MTB-MLE since they are the ones who leave a great impact on knowledge acquisition, on communication, and on production of efficient and loyal learners.

Although some were antagonistic on curriculum change towards the program, teachers shifted gradually as they realized the pedagogical and learning benefits of mother tongue instruction in their own context. In the study of Parba (2018), challenges were part in the implementation especially to teachers facing the responsibility for implementing the language policies at the classroom level. Creese (2010) believed that teachers should operate policies according to their local contexts, experiences and values even where there is a strong element of statutory compliance. The same scholar further contended that it is important to look at how the MTB-MLE policy is interpreted at the local level, because teachers "will interact with policy not in a one-to-one reading of what is required, but in an interactive frame which involves their own interpretation within their own localized communities". Furthermore, this supported Tollefson's (1991) position on the politics of language in the Philippines that "what language(s) should be used in education and in the exercise of commerce, mass media, politics and government" is a key question that deserves attention since this "has a crucial impact upon access to economic resources, to policy-making institutions, and to political power".

Pedagogical and Research Implications

In-depth understanding of the meta-synthesized studies on the implementation of MTB-MLE illuminated research and pedagogical implications.

The role of teachers in the delivery of MTB-MLE instruction greatly varies in efficiency and effectiveness. The language that the children know and fluently speak when they begin school is their mother tongue. This language allows them to continue develop critical thinking skills needed in the learning process. Using mother tongue in instruction has created a sense of pride, it also elevates self-esteem, and at the same time, eliminates fears (Arzadon, 2010). So in order to enhance the cognitive development of the learner, mother tongue needs to be implemented and be done regardless of the subject which requires a deeper understanding since these do differ in terms of content and competencies. This subject makes it hard both for the children and adults due to the complexity of grasping ideas (Espada, 2012). It becomes easier for the students to acquire both concepts and skills when mother tongue is used in the learning process (Espada, 2012).

In this research, the synthesized articles recognized both the positive and negative effects of the program, and disclosed the challenges of the implementation. Much of the researches uncovered the beauty and loopholes of teaching practices. Being able to examined the findings on the present metasynthesis, it is believed that research and pedagogical implications drawn from the previous studies offered incomparable insights and reflections on dealing with opportunities and challenges in the current era.

Research Implications

The themes developed in this research would influence teachers support for a reform, such as changes in working conditions, trainings, and practices. The findings established three significant implications critical to the transformative implementation of the program towards multilingualism. It is therefore significant to see teachers' interest in cultivating the culture of multilingualism focused on speaking the first and other

language known to the learners and teachers in fueling the delivery of instruction in the classroom and in gaining competence in sustaining the program.

The *first research implication* is apparent that in spite the loopholes showed an attention to continue the program as it is a reform for language education. While teachers may appear to act as soldiers' of the system by implementing national policies without questioning their quality and relevance, studies have suggested that their actions in the classroom were contextualized and adapted according to their own language ideologies. This supported the views of Chimbutane & Benson (2022) that some teachers and parents both demonstrated support in relation to policy compliance. In other words, they operated within different spheres of influence. Teachers' actions were carried out in the classroom, while parents' actions were focused in the home through difficult on some aspects as understanding the first language maybe difficult due to their other first language. Parents claimed they would assist with the needs of the children as this would mean as, such as preparing materials in the mother tongue. Teachers, on the other hand, appeared resistant to request such help saying that it was the job of the teacher, not the parent, to prepare the necessary materials. They suggested feelings of shame would result from requests to parents for help. Additionally, the MTB-MLE implementation necessitates a research-wide response to the mother-tongue teaching. The metasynthesized articles challenge teachers to embrace cross-cultural teaching practices to ensure that principles and strategies contribute to the over-all value of the program. However, with the demands of teachers like the lack of teaching resources, the need to contextualize and indigenize should be addressed to raise awareness in teaching.

The *second research implication* that this research shows is on the critical learning resources that need to be given to the teachers and learners as a support in the classroom to ensure engage and interactive learning environment. Likewise, the critical and transformative practices highlighted the need of exploring the MTB-MLE program in developing a culturally-responsive education. This means that schools acknowledged the significance of the mother tongue although challenging due to the demands of resources and the difficulty of its content. The findings of Dela Pena (2023) blended with this implication as some suffered from the poor competence linked to the program saying that it failed learners to knowing their native language due to the lack of resources and the suspension of using it as the principal medium of instruction in the lower years like kinder to grade 3. Chi (2023)concluded that the suspension would provide sufficient time for the DepED and school districts to develop and acquire sufficient learning materials to completely implement the use of mother tongue. This is likely a response to the instructors' complaints about the lack of MTB-MLE learning resources for many years. Recent legislation requires DepEd and the Komisyon ng Wikang Filipino to determine which school districts can completely implement mother-tongue- based instruction and which localities have multiple native languages.

The *third research implication* shows the negative attitude and resistance to change of teachers, learners, and parents as the program assumed to have embraced the diverse and cultural uniqueness of the mother tongue use. Teachers need to recalibrate and reevaluate themselves in terms of their readiness and preparedness in the new instructional environment. Therefore, as a prompt response, they need to seek reform and initiate reconceptualization for adaptability through research-based knowledge and claims aimed toward pedagogical implications.

Pedagogical Implications

This metasynthesis showed pedagogical implications derived from the emerging themes of the findings which highlight the practice of constructivism among teachers. Central to the program development is the articulation of innovative teaching pedagogies that would engage learners, teachers, and community

stakeholders to support the program. Anchored on this principle of constructivism, teachers may therefore be seen embodying important competencies and skills when navigating and moving forward from the conventions and traditional notions in language instruction. Falling short in providing teachers with the preparation needed to address demands of contextualization and indigenization. As emphasized by Mangalindan Cruz, Catipay, Sioco, Mateling, Dumalaog, & Leano (2023)that when it comes to learning a language, having the right materials to guide and support learners is extremely important. In all language learning, learners should be supported to help them effectively learn the language. With the challenges affecting the education system, this calls for government assistance in providing instructional materials that are essential for learning progression.

In addition, localized learning materials are important to support learning and daily interaction closely tied to the personal, cultural, and ethnic identity of the learners, parents, and stakeholders. For instance, teaching the mother tongue should reflect the local pride, how we communicate in different situations, and our attitudes and beliefs (Hamers & Blanc, 2020). From an acculturation perspective, being able to communicate effectively indicates successful adaptation and adjustment. Since language and culture are interconnected, learning a country's official language (L2) during migration can lead to various cultural changes for the individual, such as shifts in lifestyle, attitudes, customs, values, and self-perception (Markus & Kitayama, 2021).In essence, within the MTB-MLE framework in the Philippines, the theory emphasizes that the use of the mother tongue is not just a linguistic choice; it is a key element in preserving cultural identity, heightening cultural awareness, and concurrently fostering proficiency in multiple languages. This interconnectedness contributes to a more inclusive and culturally rich educational experience.

Interpretation

The third-order themes in this research were developed through a process of critical thinking and inductive analysis. Basically, the studies generated an evidence that there is something more that DepEd should work to achieve quality learning and education. The themes developed were common across different studies and interrelated to several other studies which suggested a more analysis on how the program could be improved.

With the Matatag curriculum phasing out the MTB-MLE, there is a need to use mother-tongue still as a medium for instruction to preserve language identity. Multilingualism is providing an idea of innovativeness where teachers need to concentrate on the development of localized learning materials. The increasing call for a change to this landscape is propelled by the integration of resources to teaching to support learning.

The phasing out or even the suspension raises a valid concern in the Matatag curriculum to transform learning differently. While discourses from teachers and parents disclosed positive and negative thoughts, the current status of the program is being analyzed. With this research, this addresses the fallacies not to use mother tongue, but a reorientation towards viewing multilingualism-as-resource(s), and proposal to promote the combined use of the national language, vernacular language(s)/regional lingua franca and international language for primary education to provide a more balanced, inclusive, socially equitable and ethical approach to language policy implementation.

IV. COCLUSIONS AND RECOMMENDATIONS

From the lens of metasynthesis, the findings supported the need to sustain the MTB-MLE program in the teaching and learning process. As new waves of reforms for teaching to engage students in the discussion,

the research implications require integration of MTB-MLE that observes a more consistent inclusive practice. The results showed difficulties in the program, however, the meta-synthesized articles challenges teachers to provide more relevant and technology-driven pedagogies that provide opportunities of dynamic interactions and contextualized materials. Hence, language teachers should reconsider by making relevant instructional adjustments to produce concrete implementations that meet today's real-world requirements of teaching.

Based on themes, research and pedagogical implications revealed in the metasynthesis, the following recommendations were given (a) teachers need to have clear understanding and insight on the MTB-MLE implementation on how it could effectively change the learning process of the students; (b) teachers should be viewed as empowered individuals who should look to themselves for continuing progress in their effectiveness, efficiency, and productivity within a nurturing culture, and (c) further studies should be undertaken on the development localized instructional materials to support learning.

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