'Starting Where the Children Are': Process Evaluation of the Mother Tongue-Based Multilingual Education Program Implementation

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Philippine Institute for Development Studies
Surian sa mga Pag-aaral Pangkaunlaran ng Pilipinas

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List of Acronyms

ACTRC	Assessment, Curriculum, and Technology Research Centre
ALIVE	Arabic Language and Islamic Values Education
ARMM	Autonomous Region of Muslim Mindanao
ASEAN	Association of Southeast Asian Nations
Basa	*Basa Pilipinas*
BEP	bilingual education policy
BLD	Bureau of Learning Delivery
BLR	Bureau of Learning Resources
CAR	Cordillera Administrative Region
CG	curriculum guide
CO	Central Office (of the Department of Education)
DEC	Department of Education and Culture
DECS	Department of Education, Culture, and Sports
DepEd	Department of Education
DO	Department Order
EDC	Education Development Center
ELLNA	Early Language Literacy and Numeracy Assessment
EO	Executive Order
FGDs	focus group discussions
FLC-BP	First Language Component-Bridging Program
FP	focal persons
IP	indigenous peoples
IPEd	indigenous peoples education
IRR	implementing rules and regulations
K to 3	Kindergarten to Grade Three
K to12	Kindergarten to Grade Twelve
KIIs	key informant interviews
L1	first language
L2	second language
L3	third language

LAC	learning action cell
LAPG	Language Assessment for Primary Grades
LD	language diversity
LDCs	linguistically diverse contexts
L-LDCs	less linguistically diverse contexts
LDI	language diversity index
LF	*lingua franca*
LFP	Lingua Franca Project
LGU	local government unit
LL	large language
LL	linguistic landscape
LLs	local languages
LOI	language of instruction
LOLI	language of learning and instruction
LM	learning materials
LS	large school
LUC	local universities and colleges
MOI	medium of instruction
MOOE	maintenance and other operating expenses
MS	medium school
MTB-MLE	Mother Tongue-Based Multilingual Education
MT	mother tongue
MTE	mother tongue education
MTS	Mother Tongue as Subject
NAT	National Achievement Test
NCR	National Capital Region
NEDA	National Economic and Development Authority
NGO	nongovernment organization
OQS	online quick survey
PE	process evaluation
PIDS	Philippine Institute for Development Studies
PSDS	public schools district supervisors
QOS	quick online survey

RA	Republic Act
RO	regional office
SL	small language
SLA	second language acquisition
SS	small school
SY	school year
SUCs	state universities and colleges
TEEP	Third Elementary Education Project
TG	teachers guide
TIMSS	Trends in International Mathematics and Science Study
TOC	Theory of Change
TWG	technical working group
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund
US	United States
USAID	United States Agency for International Development
wcpm	words correct per minute

Abstract

The primary rationale of the Mother Tongue-Based Multilingual Education (MTB-MLE) program is to start where the children are, which means building upon what children already know.[1] It is designed to implement a learner-centered education from the beginning of the education ladder. The MTB-MLE policy may be in its infancy in terms of official implementation, but it already has a long and unrecognized history in Philippine education. Implemented along the margins of dominant language-in-education policies as "auxiliary" medium of instruction (MOI) from the turn of the century until recently, the mother tongue (MT) became the primary MOI and the official language-in-education policy of the Department of Education (DepEd) in 2009 via Department Order 74. This process evaluation sought to determine the status of the program since the passage of Republic Act 10533 or the Enhanced Basic Education Act of 2013. It specifically looked at program theory, service delivery and utilization, and program organization. To capture the breadth of conceptual and implementation issues, 18 public and private elementary schools were randomly selected for the study. These schools were either private- or public-school systems, distributed according to DepEd's typology of small, medium, and large schools; island groupings of Luzon, Visayas, and Mindanao; and from both linguistically diverse and less linguistically diverse contexts. Key informant interviews with former and current DepEd officials at the national, regional, and division levels, as well as focus group discussions with teachers and parents, were done. An online survey was also conducted to determine the extent of the program's implementation at the school level. Findings show the breadth of challenges emanates from its conception to implementation stages. The online survey revealed that while almost all schools are implementing the program, the quality of implementation may be wanting as less than 10 percent of schools surveyed have done the four activities needed to implement the program well. At the conceptual level, the program had to deal with linguistic diversity in the classroom, which challenges the

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[1] The use of the phrase "starting where the children are" is a reference to both the title of the book edited by R.M. Nolasco, F. Datar, and A.M. Azurin published in 2011, containing essays on MTB-MLE, and the educational practice of beginning with what the learner knows to what the learner does not know.

primary model of implementation that assumes that a child is exposed to only one MT, rather than possibly several. At the implementation level, the program has been hampered by procurement issues and lack of designated funds for the program's operational activities, forcing the program to compete with other school needs to fund its activities from general maintenance and other operating expenses of the schools. Notwithstanding the numerous problems it is facing, the MTB-MLE has a very solid pedagogical foundation and embodies the concept of learner-centered education. Thus, this study does not question the wisdom of implementing the program but rather aims to highlight the challenges it is facing and seeks for more effective, efficient, and acceptable ways of implementing the program. It provides recommendations to improve its implementation through program theory, service delivery and utilization, and program organization. Overall, the program needs better appreciation of all stakeholders of the conceptual problems it is facing and also their cooperation to implement the program well.

Introduction

Learning in the mother tongue (MT) has been receiving increased support not only locally but also globally from institutions, such as the United Nations Educational, Scientific, and Cultural Organization (UNESCO) and the United Nations Children's Fund (UNICEF). More governments, such as India, Nepal, Papua New Guinea, and Bangladesh, among others, are now paying closer attention to the use of MT as part of their small-scale efforts in providing access to MT education (Burton 2013; Jacob 2016). In the Philippines, scholarship opportunities on learning in the MT have also increased with the institutionalization of the Mother Tongue-Based Multilingual Education (MTB-MLE) program in 2009.

The term "mother tongue" is defined as the language that a child has been exposed to since birth—during the child's critical period[1]—or the language that one learns first, knows best, uses most, and identifies with (Kosonen and Young 2009). UNESCO was the first to recognize and endorsed the necessity of school-age children becoming literate via "two short jumps", i.e., from illiteracy to literacy in the MT and from literacy in the MT to literacy in a second language, as opposed to the "long jump" of illiteracy to literacy in second or foreign languages (UNESCO 1953, p. 56). Similarly, UNICEF (1999) has asserted that the use of the MT is an essential foundation for learning as well as a scaffold for future literacy in additional languages. UNESCO (2003) reiterates the importance of the MT as a language of instruction (LOI) in supporting bilingual and/or multilingual education at all levels of schooling. It also promotes the learner's right to learn in one's own language, inclusivity, and linguistic diversity.

In the Philippines, the journey of the language used at home to the language used in schools had not been smooth. Although MTs have always been used in the country as important LOIs, they have only historically occupied an auxiliary position alongside more dominant LOIs, such as Filipino and English, throughout the whole range of primary education. In 2009, the MTB-MLE was institutionalized through Department of Education (DepEd) Order 74 and was deemed a defining moment in the

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[1] The term "critical period" in language learning refers to the first few years of a child's life when language is learned effortlessly, after which time—ordinarily after age 5—language acquisition becomes more difficult (Lenneberg 1967).

country's language-in-education history. It was further strengthened as a key educational reform embedded in Republic Act (RA) 10533, also known as the Enhanced Basic Education Act of 2013. The MTB-MLE policy reverses the century-old common practice among schoolchildren of leaving their home languages behind to study a second and a third language in school. Such practice not only denies children the right and the opportunity to learn in their own MTs but also contravenes the sound pedagogical practice of beginning with what the learner knows to what the learner does not know. For the first time in the history of the country's language policy and planning, the language used at home is recognized as an efficient vehicle for the delivery of academic content by making it the primary, instead of an auxiliary, MOI from Kindergarten to Grade 3 (K to 3).

The MTB-MLE program mandates the use of the MT as the MOI during the first four years of primary education in schools, i.e., while the students are learning Filipino and English as subject areas from Grades 1 to 3. Beyond Grade 3, English and Filipino will be used as MOIs. This program is expected to facilitate learning by eliminating children's difficulty in learning basic concepts in a language that they have yet to fully master. The literature highlights the advantages of adopting the MTB-MLE as a framework for making academic content more accessible to learners, especially among young students. Studies find that children are more likely to succeed in school when the MT is used as parents become more invested in their children's learning. These effects of MT education are more noticeable among girls and disadvantaged groups, such as children from rural and indigenous communities (Ball 2010).

The main goal of this study is to document the manner of implementation as well as the breadth of MTB-MLE implementation in the Philippines using a process evaluation. A process evaluation is an integral mechanism that examines the implementation process of programs and attempts to determine the success of the project in terms of following the strategy laid out in the logic model (USAID 2009). This study particularly aims to provide a factual MTB-MLE program assessment by reviewing its (a) program theory, (b) service delivery and utilization, and (c) program organization. It seeks to identify implementation issues and recommends appropriate interventions. The findings of this study

will serve as useful inputs to the policy and implementation decisions of the DepEd, including schools at the divisions and regions across the Philippines. Ultimately, the benefits will redound to the individual Filipino learner's academic, affective, and psychomotor development.

Due to time and resource constraints, the study was designed to cover only 18 but well-selected schools. The selection of the schools is described in detail in the Sampling Strategy under the Research Design and Methodology section. There is no way these 18 schools can represent the breadth of experience of the 51,140[2] schools offering K to 3. This is the main limitation of the study. However, it is interesting to note that even among these selected schools, similar issues were repeatedly identified. A quick online survey (QOS) describing the extent of MTB-MLE implementation and participated by 16,479 schools was conducted to augment the process evaluation. Finally, there are desired program documents that were not readily available during the period of study, hence, were not included in the analysis. The findings of the study should be appreciated with these limitations in mind.

Literature Review

The literature highlights that adequate knowledge of the MT is an essential foundation for learning second languages. Once the cognitive capabilities underlying skills in reading and writing in the first languages (L1s) have been fully developed, they can be applied to the learning of another language (August et al. 2002).

Consistent with this idea, Durgunoglu et al. (1993) studied Spanish nonfluent readers to determine whether second language (L2) word recognition skills were influenced by the pupils' phonemic awareness in their native tongue. Through a variety of tasks,[3] the study concludes that phonological awareness training in one's MT—in this case, Spanish—could facilitate children's ability to read in English.

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[2] This is the estimated number of schools offering K to 3 in SY 2017–2018 according to DepEd data.

[3] These include a letter naming task, a Spanish phonological awareness test, a Spanish and English word recognition task, an English word reading task, an English-derived pseudo word task, and a Spanish and English oral proficiency test.

Similarly, the work of August et al. (2002) examined the transfer of skills from Spanish to English as well as the effects of Spanish literacy and oral English proficiency levels on English literacy acquisition. By constituting four cohorts of pupils (N=189) into (1) English monolingual pupils instructed in English, (2) Spanish-speaking pupils instructed in English, (3) Spanish-speaking pupils instructed in Spanish through second grade, and (4) Spanish-speaking pupils instructed in Spanish through third grade, the study tracked pupils' progress over a three-year period (end of second grade to end of fourth grade) in schools in Boston, El Paso, and Chicago in the United States (US). The study's concrete findings endorsed the theory of Linguistic Threshold Hypothesis: that Spanish phonemic awareness, letter identification, and word reading were reliable predictors of performance on parallel tasks in English at the end of third and fourth grades, and most especially that Spanish phonemic awareness among the four cohorts translated to English phonemic awareness.

Numerous studies recognize the positive cross-linguistic transfer of phonological awareness. For Spanish to English for instance, notable studies are those of Cisero and Royer (1995) and Bialystok et al. (2005). August et al. (2002) cited several studies analyzing the transfer from Arabic to English: Abu-Rabia and Siegel (2002, 2003), Farran et al. (2012), and Abu-Rabia et al. (2013); from Hebrew to English: Abu-Rabia (1997), Geva and Siegel (2000), Kahn-Horwitz et al. (2005), and Russak and Kahn-Horwitz (2013); and from Korean to English: Chiappe et al. (2007), Kim (2009), Shakkour (2009), and Kang (2012).

In the Philippines, the adoption of the MTB-MLE was also proposed, citing that English or Filipino languages are essentially "foreign" to millions of school-age children that, if used as MOI, will do more harm to an already "ailing system of education" (Nolasco 2008, p. 1). Initial studies that were conducted on MTB-MLE showed better student performance. For example, the result of the First Language Component (FLC) Bridging Program initiated in 1998 in five schools in Lubuagan, Kalinga, indicated highly encouraging results (Duguiang and Dekker 2010). The 2001 FLC achievement scores in reading comprehension showed higher test scores among the experimental groups. Other positive results were observed in children's attendance, receptiveness, participation in classroom activities, and better relationship with teachers (Dumatog and Dekker 2003).

Similarly, Reyes (2010) discovered that pupils learned Science better when the children's MT is used. In an experiment conducted in a Grade 4 science class in a public elementary school in Quezon City, the author discovered that students responded better when Filipino was used as MOI compared to when the class was conducted entirely in English. Other advantages noted were facilitated learning of key concepts, livelier verbal interaction, and marked improvement in quiz scores. Overall, the study suggested that using Filipino in teaching Science in Tagalog-speaking areas would be more effective than using English, and should therefore be used as the language of learning and instruction (LOLI) for science in Grade 4.

Barrios and Bernardo (2012) also found that L1 speakers of *Cebuano* learned Filipino as their L2 more easily than L1 speakers of *Chavacano* learning Filipino. Cebuano and Filipino are structurally similar languages but Chavacano is different from either of the two. This confirms that learning one's MT first will help facilitate the learning of the L2, especially in cases where the two languages share similarities. The studies of Arzadon et al. (2016), Ocampo (2006), Quijano (n.d.), Reyes (2010), and Tapang (2012) also yielded promising results among pupils learning academic content in the MT.

In Agusan del Sur, Quijano (n.d.) found that since the MT of most pupils is neither Filipino nor English, using *Minanubu*—the language that children speak in the area—in reading materials, charts, songs, and poems, improved children's learning and confidence. Although more precise measurements have to be developed to categorically say that there have been marked improvements in the way students learned based on their MT proficiency, the zero percent rate of repetitions in schools is an encouraging preliminary result (Quijano n.d.).

Meanwhile, UNESCO (2016) presented studies to show the effectiveness of learning the official school languages when students begin with their mother tongues, particularly English in the Philippines and Cameroon, and Thai in Thailand. Student assessments in these countries showed that "children in MLE classes consistently show an advantage of 30–60 percent over students of the same grades in non-MLE classes" (UNESCO 2016, p. 29). In this case, students who learned their MTs first learned official school languages better than students who did not begin learning using their MTs.

Background of Mother Tongue-Based Multilingual Education (MTB-MLE) in the Philippines

The Philippines' language-in-education policies

A short summary of language planning and policymaking efforts in the Philippines is recounted in Table 1 to provide context for the MTB-MLE. Language-in-education policy, or the "legislation on and practices pertaining to languages or media of instruction and languages of literacy used in basic education" (Kosonen and Young 2009, p. 11) may be viewed as guidelines for the use and acquisition of languages, implemented within nation-states or institutions, such as schools or workplaces. This definition is the main guide of this research. Other studies, such as Tollefson (2011), refer to language policies as "the explicit or implicit language planning by official bodies, such as ministries of education, workplace managers, or school administrators" (p. 357). Similarly, Kaplan and Baldauf (2003) explained that language policies are attempts to facilitate communication of people across linguistically diverse communities upon independence from colonial masters.

Linguistic diversity of Philippine classrooms

There are 182 languages currently being spoken in the country (Eberhard et al. 2020). Consequently, the country's linguistic diversity has been blamed for complicating educational outcomes. Millions of children often start school with limited or underdeveloped ability to speak and understand the MOI of the school; these children are therefore described as deficient. Framed within the language as problem orientation (Ruiz 1984), the issue of linguistic diversity had been resolved in the past through monolingualism (English-Only Policy) to facilitate the delivery of academic content or of token accommodation via the Bilingual Education Policy (BEP). It is clear, however, that a one-size-fits-all program is inadequate in responding to the unique linguistic make-up of Philippine classrooms, which produces less than ideal outcomes. Even in less linguistically diverse contexts (L-LDCs), such as the Cagayan de Oro division in Mindanao or in an integrated school in Taguig in the National Capital Region (NCR) (Box 1), there may be anywhere from 15 to 30 other languages alongside more dominant MTs. The reality of linguistic diversity in Philippine classrooms limits the efficacy of

Table 1. Language-in-education policies: Philippines, 1900–2009

Year	Policy	
1901	Education Act 74 (Monolingual Education Policy)	US President McKinley directs the Philippine Commission to establish a system of schools where English is "the basis of all public school instruction", the establishment of which is deemed "essential to the success of democracy" (Dawe 2014, p. 66).
1937 and 1940	Executive Order (EO) 134 and EO 263	The 1935 Constitution adopts Tagalog as the national language in 1937. EO 263 stipulated the teaching of Tagalog as a separate subject in primary, secondary, and teachers' colleges, in both public and private schools.
1957	Revised Educational Act	The Board of National Education provides for the use of vernacular languages as medium of instruction (MOI) in Grades 1 and 2, and auxiliary MOI in Grades 3 and 4. English is introduced as a separate subject and MOI from Grade 3 onward. Tagalog or 'Pilipino' (adopted in 1959) becomes an auxiliary MOI in Grades 5 and 6 (Bernardo 2004, p. 19).
1973	DEC Department Order (DO) 9 (Bilingual Education Policy)	The Department of Education and Culture (DEC) adopts the Bilingual Education Policy (BEP) at all levels of schooling to develop bilingual competence in the use of both Pilipino and English through the teaching of both languages as subject areas and as MOIs. Regional languages are used as auxiliary languages in Grades 1 and 2.
1987	DECS Order 52	The Department of Education, Culture, and Sports (DECS) reiterates provisions in the BEP: Use of English as MOI in Science, English, and Mathematics, and Pilipino (spelled 'Filipino' after 1987) as MOI in Filipino, Social Studies, Character, Health, Work, and Physical Education at all levels of education. Regional languages remain auxiliary MOI (Castillo 2000; Dekker and Young 2005).
2009	DepEd DO 74 (Multilingual Education Policy)	The Department of Education (DepEd) institutionalizes the child's mother tongue as primary MOI in all subject areas, "from preschool until, at least, Grade 3", followed by Filipino and English introduced as separate subjects "no earlier than Grade 2". The teaching of MT as subject (MTS) begins in Grade 1. Filipino and English become the MOI from the secondary level onward.

Source: Authors' compilation

Box 1. Linguistically diverse classroom scenarios: Taguig school and Cagayan de Oro division

The National Capital Region (NCR) is considered a less linguistically diverse context (L-LDC), where *Tagalog*, the predominant language spoken in the region, may be everyone's MT. This is not true, however, in a classroom in Taguig, which easily illustrates the complex linguistic nature of Philippine education. In a Grade 1 class of 40 pupils, there are as many as 16 MT languages identified by the learners themselves. Tagalog is spoken by 13 pupils—not a clear majority—followed closely by *Sinugbuanong Binisaya* with 10 speakers, and other Cebuano dialects with 5 speakers. Each one of the following languages has one speaker: *Bikol* (West Albay), Bikol (Miraya), Bikol (Libon), *Hiligaynon, Tagbanwa, Kinaray-a, Capiznon, Chabacano, Kalinga, Davawenyo, Bantoanon,* and *Tausug.*

In another L-LDC in the Cagayan de Oro division in Mindanao where the clear majority (48,568 speakers) speak Cebuano/Sinugbuanong Binisaya/*Kana* and other variants of the language, some K to 3 pupils (1,546 speakers) speak many other languages as their MTs. These include *Maranao, Higaonon*, Tagalog, Hiligaynon, English, *Bol-anon, Arabic,* Bikol, Tausug, *Surigaonon,* Chabacano, *Maguindanaoan, Binukid, Capiznon, Waray, Aklanon, Iloko,* Kapampangan, Manobo, Ivatan, Minasbate, Butuanon, and Kinaray-a.

For these linguistically diverse classrooms in L-LDCs, how can the MTB-MLE be facilitated?

Source: Authors' compilation

instructional content in one, two, or even three MOIs, unless more languages are accommodated. Since the MTB-MLE is expected to be the policy that bridges the gap between illiteracy in the MT and literacy in the second or third language, the program requires a reassessment of design and implementation given the diversity in the classroom. The DepEd recognizes that it is not possible to cater to all distinct languages existing in the classroom. Thus, it has since encouraged schools and divisions to do their own localization of the MTB-MLE implementation, which is not easy to do without appropriate support. In such case, the teacher has no recourse but to improvise, making the result dependent on the ability of the teacher.

Multilingual versus bilingual education policies/initiatives
The recent policy reform is a culmination of contested language-in-education policy debates throughout history and the result of two conflicting but parallel developments in recent memory, the trajectory of which have had long-lasting policy implementation implications from the last century to this day.

The first one was the series of 'first language first' initiatives that began in the 1940s, effectively predating a multilingual language-in-education policy in the Philippines. Implemented along the margins of dominant language-in-education policies, the exclusive use of the MTs in the early grades had been carried out in Iloilo in 1948–1954 and 1961–1964, where Hiligaynon was used in teaching Grades 1 and 2 pupils (Nolasco 2008). In Cebu, the teaching of Social Studies in Sinugbuanong Binisaya had been successful (Igcalinos 2012). A language model was also implemented in Antique, where three language-in-education models with different numbers of vernacular use in 1952 were used (Igcalinos 2012). Meanwhile, the Rizal experiment that was carried out between 1960 and 1966 looked into the timing and amount of input in English as a subject and MOI in a Tagalog-medium class (Nolasco 2008; Llaneta 2010; Igcalinos 2012; Arzadon et al. 2015).

Up north, the First Language Component-Bridging Program (FLC-BP) was a six-year research project on transitional education that had been carried out under the Summer Institute of Linguistics, the Department of Education, Culture, and Sports (DECS), and the Ifugao Division consortium. Initiated in 1985 by Dr. J. Codamon, supervisor of Hungduan District at the time, the project used Tuwali as MOI and sought to improve the test scores of elementary grade school pupils. The program believed that the child who acquires reading and writing skills in the first language, with the rigorous bridging of language arts skills to the two second languages as MOI, will be more competent in all areas of study than the child who did not acquire competence in reading and writing in the first language (Hohulin 1995). The bridging program eventually became the Lubuagan MLE Program (1998–2012), undertaken in several schools in the Lubuagan District using the Lilubuagen language (Walter and Dekker 2011).

The Lingua Franca Project (1999–2001), a DepEd initiative under the leadership of Br. Andrew Gonzalez, was a program participated by 32 schools from all regions. Schools were given options to use any of the three *lingua franca* (LF)—Tagalog, Ilokano, and Cebuano—as MOI in Grades 1 and 2. A study showed that children who had learned to read and write in their L1 before learning a second language were more successful and confident second language learners, and had transitioned more successfully from the L1 to the L2 (Quijano and Eustaquio 2009).

Finally, the Culture-Responsive Curriculum for Indigenous Peoples–Third Elementary Education Project (TEEP) (2003–2007) was conducted in the southern island of Mindanao targeting the Manobo community. It was implemented as an indigenous curriculum for a Manobo community using the indigenous language of Minanubu (Llaneta 2010; Arzadon et al. 2015). Results of the experiments had consistently shown that classes that used local languages demonstrated improved student performance compared with classes that used only Filipino and/or English. In addition, results suggested that learning in the home languages facilitates the future learning of additional languages, especially with additional supports, such as adequate reading materials and properly programmed instruction and transition to L2, L3, and other additional languages.

In seeming conflict to 'first language first' initiatives, an attempt to return to English as primary MOI was pushed through Executive Order (EO) 210 titled "Establishing the Policy to Strengthen the Use of the English Language as a Medium of Instruction in the Educational System", issued on May 17, 2003. Subsequently, the DepEd issued Memorandum 181, series 2003, advising the following: "the English language will be used as a medium of instruction in the educational system to develop the aptitude, competence, and proficiency of the students in the English language to maintain and improve their competitive edge in emerging and fast-growing local and international industries, particularly in the area of information and communications technology (ICT)" (Quijano and Eustaquio 2009). House Bill 5091, also known as "Strengthening and Enhancing the Use of English as the Medium of Instruction in Philippine Schools", was also filed to reinstall English as the primary MOI in basic education. However, these efforts did not prosper. It is clear in the foregoing discussion that the use of the MTs in schools has always been met with strong resistance from many sectors, despite evidence that they work. Meanwhile, English is continuously being pushed as the primary MOI in schools despite the evidence that its use does not always work and apply to the whole population.

Bilingual education policy (BEP) and academic performance
Largely, the BEP or the use of both Filipino and English as MOIs has been considered a failure due to weak performance of Filipino students

in Math and Science, which led DepEd to believe that Filipinos are not learning what they should be learning in school. Data showed that Filipino learners are not mastering even 60 percent of academic content with the current BEP (DepEd Fact Sheet 2008). Experts surmise that language could be a factor why academic content is not being learned sufficiently. A study by Tapang (2012) suggests that the teaching of Science and Math be conducted using the learner's mother tongue instead of English, pointing out that countries that ranked high in Math and Science assessments conduct basic instruction in the local tongue (with the exception of Singapore).

Data from Trends in International Mathematics and Science Study (TIMSS) provided important benchmarks for comparing the country's performance vis-à-vis select Asian countries. Table 2 shows the average scaled scores and ranks in Mathematics and Science of Grade 8 students from 46 countries and four benchmarking participants (Indiana in the US, Ontario and Quebec provinces in Canada, and the Basque Country in Spain).

Table 2 also shows that the Philippines ranked very low in these two content areas in Grade 8—42nd in Math (Mullis et al. 2004a) and 43rd in Science (Mullis et al. 2004b). The country is only above Botswana, Saudi Arabia, Ghana, and South Africa in Math (Mullis et al. 2004a), while only above Botswana, Ghana, and South Africa in Science (Mullis et al. 2004b).

Table 2. Select Asian countries' score and rank in Math and Science: Grade 8

Country	Math		Science	
	Score	Rank	Score	Rank
Singapore	605	1	578	1
South Korea	589	2	558	3
Hong Kong, SAR	586	3	556	4
Chinese Taipei	585	4	571	2
Japan	570	5	552	6
Malaysia	508	10	510	20
Indonesia	411	34	420	36
Philippines	378	42	377	43

Source: Authors' tabulation based on data from 2003 International Mathematics and Science Study

Table 3 shows the average scaled scores and ranks in Math and Science of Grade 4 students from 25 countries and three benchmarking participants (Indiana in the US, and Quebec and Ontario in Canada).

Similarly, the Philippines ranked very low, at 23rd place, in both Math (Mullis et al. 2004a) and Science (Mullis et al. 2004b) among Grade 4 students. The country is only above Morocco and Tunisia in Math (Mullis et al. 2004a, p. 35), and Tunisia and Morocco (Mullis et al. 2004b, p. 37) in Science.

Table 3. Select Asian countries' score and rank in Math and Science: Grade 4

Country	Math		Science	
	Score	Rank	Score	Rank
Singapore	594	1	565	1
Chinese Taipei	564	4	551	2
Japan	565	3	543	3
Hong Kong, SAR	575	2	542	4
Philippines	358	23	332	23

Source: Authors' tabulation based on data from 2003 Trends in International Mathematics and Science Study

The current MTB-MLE program

Policy framework

The Philippine Constitution recognizes the use of MT or native languages in education. Article XIV states that: "For purposes of communication and instruction, the official languages of the Philippines are Filipino and, until otherwise provided by law, English. The regional languages are the auxiliary official languages in the regions and shall serve as auxiliary media of instruction therein" (emphasis provided). The official and articulated support enjoyed by MTs is proof that the Philippine government is aware and cognizant of the multilingual nature of the country and articulates policies towards inclusion and linguistic diversity.

The landmark Department Order (DO) 74, series 2009, titled "Institutionalizing Mother Tongue-Based Multilingual Education (MLE)",[4] articulated an important policy regarding the use of MT as LOI:

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[4] Department of Education (http://www.deped.gov.ph/orders/do-74-s-2009)

> *"3. The use of the learner's First Language (L1) as the primary medium of instruction (MOI) from preschool until, at least, Grade 3. During such period, L1 shall be the main vehicle to teach understanding and mastery of all subjects [sic] areas like Math, Science, Makabayan, and language subjects like Filipino and English."*

The use of regional languages as auxiliary media of instruction, as well as initial languages for literacy, has adequate support from previous and current departments of Education. The institutionalization of the Universal Kindergarten, one of the key provisions in the Enhanced Basic Education Program of 2013 further acknowledges children's right to learn in their own mother tongue and be assessed in it.

This provision is articulated in Section 4, paragraph 3, of RA 10533, which states that:

> *"For kindergarten and the first three years of elementary education, instruction, teaching materials, and assessment shall be in the regional or native language of the learners. The Department of Education shall formulate a mother language transition program from Grades 4 to 6 so that Filipino and English shall be gradually introduced as languages of instruction until such time when these two languages can become the primary languages of instruction at the secondary level."*

DO 43, series of 2013,[5] or the Implementing Rules and Regulations (IRR) of RA 10533 (DepEd 2013a), further clarifies the approved law, stating that:

> *"10.4. Medium of Teaching and Learning. Pursuant to Sections 4 and 5 of the Act, basic education shall be delivered in languages understood by the learners as language plays a strategic role in shaping the formative years of learners.*
>
> *The curriculum shall develop proficiency in Filipino and English, provided that the first and dominant language of the learners shall serve as the fundamental language of education. For Kindergarten and the first three years of elementary education, instruction, teaching materials, and assessment shall be in the regional or native language of the learners."*

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[5] Department of Education (http://www.deped.gov.ph/orders/do-43-s-2013)

It is clear from all department issuances that for teaching and assessment, the MT shall be used during the first four years of a child's education until such time that a transitional program for additional languages becomes mandatory once they reach Grade 4. As the sole agency tasked to design an effective transitional program for Filipino and English, DepEd also monitors how the MTB-MLE is implemented.

In the literature, the MTB-MLE is defined as "classroom instruction that begins in children's mother tongue and then gradually shifts toward national and/or international language(s) as the children advance through primary education" (Jacob 2016, p.1). The DepEd formally defines it as the "effective use of more than two languages for literacy and instruction" (DepEd 2012). The MTB-MLE program is embedded in RA 10533 and is one of the features of the K to 12 program along with the following:

1) Strengthening Early Childhood Education (Universal Kindergarten)
2) Making Curriculum Relevant to Learners (Contextualization and Enhancement)
3) Ensuring Integrated and Seamless Learning (Spiral Progression)
4) Gearing Up for the Future (Senior High School)
5) Nurturing the Holistically Developed Filipino (College and Livelihood Readiness, 21st Century Skills)

The guiding principle of the program is to improve access to and promote equity in education through the use of the learners' MT in teaching academic content. Through this, learning outcomes are expected to improve as mastery of the first language promotes the required cognitive development to easily learn a second language. In addition, utilizing the learners' MT is anticipated to build up children's self-confidence and pride in their linguistic resource(s), promote inclusion of more local content, as well as encourage greater participation of parents and community members in the learning process. This will also enable teachers to employ more active and efficient methods of teaching and ensure that the knowledge children bring to school becomes the basis for further learning. On the other hand, the government is expected to reap economic benefits from the MTB-MLE program in terms of reduced educational costs incurred from repetitions, dropouts, and absenteeism. This program is also expected to address problems related to literacy and numeracy that have hounded basic education (Nolasco 2008).

The conceptual framework of the K to 12 basic education program is shown in Figure 1. It identifies the ideal graduate of a basic education program—a competent and multiliterate learner who understands cultures and languages and is able to process information in both oral and written forms. As exhibited in Figure 1, theories of language learning and teaching are shown as the bedrock on which the success of K to 12 graduates rests. Consequently, educational outcomes are achieved when the foundation rests on a strong knowledge of the nature of languages, how young children learn languages, and how teachers can best help children learn them.

Figure 1. K to 12 basic education curriculum framework (2013)
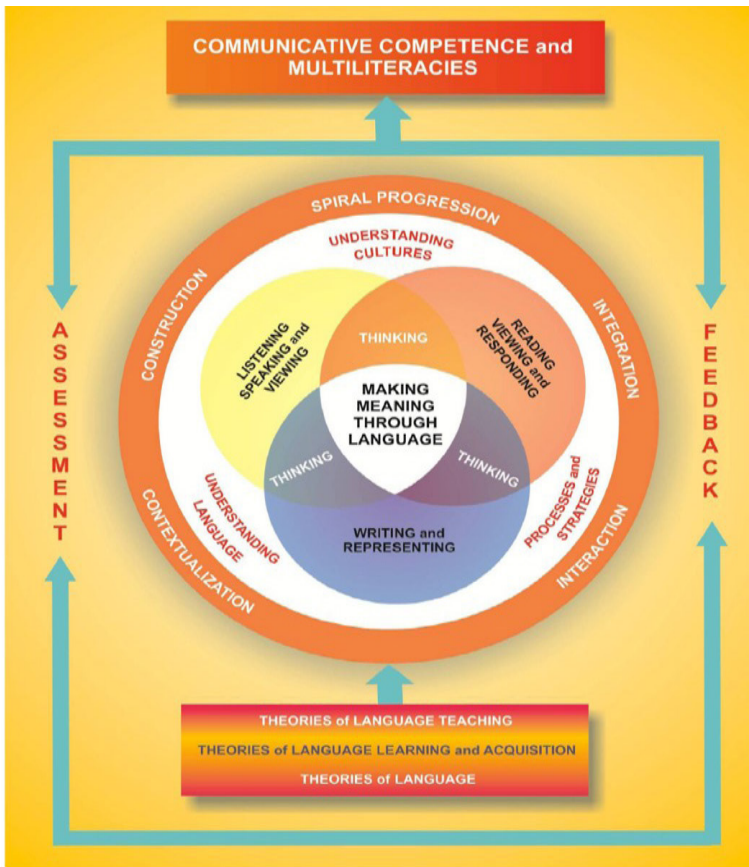
Source: DepEd (2013b)

Success factors

Based on DO 74, ensuring the success of a strong MTB-MLE program requires fundamental elements, such as presenting the program in two modes—MT as MOI and MT as subject (MTS); gradual and systematic introduction of the first language (L1), second language (L2), and other languages, (such as Arabic in Madrasah schools); continuous training of teachers; working orthography of MOI and production and distribution of inexpensive reading resources, e.g., children's literature; and support from the community and other stakeholders, among others.

In interviews with key personnel on the MTB-MLE program, and based on best practices in multilingual countries offering mother tongue education (MTE) (UNESCO 2016), other metrics for successful implementation include four minimum activities, i.e., writing of 'big books' or cultural stories in teacher-produced materials, documenting the orthography and grammar, and producing dictionaries of the language.[6] The four minimum activities are expected to be done by individual schools because these form the backbone of the MT as MOI and as a subject and are expected to benefit not only the pupils but especially the teachers for whom the MT may be their L1/L2/L3.

Lastly, recent assessments of the MTB-MLE program point to the crucial roles of teachers as program implementers.[7] In certain cases, however, teachers are seen as "barriers" to program implementation (Stone 2012, p. 212). Teachers sometimes have negative, even open antagonism, toward teaching in the MT because of underlying ideologies about the value of learning English vis-à-vis that of the MT (Burton 2013). Studies note that the negative attitudes spring from teacher's lack of confidence in teaching literacy in their mother tongue (Stone 2012), hence, resorting to strategies where they show outward support for program policy but practice "subtle acts of resistance" (Burton 2013, p. 101). Parba (2018) also claims that the economic benefits acquired from competence in English outweigh any benefits in learning using the MT. Therefore, the teachers' beliefs and attitudes shape and influence the methods they use in teaching in the MT, which could be employed to subvert policy implementation (Burton 2013).

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[6] This is based on a personal interview in June 2018 with Dr. Rosalina J. Villaneza, chief education program specialist of the Teaching and Learning Division of the Bureau of Learning Delivery.

[7] Due to time and budget restraints, this PE did not consider an evaluation of instruction nor of community engagement, except to a limited degree when parents were asked about their experience with MTB-MLE.

According to Stone (2012), policymakers must clearly mandate the instruction in MT and implementation of the program for as long as possible (Malone 2012). Stone (2012) further believes that the educational system should support and value MT teaching and learning through the conduct of examinations in LLs, providing pre- and in-service teacher trainings and professional development in LLs, providing teacher support for MT teaching and learning, and developing and using LL teaching and learning materials aligned with the curriculum.

Stone (2012) further opined that the success or failure of the MTB-MLE implementation would partly depend on the structure of the education system, especially in the ability of regions to make policy decisions in terms of their preferred MOI language based on their own needs and contexts. The study also stressed the need to engage the key stakeholders in deciding which languages are to be taught in schools and to conduct language mapping and language planning to understand the region's linguistic make-up.

Thus, research suggests addressing teachers', parents', and communities' attitudes and beliefs about MTB-MLE so that they can act as supports, rather than barriers, to implementation (Stone 2012; Burton 2013). Specific cultural activities involving the mother tongue, such as poetry reading and poetry writing in MT, as well as consciousness-raising among parents, could improve the community's attitude and perceptions of the MT. Among teachers, these activities could be done during preservice teacher training and reinforced during teacher professional development programs. Stone (2012) asserted that teachers do not intentionally act as barriers to student learning, but without the guidance of their superiors, their limited understanding of implementation rationale may seriously compromise the results of the policy.

Implementation

The MTB-MLE program was officially implemented throughout the country in school year (SY) 2012–2013. Eight major languages or LF (Tagalog, *Kapampangan, Pangasinense, Iloko, Bikol,* Cebuano, Hiligaynon, and *Waray*) and four languages in the South (*Tausug, Maguindanaoan, Meranao*, and *Chabacano)* were identified as subject areas and LOI. In July 2013, seven LLs were added, bringing the total number of MOIs to 19 (8 LFs and 11 LLs). These additional languages are *Ybanag* for Cagayan, Isabela, and Tuguegarao City; *Ivatan* for the Batanes group of islands;

Sambal for Zambales, *Akeanon* and *Kinaray-a* for Aklan and Capiz, *Yakan* for Basilan province, and *Surigaonon* for Surigao provinces and Surigao City. Plans to further increase the MTs in 2019 were revealed during the 2018 tripartite meeting with officials of the DepEd, National Economic and Development Authority, and the Philippine Institute for Development Studies (PIDS). This plan would allow more Filipino children access to MTE.

Initial assessments of the MTB-MLE program
To date, two multiphase research projects funded by the United States Agency for International Development (USAID) and the Australian government have carried out impact evaluations and program assessments of the MTB-MLE program in the Philippines.

The USAID assisted the DepEd's MTB-MLE program through the *Basa Pilipinas* (Basa) program, a four-year[8] early grade reading intervention program to benefit a million Filipino students in two MTs (Ilokano and Sinugbuanong Binisaya), Filipino, and English. The project sought to track gains in reading comprehension between two groups of schools—the Basa partner-schools and the non-Basa partner-schools—at the end of SY 2015–2016 and SY 2016–2017. Data, which included reading assessments, principal interviews, classroom observations, teacher interviews, and household surveys, were collected at three points in time: baseline (September–October 2015), midline (February–March 2016), and endline (February–March 2017). At the end of the project, 1.8 million children from Kindergarten to Grade 3 benefited from the program and an additional 2 million were indirectly impacted through various means, e.g., through the provision of learning materials and teacher trainings, among others.

Impact evaluation using a quasi-experimental design was conducted to compare the effect of Basa-supported early grade reading interventions and the non-Basa supported interventions to elementary school students. Schools that were included in the evaluation were selected using a two-step sampling and matching methodology. Sample schools and students were from Regions I and VII. At midline, the study found that Basa students met or exceeded targets for oral reading fluency benchmarks for Ilokano, as well as for reading comprehension targets, but non-Basa students fell

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[8] Originally conceptualized to run from January 2013 to December 2016, the Basa Pilipinas project was extended for an additional 17 months until July 2018 (Education Development Center [EDC] 2018).

short for both of these targets. Both Basa and non-Basa students attained the 40 words correct per minute (wcpm) benchmarks in oral reading but fell short of the 60 wcpm benchmarks (Duthie et al. 2016). At the end of the five-year project, a significant increase from 28 percent at baseline to 42 percent at endline for reading comprehension skills in Filipino was noted among Grade 2 learners. Fifty-three percent of the same set of learners met the reading fluency (40 wcpm) and comprehension (60% correct answers) benchmarks in 2018 compared with only 45 percent in 2014 (EDC 2018). Other notable successes of this project include improvement in reading instruction, reading delivery systems, and access to quality reading materials, among others.

The Assessment, Curriculum, and Technology Research Centre (ACTRC)-led study was another multiphase study of schools' best practices in implementing the MTB-MLE. Metila et al. (2016a) conducted a nationwide survey including 50 schools in linguistically diverse contexts (LDCs) to identify challenges and strategies as schools all over the country localize a national policy. The study yielded 17 unique program challenges collected in four categories—design, connection with local community and culture, staff training, and staff selection—and 18 implementation strategies adopted by schools organized into 5 categories—design, connection with local community and culture, staff training, advocacy, and monitoring and evaluation. Results showed that the biggest challenge in the area of design is the use of the regional lingua franca as a fallback in highly diverse linguistic communities. In these communities, teachers employed time-tested communication strategies, such as code-switching, translation, and bridging, in an effort to reach as many students. According to the study, "LDC teachers used the MT during instruction but found this to be limited in academic register and academic formality so they employed communication strategies to accommodate learners whose MTs were different from the MT MOI" (Metila et al. 2016a, p. 785). The study asserted that "adapting policy imperatives to local circumstances can be effective but can result in unevenness in the extent to which localization is faithful to MTE goals and principles," requiring close monitoring of and support for schools as they engage in localizing a national policy (Metila et al. 2016a, p. 788).

Phase 1 of the study, conducted from October 2013 to May 2014, a couple of years after DepEd implemented the program, was a scoping study identifying school practices, issues, and concerns, which were fully

investigated in the later phases of the study. Reporting on the experience of eight schools regarding challenges and strategies in four different language contexts, such as large language (LL) contexts in schools that use a mother tongue with more than two million speakers, such as Cebuano, Iloko, and Hiligaynon (but excluding Tagalog); small language (SL) contexts schools that use a mother tongue with fewer than two million speakers; Tagalog contexts in which schools use a Tagalog dialect (distinct from Filipino) as an MT; and LDCs where several MTs are used in schools, Williams et al. (2014) concluded that issues identified in MT literature are also happening in Philippine schools, especially in the early stages of the MTB-MLE implementation.

Phase 2 (June to September 2014) study results reported that schools experience the same challenges and strategies identified in Phase 1, but on a wider scale. Data were generated from 1,248 survey responses from 158 schools across the country. The challenges and strategies reported by the schools were filtered and analyzed to come up with unique sets of challenges and strategies in each of the four language contexts and classified into the dimensions of Language, Instruction, Materials, and Program.[9] Phase 2 results revealed that over time, schools have adapted and developed strategies to meet implementation issues, and except in regions that are linguistically heterogenous and thus have a unique set of challenges, there appears to be a common set of challenges across contexts (Metila et al. 2016b).

Phase 3 (October 2014 to May 2015) provided a detailed description of the best practices in four schools using principles consistent with successful MTB-MLE implementation (Metila et al. 2017). Results from a case study of each school showed that centralized policy guidelines may be tailor-fitted to a school's particular circumstance to develop high-quality programs in a short amount of time. Exemplar schools were deemed successful when their program is coherent and fosters collaboration among stakeholders and the community at large, as well as when they are aware of the localized version of the national language. The use of

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[9] In this study, 'Language' refers to understanding of and attitudes toward the use of the MT as MOI; 'Instruction' refers to teaching and learning inside the classroom; 'Materials' pertains to the development, production, procurement, availability, and accessibility of suitable materials to support teaching and learning in the MT, and 'Program' refers to logistical arrangements, such as MT selection, teacher training, and student sectioning, among others (Metila et al. 2016b, p. 3).

a lingua franca as a strategy to accommodate linguistic heterogeneity in linguistically diverse contexts is a technique that promotes social cohesion and cultural cohesion.

This study hopes to pave the way for the conduct of a systematic process evaluation of the MTB-MLE in the Philippines, a type of study that has not been done, whether in public or private schools.

Research Design and Methodology

Conceptual framework

The main objective of this study is to conduct a process evaluation of the MTB-MLE program implemented through RA 10533. The assessment looks at three components, namely, program theory, service delivery and utilization, and program organization as suggested in Rossi et al. (2004) and Gertler et al. (2016). The review of program theory assesses the conceptual aspects of the program, primarily its logic and plausibility. The review of service delivery and utilization, on the other hand, assesses the delivery mechanisms installed for the program, the initial successes or failures of delivery, and the responses of the target beneficiaries. Finally, the review of program organization assesses the organizational setup developed to support program implementation (Rossi et al. 2004).

Figure 2 illustrates the Theory of Change (TOC) narrative. It shows that to achieve the desired outcomes of the MTB-MLE program, inputs like budget, teachers, classrooms, and textbooks should be converted into outputs, such as MT textbooks, big books, LMs, and teachers trained in using MT through corresponding activities. Utilization of these outputs—for instance, K to 3 classes taught in MT—leads to intermediate outcomes, such as K to 3 students that can read, comprehend, and write in MT. The program can be considered successful if all these intermediate outcomes are translated into final outcomes, such as improved reading scores, higher comprehension scores, higher rate of completion, fewer school dropouts, improved Language Assessment for Primary Grades, Early Language Literacy and Numeracy Assessment, and National Achievement Test scores, and reduced educational costs from repetitions. While Figure 2 provides a comprehensive framework for the program,

the research itself, being a process evaluation, only covers primarily the implementation aspects. Assessment up to the final outcomes would require an impact evaluation.

Figure 2. Theory of Change narrative

Input	Activities	Output	Intermediate Outcomes	Final Outcomes
Amount of budget	Development of MT textbooks	MT textbooks	K to 3 classes taught in the MT	Improved reading scores; higher comprehension scores
Number of existing teachers	Development of big books and other localized resources	MT big books	K to 3 students that can write in the MT	Improved LAPG, ELLNA, and NAT scores
Number of existing classrooms	Translation of curriculum guide and teachers guide to MT	Learning materials in MT	K to 3 students that can read and comprehend in the MT	Reduced educational costs from repetitions
Number of existing textbooks	Training of teachers to teach in the MT	Number of teachers trained in the MT	K to 3 students that can compute	Fewer dropouts; less absenteeism

MT = mother tongue; LAPG = Language Assessment for Primary Grades; ELLNA = Early Language Literacy and Numeracy Assessment; NAT = National Achievement Test ; K = kindergarten
Source: Orbeta and Paqueo (2018)

Methodology and sources of data

This study is a process evaluation of the MTB-MLE program. The primary methods used were qualitative methods consisting of key informant interviews (KIIs) and focus group discussions (FGDs) focusing on the three components mentioned in the framework: (a) program theory, (b) service delivery and utilization, and (c) program organization. Assessment of program theory refers to the review of how well defined the components of theory and the target beneficiaries are, and whether the goals and objectives are feasible given the resources. Assessment of service delivery and utilization refers to the review of the delivery mechanisms, outreach, utilization, and client satisfaction. Assessment of program organization refers to the review of the organization tasked with delivering the program, including the extent of support it is getting from decisionmakers and stakeholders (Rossi et al. 2004; Gertler et al. 2016). Key design and implementation personnel of DepEd, including program specialists, school principals, and personnel from the central, regional, and division offices, participated in the KIIs. FGDs, on the other hand, were participated by teachers and parents. FGDs with K to 3 pupils were not conducted due to age-related concerns, such as

the difficulty with procuring the required parental consent for interviews with minor respondents. Teachers and parents were chosen because of their first-hand observation and experience of specific issues around the three components. Parents were selected to provide beneficiary feedback. All respondents were asked to provide their perspectives on the three components with questions designed for their role in the program. For instance, on the component of program theory, the decisionmakers were asked about the design of the program, while implementers and parents were asked about their understanding of the program logic. Similarly, on the component of service delivery and utilization, the DepEd personnel were asked to describe the available delivery mechanisms, preparation done before actual implementation, and their perspective on the extent of utilization of the program services. Parents, on the other hand, were asked about their feedback on the way the program was implemented. Finally, on the component of program organization, the DepEd personnel were asked to provide their perspective on the program organization from personnel to resources while parents were asked to provide their perspective on program support and their experience dealing with the schools. In each of these sessions, participant profile was gathered.

During school visits, classroom observations were carried out to generate first-hand information on the conduct of K to 3 classes. A checklist was used to record observations on language use, children's extent of participation, and availability of textbooks.

To gauge the extent of program implementation in the entire K to 3 school system, an online quick survey (OQS) was designed and set up using PIDS servers. Specific school personnel, preferably the school's MTB-MLE focal person, were asked to respond to three sets of questions: (a) school information, (b) MTB-MLE implementation, and (c) the reasons why schools do not implement the program. To implement the survey, a DepEd memo was sent to schools, which contained the link to the online survey. Weekly reports on the status of responses were sent to DepEd to guide them on subsequent school-level follow-ups.

Review and analysis of program documents from resource persons, as well as an independent document gathering, were also done.

Finally, enrollment data were used to provide information on the size of the target K to 3 population. Data on reported primary language used by pupils at the class level were also processed to provide a measure of language diversity.

The data generation instruments in the study and the corresponding information generated from these instruments are as follows:

- **FGD and KII guide questions** generated qualitative data on program theory, rationale, and framework; service delivery utilization and challenges; and information on the organization of the program.
- **Participant profile sheet** generated data, such as number of children in school and length of residence in areas surveyed for parents; subjects taught and length of service for teachers; and length of service, educational attainment, and courses taken related to educational administration and management for school-based administrators.
- **Classroom observation checklist** generated data on language use inside the classroom, pupils' extent of participation using school's MOI, and whether or not textbooks were used.
- **OQS** generated data on whether public and private schools implemented the MTB-MLE program, specific languages used as MOI, if implemented, and the reasons for nonimplementation, if not implemented.
- **Secondary data** on enrollment and schools provided information on the size and distribution of K to 3 enrollees by type of school. Classroom-level data on reported primary language spoken by K to 3 pupils also provided information on linguistic diversity.

The study was conducted over a period of six months from June to December 2018.[10]

Sampling strategy

As in any qualitative study, a purposive sampling strategy was utilized to identify FGD and KII participants. The sampling was designed to capture the breadth of program understanding and implementation issues. Understanding and implementation issues are expected to be different by size of school and location. Thus, the DepEd schools were stratified

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[10] The OQS was kept running beyond the period of the study and updates up to March 18, 2019 have been reported in this paper.

according to island groupings of Luzon, Visayas, and Mindanao, and enrollment size.[11] Participant schools are referred to in this study as large schools (LS), medium-sized schools (MS), and small schools (SS) followed by their location.

Linguistic diversity (LD), which was another factor considered in this study, refers to the "number of languages and the evenness of distribution of mother-tongue speakers among languages in a given area" (Harmon and Loh 2010).[12] LD is represented by the language diversity index (LDI) per province (Thinking Machines 2016). The provinces from each island cluster were classified according to their respective LDIs. Provinces with LDIs of more than 0.50 were classified as linguistically diverse communities (LDCs) while provinces with LDIs of less than 0.50 were classified as less linguistically diverse communities (L-LDCs). Over the three major island clusters, a total of nine areas were classified under LDCs while nine areas were classified under L-LDCs. Classifying schools along the lines of linguistic diversity hoped to uncover more specialized implementation issues, if any, which linguistically homogenous communities may not have to contend with.

After initial selection based on the foregoing, schools were further classified ex post into urban and rural locations, as well as public- and privately owned/operated. Table 4 shows the results of the random selection of schools based on LDIs. The sample population consists of 14 public schools and 4 private schools.

Table 4. Selected schools based on language diversity index (LDI)

School	Location	LDI
Luzon		
Linguistically diverse contexts		
Small school	Benguet	0.75
Medium school	Benguet	0.75

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[11] Enrollment size follows the DepEd classification (http://www.deped.gov.ph/wpcontent/uploads/2016/04/DO_s2016_19_0.pdf). The 'very large' and 'large' classifications were combined because there are few schools in this classification.

[12] Evenness of distribution may be illustrated this way: Two regions where 10 languages are spoken may be said to have linguistic diversity, but the region in which each language is spoken by 10 percent of the population has greater evenness, and, therefore, higher linguistic diversity than one where 91 percent of the population speaks only one language, and only 1 percent of the population speaks each of the other nine (Harmon and Loh 2010).

Table 4. (continued)

School	Location	LDI
Large school	Benguet	0.75
Less linguistically diverse contexts		
Small school	Bulacan	0.03
Medium school	Bulacan	0.03
Large school	Metro Manila	0.05
Visayas		
Linguistically diverse contexts		
Small school	Leyte	0.56
Medium school	Leyte	0.56
Large school	Leyte	0.56
Less linguistically diverse contexts		
Small school	Cebu	0.22
Medium school	Cebu	0.22
Large school	Cebu	0.22
Mindanao		
Linguistically diverse contexts		
Small school	Surigao del Sur	0.74
Medium school	Surigao del Sur	0.74
Large school	Zamboanga del Sur	0.75
Less linguistically diverse contexts		
Small school	Cagayan de Oro City	0.19
Medium school	Cagayan de Oro City	0.19
Large school	Cagayan de Oro City	0.19

Source: Authors' tabulation

Results and Discussion

Target school-age population

The MTB-MLE program was designed for K to 3 pupils. Table 5 shows that as of SY 2017–2018, DepEd had served a total of 15.8 million students, 91 percent of which were in public schools and the remaining 9 percent were in private schools. In total, there were 51,140 schools (76% from public schools; 24% from private schools) that had K to 3 enrollments during the same school year.

Table 5. Enrollment and schools with K to 3, SY 2017–2018

Type	Enrollment		Number of Schools	
	Number	Percent (%)	Number	Percent (%)
Public	14,367,794	90.7	38,911	76.1
Private	1,458,930	9.2	12,186	23.8
SUCs/LUCs	11,685	0.1	43	0.1
Total	15,838,409	100.0	51,140	100.0

K = kindergarten; SY = school year; SUCs/LUCs = state/local universities and colleges
Source: Authors' compilation

Online quick survey (OQS) results

The study team's discovery that not all elementary schools were implementing the MTB-MLE program prompted the design of an online survey. The goal was to determine the breadth of MTB-MLE implementation in public and private schools, MTs currently used in schools, and reasons why schools do not implement the program. The survey also sought to determine program accomplishments in terms of the four basic activities required for good MTB-MLE implementation, i.e., writing of big books, grammar, and dictionary, and documenting the orthography of the language.[13]

The OQS initially obtained responses on October 12, 2018; link remained open until March 18, 2019. The results discussed in this subsection are from 16,479 (32%) respondent schools as of March 18, 2019. Table 6 shows varying response rates by region, ranging from 2.2 percent in the Autonomous Region in Muslim Mindanao to 65 percent in Region VIII.

Meanwhile, Table 7 shows that almost all (99.5%) of the respondent schools claimed to be implementing the MTB-MLE. The outstanding response rate illustrates the effort and desire of teachers and administrators on the ground to provide necessary information to further improve MTB-MLE implementation. It also signifies the outstanding level of coordination between the DepEd central office and schools in the regions. But while this high proportion was true of public schools, there was also a proportion (12.5%) of private schools that admitted not implementing the program.

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[13] The four basic activities are used to determine MTB-MLE implementation readiness. The DepEd intends to expand the program beyond the 19 officially adopted languages as highlighted in the Indigenous Peoples Education curriculum contextualization.

Table 6. Online quick survey response rates by region

Region	Frequency	Total Schools	Response Rate (in %)
Region I	1,707	2,893	59.0
Region II	713	2,569	27.8
Region III	1,398	4,495	31.1
Region IV-A	1,306	5,447	24.0
Region IV-B	917	2,100	43.7
Region V	1,961	3,624	54.1
Region VI	545	4,420	12.3
Region VII	353	3,719	9.5
Region VIII	2,529	3,873	65.3
Region IX	86	2,348	3.7
Region X	1,430	2,624	54.5
Region XI	1,097	2,235	49.1
Region XII	690	2,181	31.6
ARMM	51	2,328	2.2
CAR	269	1,736	15.5
Caraga	1,055	1,912	55.2
NCR	372	2,636	14.1
Total	**16,479**	**51,140**	**32.2**

ARMM = Autonomous Region in Muslim Mindanao; CAR = Cordillera Administrative Region; NCR = National Capital Region
Source: Authors' tabulation

Table 7. Number of schools implementing the MTB-MLE

Implementation Responses	Public		Private		SUC/LUC		Total	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
No	82	0.5	110	12.5	0	0.0	192	1.2
Yes	15,518	99.5	768	87.5	1	100.0	16,287	98.8
Total	**15,600**	**100.0**	**878**	**100.0**	**1**	**100.0**	**16,479**	**100.0**

MTB-MLE = Mother Tongue-Based Multilingual Education; SUC/LUC = state/local university and college
Source: Authors' tabulation

Table 8 shows that the top reasons of the 192 schools for not implementing the program were resource-related: teachers lacking relevant teaching materials (17%), schools not having the dictionary of the language (16%), and students lacking textbooks (16%).

Other reasons were related to the chosen MOI of the school: teachers lacking expertise in the MOI (12%), students not speaking the MOI of the school (9%), and parents not speaking and supporting the chosen MOI (9%).

Table 8. Reasons cited by schools for not implementing the MTB-MLE

Reasons for Nonimplementation*	Frequency	Percent (%)
Teachers lack relevant teaching materials	91	17.3
School does not have the dictionary of the language	85	16.2
Students lack textbooks	84	16.0
Teachers lack expertise in the MOI of the school	64	12.2
Others	49	9.3
Students do not speak the MOI of the school	48	9.1
Parents do not speak and support the chosen MOI	46	8.7
Teachers do not speak and support the chosen MOI	26	4.9
School officials do not speak and support the chosen MOI	20	3.8
School does not get support from the DepEd Central Office/Division Office	13	2.5
Total	**526**	**100.0**

MTB-MLE = Mother Tongue-Based Multilingual Education; ; MOI = medium of instruction; DepEd = Department of Education
Note: *Schools can mention more than one reason.
Source: Authors' tabulation

Table 9 identifies the number of MOI used in schools. Tagalog as MT has been identified by as many as 6,102 schools (32%), followed by Cebuano in 4,556 schools (24%), and Iloko in 1,996 schools (11%).

Table 9. Medium of instruction (MOI) used in schools

Medium of Instruction*	Frequency	Percent (%)
Tagalog	6,102	31.71
Cebuano	4,556	23.67
Iloko	1,996	10.37
Waray	1,537	7.99
Other	1,453	7.55
Bikol	1,220	6.34
Hiligaynon	846	4.40
Surigaonon	366	1.90

Table 9. (continued)

Medium of Instruction*	Frequency	Percent (%)
Pangasinense	333	1.73
Kapampangan	259	1.35
Meranao	183	0.95
Kinaraya	130	0.68
Maguindanaoan	84	0.44
Ybanag	60	0.31
Sambal	36	0.19
Tausug	34	0.18
Chabakano	28	0.15
Yakan	15	0.08
Aklanon	6	0.03
Ivatan	2	0.01
Total	19,246	100.00

Note: *Schools can mention more than one MOI.
Source: Authors' tabulation

Interestingly, few schools teach as many as five MOIs, although most schools (82%) teach only one (Table 10). Based on the OQS, there were also other languages used as MOI, such as English in private schools, for example, that are not in the list of 19 officially recognized MOIs.[14] Appendix A shows the long list of other MOIs used in schools.

The quality of the MTB-MLE implementation is indicated by the school's progress in terms of implementing the four required activities. Schools were expected to (a) write big books on language, literature, and culture; (b) document the orthography of the language; (c) document the grammar of the language; and (d) write a dictionary of the language.[15] It is revealing that out of those that claimed to have implemented the program, only 9 percent had done all four, whereas 6 percent had not done any of the four (Table 11). A big bulk of the respondent schools had done only some of the four required activities, indicating that

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[14] Tagalog, Kapampangan, Pangasinan, Iloko, Bikol, Ybanag, Sinugbuanong Binisaya, Hiligaynon, Waray, Bahasa Sug, Maguindanaoan, Maranao, Chavacano, Ivatan, Sambal, Akianon, Kinaray-a, Yakan, and Sinurigaonon (DepEd 2016)

[15] Based on field interviews, the DepEd partners with the *Komisyon sa Wikang Filipino* and schools routinely seek the help of expert validators for quality assurance of their learning materials.

Table 10. Number of MOIs used in schools

Number of MOI	Frequency	Percent (%)
1	12,974	81.58
2	2,541	15.98
3	368	2.31
4	19	0.12
5	2	0.01
Total	**15,904**	**100.00**

MOI = medium of instruction
Source: Authors' tabulation

Table 11. Number of activities done in implementing the MTB-MLE

Number of Activities Done	Frequency	Percent (%)
1	8,023	49.3
2	4,022	24.7
3	1,754	10.8
4	1,471	9.0
0	1,017	6.2
Total	**16,287**	**100.0**

MTB-MLE = Mother Tongue-Based Multilingual Education
Source: Authors' tabulation

schools have a long way to go in implementing the program even for the 19 languages currently officially recognized as MOI.

Table 12 presents the activities that have been accomplished in the field. Nearly half (45%) of the schools did the writing of big books, 21 percent documented the orthography of the language, 18 percent documented the grammar of the language, and 13 percent documented the dictionary of the language. This implies the need to assist schools extensively to do all four activities, with priority given to writing the dictionary, grammar, orthography, and big books.

To provide a more nuanced view on the extent of compliance to doing the four minimum activities, Table 13 provides the proportion of schools who reported to have done each of the four minimum activities by MOI used. The table includes only schools reporting one MOI. This is

Table 12. Activities done in the school implementing MTB-MLE

Activities Done	Frequency	Percent (%)
Writing big books on language, literature, and culture	12,633	44.6
Document the orthography of the language	6,037	21.3
Document grammar of the language	4,957	17.5
Document dictionary of the language	3,586	12.7
Others	1,098	3.9
Total	28,311	100.0

MTB-MLE = Mother Tongue-Based Multilingual Education
Source: Authors' tabulation

because, for schools reporting more than one MOI, it would be difficult to identify which MOIs is/are referred to in their responses.

Similar to Table 11, which considered all responses, Table 13 also shows that among schools reporting only one MOI, preparation of big books (76%) was the activity commonly done, followed by orthography (43%), grammar (21%), and dictionary (25%).[16] Significant variations were noted in the proportion of schools doing each activity within the four minima. The proportion of schools that have documented orthography ranged from 27 percent to 61 percent, while it was 60 percent to 87 percent for big books, 3 percent to 40 percent for dictionary, and 3 percent to 41 percent for grammar. The reasons behind schools doing certain activities more than the others were, however, uncertain. As such, these proportions also reflected the relative level of difficulty or ease of doing the required activities vis-à-vis the capacity of school personnel.

The survey provided a good and up-to-date picture of the extent of MTB-MLE in schools. It indicated that implementation is almost universal in public schools. Majority of the private schools also implemented the program, but there was clearly a higher proportion that did not implement it. The primary reasons for nonimplementation were related to lack of resources (teaching materials, dictionary, and textbooks, among others) and difficulty in terms of teaching the chosen MOI. While some schools used as many as five MOIs, 82 percent used only one MOI. The dominant languages used as MOI were Tagalog, Cebuano,

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[16] To provide more stable proportions, only MOIs used in 30 or more schools reporting are considered in the computation.

and Iloko. In addition, there was a long list of languages being used as MOI even beyond the 19 officially adopted languages (see Appendix A). Even if there seems to be an almost universal implementation, the quality of implementation appears to be wanting. A good MTB-MLE implementation requires doing the four minimum activities. The survey revealed, however, that among those who claimed to have implemented the program, less than 10 percent had written big books, documented orthography and grammar, and written a dictionary on their language. A similar proportion was not doing any of these activities. One can only imagine what teachers have been doing under these circumstances.

Classroom observations

During the visits to public and private schools, more interactions were observed between students and teachers in classrooms using MT.

Table 13. Proportion of schools by MOI implementing MTB-MLE and complying with the four minimum activities

MOI*	Orthography	Big Books	Dictionary	Grammar	Count
		(%)			
Tagalog	27.3	78.1	32.2	41.0	3,793
Cebuano	36.2	85.4	20.1	29.7	3,385
Iloko	51.4	74.9	14.8	25.9	1,400
Waray	40.3	82.6	14.0	28.1	1,310
Bikol	39.6	77.0	10.7	25.2	854
Others	39.6	75.4	19.6	23.7	755
Hiligaynon	37.5	68.2	29.0	29.1	573
Pangasinense	61.0	69.5	15.9	29.3	246
Surigaonon	49.3	75.1	18.9	22.6	217
Kapampangan	42.6	82.1	20.4	33.3	162
Meranao	36.1	76.5	22.7	13.4	119
Kinaraya	42.1	76.3	26.3	31.6	38
Maguindanaoan	56.7	86.7	3.3	3.3	30
Ybanag	43.3	60.0	40.0	20.0	30
Chabakano	61.9	61.9	28.6	33.3	21
Tausug	68.8	62.5	31.3	43.8	16
Sambal	69.2	76.9	38.5	23.1	13
Yakan	63.6	90.9	9.1	0.0	11

Table 13. (continued)

MOI*	Orthography	Big Books	Dictionary	Grammar	Count
		(%)			
Ivatan	100.0	0.0	0.0	0.0	1
Total number of schools					**12,974**
For MOI with 30 more schools reporting:					
Average	43.1	76.3	20.6	25.4	
Minimum	27.3	60.0	3.3	3.3	
Maximum	61.0	86.7	40.0	41.0	

MTB-MLE = Mother Tongue-Based Multilingual Education; MOI = medium of instruction
Source: Authors' tabulation

Most classrooms, however, did not employ only one mother tongue; rather, pupils freely used whatever language was available to them. Translanguaging, or moving from one language to another—from MT to Tagalog or English and vice-versa—happens on a daily basis, whether observed or not and regardless of location. Children, in general, seemed well invested in their lessons in MT classes. It was observed that students appear to be motivated, engaged, highly responsive, and participative during their classes. A pattern for language use was also noticed:

- MT: used in the delivery and management of academic content; often used in greetings, for instance.
- Tagalog/Filipino: used in LDCs is minimal, but is often used during unguarded moments, such as in exclamations of surprise: *"Galing!"*
- English: used in everyday expressions, such as "Right," "OK," and "Good job!"
- Translanguaging occurred all the time: For example, Chabacano's *"singko cupcakes na plato"*, a mix of Spanish, Tagalog, and English, was used during a classroom demonstration.

An important finding observed on the ground was that elementary schools are not a place where languages are used discretely—one language for subject matter and another for use at home—but in most cases, two or three languages flow into one another in a single utterance. This was also very evident in the linguistic repertoire of teachers and key personnel in schools who freely moved in and out of at least three languages.

Profile of respondents

For key informant interviews (KIIs)
To document the manner of MTB-MLE implementation, KIIs were conducted with program framers, specialists, and bureau chiefs from the DepEd central office (CO); public schools district supervisors (PSDS) and focal persons (FP) from regional and school division offices; and school heads, principals, and academic coordinators in elementary schools. A total of 20 officials from the DepEd-CO, 13 administrators from the regional offices, and 25 school officials participated in the KIIs. The nature of questions asked of representatives from the three clusters of KII respondents is summarized below.

      Central office respondents. A former department secretary and two former undersecretaries were interviewed to provide their perception of the program design, direction, and imperatives of the MTB-MLE. Bureau chiefs and specialists were asked about the preparations prior to implementation and the ongoing initiatives to capture the extent of service delivery.

      Regional office respondents. As a crucial aspect of the hierarchy, representatives from the field offices were interviewed to understand how regional and division offices translate and transmit top-level initiatives to the bottom of the hierarchy tailored to the needs of their specific locales. More importantly, regional, division, and district offices were asked how they monitor, maintain, and ensure compliance with program goals.

      Elementary school respondents. School heads, being at the forefront of policy implementation, were asked questions that ranged from managing resources at the school level to resolving issues and challenges, such as lack of textbooks and teacher competence.

      Table 14 shows the descriptive statistics of all participants in the KIIs and FGDs, which totaled 405 respondents, disaggregated by island clusters.

For focus group discussions (FGDs)
Through a DepEd directive and follow-through emails, the MTB-MLE team requested each randomly selected school to constitute 10 parents and 10 teachers of K to 3 pupils to participate in FGDs. In the case of large schools, as many as 12 parents agreed to join, while a few small schools fielded fewer participants. FGDs were also conducted with teachers. Similarly, teachers' participation was higher for large schools (as

Table 14. Descriptive statistics of participants of the focus group discussion and key informant interviews by island clusters

Participants	Luzon	Visayas	Mindanao
Parents	53	63	60
Teachers	59	54	58
DepEd administrators	32	10	16
Total	144	127	134

DepEd = Department of Education
Source: Authors' computation

many as 12 teachers) while small schools fielded only four (one for each K to 3 level). All 348 respondents were asked to fill out profile sheets. Teacher-respondents were asked questions, such as their academic preparation, length of service in their respective schools, and subjects taught, among others. Parent-respondents, on the other hand, were asked to fill out details of length of residence and number of children enrolled in K to 3 to ensure that FGD participants have actual experience of MTB-MLE implementation. Tables 15–17 show the descriptive statistics of the respondents. The nature of questions directed to the teachers and the parents is summarized below.

K to 3 teachers. Functioning as the most important element in the implementation process who have the most exposure to K to 3 pupils, teachers were asked on their preferred theory of learning that supports the MTB-MLE implementation, the challenges they experienced on the ground, and the specific strategies, if any, they deployed when faced with implementation challenges, such as the presence of pupils who do not speak the MOI of the school.

Parents of K to 3 children. Being the 'first teachers' at home, parents were also asked on their knowledge of the MTB-MLE program and the languages spoken at home to possibly uncover linguistic biases and anxieties of parents regarding language acquisition and learning, as well as to determine whether they believe that children's best interests are being served by the MTB-MLE program.

From the three island clusters, 177 parent-participants joined in the school-based FGDs, comprising 119 parents with one child (67.2%), 49 parents with two children (27.7%), and 9 parents with three or more children (5.1%). Table 15 presents the profile of parent-participants in the FGD by number of children.

Table 15. Profile of the FGD parent-participants by number of children

Parent-participants' number of children	Count	Percent (%)
Parents with 1 child	119	67.2
Parents with 2 children	49	27.7
Parents with 3 or more children	9	5.1
Total	177	100.0

FGD = focus group discussion
Source: Authors' computation

Table 16 shows that majority (33.3%) of the respondents have been living in their respective areas between 0 and 10 years, followed by those who have been living in the area between 31 and 40 years (20.9%), and those living in the area between 11 and 20 years (15.3%). There were also 22 respondents (12.5%) who have been living in the area for 21–30 years, 19 (10.7%) for more than 40 years, and 8 (4.5%) for more than 50 years. The rest (2.8%) did not indicate their length of residence in the profile sheet. Findings on length of residence indicate that majority of the parent-respondents had not been living in their respective residence for a long time, which may have implications for the program's service delivery and utilization because, as new residents, they may not be speaking the MOI of the school that their children attend.

Table 16. Profile of the FGD parent-participants by number of years of residency (in ranges)

Number of years in current residence	Count	Percent (%)
Between 0–10 years	59	33.3
Between 11–20 years	27	15.3
Between 21–30 years	22	12.5
Between 31–40 years	37	20.9
Between 41–50 years	19	10.7
More than 50 years	8	4.5
Did not indicate length of residence	5	2.8
Total	177	100.0

FGD = focus group discussion
Source: Authors' computation

     Teachers. A total of 171 K to 3 teachers participated in the school-based FGDs, of which, 166 are females and 5 are males. Table 17 presents the educational attainment of teachers. One hundred thirty-nine (139) of the total respondents graduated with a bachelor's degree (81.3%), 30 teachers (17.5%) had a master's degree, while two (1.2%) of them had doctorate degrees. Of the 171 teachers that participated, almost half (49.7%) taught all subjects in their respective grade levels while the other half only taught specific subjects. Meanwhile, Table 18 indicates the plantilla positions occupied by teacher-respondents from public schools.

     Important threads of inquiry from KIIs and FGDs in the field articulate several challenges regarding DepEd's MTB-MLE program logic, service delivery and utilization, and program organization. The following sections provide an in-depth discussion of these challenges.

Table 17. Profile of FGD teacher-participants by level of educational attainment

Educational Attainment	Count	Percent (%)
Bachelor's degree	139	81.3
Master's degree	30	17.5
Doctorate degree	2	1.2
Total	**171**	**100.0**

FGD = focus group discussion
Source: Authors' tabulation

Table 18. Profile of FGD teacher-participants by plantilla position held

Teacher Item	Count	Percent (%)
Master Teacher II	9	7
Master Teacher I	9	7
Teacher III	36	31
Teacher II	10	8
Teacher I	51	44
Total	**115**	**67**

FGD = focus group discussion
Note: Teacher items identified here refer to plantilla-based teachers in public schools. Private school teachers follow a different system of ranking and are not included in this table.
Source: Authors' tabulation

Key findings from KIIs and FGDs

Assessment of program theory

The most important rationale of the MTB-MLE program is to provide access to academic content among pupils for whom the MOIs under the previous policy, Filipino and English, are second and third languages, respectively. In personal interviews with previous and current DepEd secretaries, this philosophy was endorsed as well. They saw the value of 'starting where the children are' and providing a 'learner-centered' environment for Filipino pupils. Language experts also agree that without oral and writing fluency in either Filipino or English, delivery of academic content is expected to fail.

The program rests on sound and evidence-based research asserting that "helping children gain competence in oral and written L1 provides them with the foundation for learning the L2 as well" (Malone 2012, p.1). There is also adequate theoretical and empirical basis that, unlike basic interpersonal communicative skills or conversational fluency that a child may develop effortlessly, cognitive academic language proficiency[17] requires effort and may take about four to seven years to develop (Malone 2012). Cummins' theory of threshold hypothesis also states that students learn an additional language "by adding it to his or her competently learned first language" and that there may be "threshold levels of linguistic competence that a bilingual child must attain to avoid cognitive disadvantages and allow the potentially beneficial aspects of bilingualism to influence his cognitive and academic functioning" (Cummins 2013, p. 222). Additionally, the developmental interdependence hypothesis articulates the mutual interdependence of L1s and L2s, which mutually help the learner access the deeper conceptual and linguistic development of L2 or L3 (in Baker 2011, p. 96). In other words, readiness and eventual competence in L2 depends on the competence already developed in L1. The same competence is needed to learn an L3.

The MTB-MLE curriculum substantiates the logic by designing a systematic plan to distribute languages across grade levels, in keeping with the spirit of the abovementioned evidence-based research. However, the matrix of MOI provided in DepEd DO 31, series 2012 (Figure 3), exhibits that, in contrast to DepEd DO 74, three languages are simultaneously

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[17] Refers to "students' ability to understand and express in both oral and written modes, concepts, and ideas that are relevant to success in school" (Khatib and Taie 2016, p. 65).

Figure 3. Medium of instruction across grade levels stakeholders

D. Medium of Instruction

Mother Tongue (MT) shall be used as the medium of instruction and as a subject from Grade 1-3. English or Filipino is used from Grade 4 to 10. Both languages are taught from Grade 1 to 10. The matrix below shows the specific medium of instruction per learning area and per grade level.

NOMENCLATURE/ LEARNING AREA	MEDIUM OF INSTRUCTION PER GRADE LEVEL						
	G1	G2	G3	G4	G5	G6	G7 to G10
Language Arts							
Filipino	Filipino						
English	English						
Mother Tongue	MT			-		-	-	-
Science	-	-	-	MT	English		
Mathematics	MT			English			
AP	MT			Filipino			
EPP/TLE	-	-	-	-	Filipino	English	
MAPEH	MT			Filipino		English	
EsP	MT			Filipino			

Source: DepEd (2012)

being used in Grade 1 level. Filipino and English are taught as subjects using those two languages when they must only be used as MOI from Grade 4 (since MT as MOI is used from K to 3). This means that pupils aged 7 years in the regions currently use three languages simultaneously, a scenario that was observed during fieldwork. Not only do children struggle with learning the Filipino and English language subjects—languages they are unfamiliar with because they are still mastering their MTs at this point—but they are also being assessed using these two languages. In essence, a student is assessed in three languages, including the MT for MTS. The modifications that contravene articulated policies at the department, legal, and national level will have far-reaching educational implications to the way children learn academic content.

A key element of the MTB-MLE program is the transition to national and international languages of Filipino and English, respectively. According to experts, transitioning from L1 to L2 and L2 to L3 before a child is ready may have negative effects on the learning of languages, resulting in subtractive bilingualism (Baker 2001). Figure 4 shows an optimal design that considers the number of years needed by children to master their MT before being bridged to additional languages. Malone (2012, p. 4) suggested using the L1 as the "only language of instruction in early grades and both L1 and L2 in middle to primary grades".

Figure 4. Optimal design for bridging additional languages

	Kindergarten 1	Kindergarten 2	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6
Languages taught as "school subjects"	Build oral L1 "language"	Continue oral	Continue oral and written L1, oral L2	Continue oral and written L1 and oral L2	Continue oral and written L1, oral L2	Continue oral and written L1 and L2, and oral L3	Continue oral and written L1, L2, and L3	Continue oral and written L1, L2, and L3
	Begin prereading and prewriting	Introduce L1 literacy		Bridge to written L2	Begin oral L3		Bridge to written L3	
		Begin oral L2						
Language used for teaching	L1 for teaching	L1 for teaching	L1 for teaching	L1 for teaching	L1-L2-L1 for teaching	L1-L2-L1 for teaching	L2-L1-L2 for teaching	L2-L1-L2 for teaching

L1 = first language; L2 = second language; L3 = third language
Source: Malone (2012)

In the design, four- or five-year-olds begin learning oral and written L1 in school and only start learning oral L3 in the third grade. This is before the student begins writing in L3 at Grade 5, where L2 is shared with the L1 as MOI until the child exits primary grade.

In the Philippines, language outcomes of MLE may be graphically represented as stacks, with the MT forming the bedrock on which L2 and L3 are added (Figure 5). As proposed, when a child exits primary school, his/her linguistic repertoire would look something like Column A (using Sinugbuanong Binisaya as an illustrative language). On the ground, however, children are exposed to and may speak a number of regional languages at home, more realistically represented as Column B. This is a more accurate rendering of the language outcome of the MTB-MLE education in the regions, where L1 speakers of Sinugbuanong Binisaya may also be speaking Cebuano or Kana (even Tagalog due to the influence of soap operas on TV). The FGD with parents and teachers revealed that it is quite common among parents and grandparents who come from different linguistic backgrounds to speak different languages at home, exposing the child to several languages, including the school's identified MOI, simultaneously.

Column C shows the situation in public schools in NCR and other areas where Tagalog is the predominant MT, English is usually the student's L2, and there is no proposed L3.[18] Hence, graduates in these areas exited the program with only two languages.

Private schools that did not implement the MTB-MLE only carried out the MTS component of the program (Column D). Many private schools claimed that English is the students' L1 based on observations and household surveys. Employing English as their MOI means that these schools taught all subjects in English except for Filipino and *Araling Panlipunan* (ArPan) subjects, which were taught in Filipino. If English is the L1 and Filipino is the L2, then, what do private schools teach as L3?[19] Moreover, it must be noted that English was not included in the 19 languages under the MTB-MLE program. Hence, no teacher trainings,
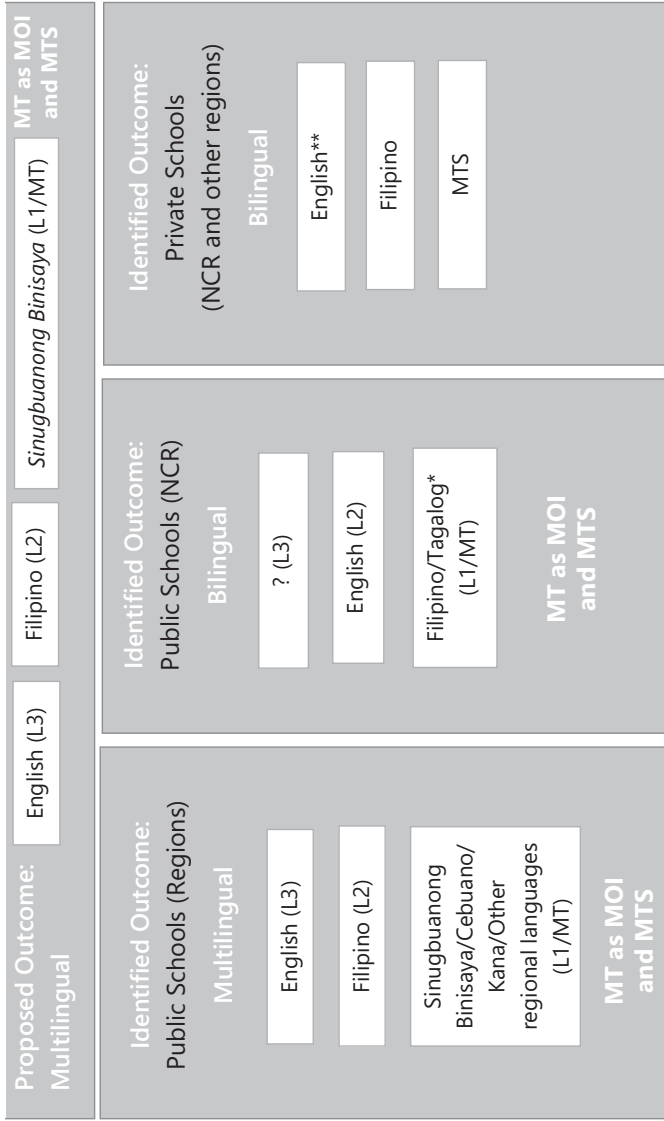
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[18] On June 21, 2017, DepEd Secretary Leonor Briones and other officials signed a memorandum of agreement with Ambassador Kim Jae Shin, establishing a pilot program for the teaching of Korean language in 10 public schools in Metro Manila. It is unclear if Hangul, a foreign language in the Philippines, may be the L3 in NCR (https://globalnation.inquirer.net/158419/korean-language-taught-public-high-schools).

[19] One DepEd regional supervisor in Mindanao shared that they have already gathered and instructed private school owners in a meeting and told them to implement the MTB-MLE.

Figure 5. Language outcomes of multilingual education for different stakeholders

| Proposed Outcome: Multilingual | English (L3) | Filipino (L2) | *Sinugbuanong Binisaya* (L1/MT) | MT as MOI and MTS |

Identified Outcome: Public Schools (Regions)

Multilingual

- English (L3)
- Filipino (L2)
- Sinugbuanong Binisaya/Cebuano/ Kana/Other regional languages (L1/MT)

MT as MOI and MTS

Identified Outcome: Public Schools (NCR)

Bilingual

- ? (L3)
- English (L2)
- Filipino/Tagalog* (L1/MT)

MT as MOI and MTS

Identified Outcome: Private Schools (NCR and other regions)

Bilingual

- English**
- Filipino
- MTS

L1 = first language; L2 = second language; L3 = third language; MT = mother tongue; MOI = medium of instruction; MTS = mother tongue as subject; NCR = National Capital Region

Notes: * as MTs, based on interviews with parents. Observations on the ground suggest, however, that the single MT identified is normally learned alongside another predominant language, i.e., English for Filipino/Tagalog MT speakers or Filipino/Tagalog for English MT speakers.

** Private schools teach English, Filipino, and MT as subjects, and therefore, differ from the MTB-MLED design of the Department of Education in using the child's regional or local language as the foundation for subsequent language development.

Source: Authors' compilation

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LMs, and other resources were designed for these schools. Private school administrators were also generally uncertain about how a transition program for additional languages would look like.

In summary, the MTB-MLE program has not taken hold in private schools that still use the old format of children entering school already speaking English—language that administrators claimed is the students' MT. Furthermore, this study found out that the design of the program was predicated on the assumption that there is only one language used as MT in households all over the country, which is then used as the foundation for learning an L2 in school, in a type of learning called sequential bilingualism (Baker 2011). In reality, however, language acquisition in the Philippines proceeds through what De Houwer (2017) terms as 'simultaneous bilingualism', wherein two or more languages are learned at once (also known as bilingual first language acquisition).

Assessment of service delivery and utilization

Service delivery refers to the system of making available resources (teaching and LMs, such as textbooks and teacher guides), facilities, equipment, budget, and manpower. The KIIs and FGDs revealed that schools and learners face a host of challenges in several aspects.

Program coverage. Section 8 of DepEd DO 43, series of 2013, clearly articulates the inclusiveness of enhanced basic education and gives attention to programs designed to address the physical, intellectual, psychosocial, and cultural needs of learners. The use of the child's MT is mandated as part of the early education program. Aside from looking at regular classrooms, this study also looked into the MOI used in the said programs.

- **Inclusiveness of the enhanced basic education**[20]

  Programs for the gifted and talented. In an LS in Metro Manila where this program is being offered, teachers appeared to automatically adopt English as the MOI of students deemed advanced, contravening the existing MTB-MLE implementation guidelines.

  Madrasah Program. Based on KIIs with the program heads of the Madrasah program, it appears that the important aspect of MTB-MLE education—learning in one's mother

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[20] Despite the study team's attempts to reach out to all Student Inclusion Division offices, some requests for KIIs were not granted with no explanation given.

tongue—was not available to students. This is because the curriculum designed in 2005 used Arabic in its Arabic Language and Islamic Values Education program in conjunction with a student's L1 (e..g., Tausug). Arabic was taught as part of the regular curriculum, in addition to teaching in the MT, Filipino, and English.

Indigenous Peoples (IP) Education Program. The IP communities have been using their MTs for as long as the Philippine islands have been inhabited. An excellent curriculum employing the indigenous languages as MOI, where many inputs are sourced from community elders, targets the sustained learning of other LOLI. The IP program appeared to have benefitted from the program fully becuase they have always taught content in the MT. Hence, their way of learning through the MT has been validated for the first time.

Service Delivery. The KIIs and FGDs reveal that there were key elements that were not in place prior to the program rollout in 2012. The program was found to be implemented under these conditions. These explained in part the less than desirable outcomes found in the field.

- **Lack of accurate information among key stakeholders on the rationale of MT implementation resulted in resistance to the use of MTs as MOIs.**

  The concept of teaching using the MT is to improve access to education and facilitate the learning of academic content (Jacob 2016). Key stakeholders, such as teachers and parents, did not fully understand the rationale of the program. Policy guidelines took time to trickle to the rank-and-file and the absence of enough lead time prior to implementation resulted in teachers resenting the policy, who, in turn, implemented the program based on their own understanding. Failure of the teachers to understand the rationale of the policy also resulted in their inability to communicate its benefits to parents who likewise resisted the use of the MT as MOI.

  Many teachers were not fully aware of the provisions of RA 10533 nor did they fully understand the IRR of the MTB-MLE policy. Parents also resisted the use of the MT for academic purposes. Some of the responses—"*Waray na*

nga sa loob ng bahay, Waray pa rin sa school? (We are already speaking Waray at home, so why also use Waray at school?)" or "*Hindi naman Waray ang gagamitin during job interviews* (Job interviews will not be conducted in Waray)"—reflect the utilitarian reasons, which parents claim are the reason why their children are in school. Such views sometimes arise from a lack of information regarding the benefits brought about by knowledge of the home languages. Although some claimed to understand and appreciate the fact that their languages are valued and used in school, some failed to see the usefulness of these languages in learning academic content, hence, were not fully supportive of the decision to transition the MT from the home to the school. Some even advocated for the elimination of these languages from Grade 4 onward since they are not deemed useful in getting a job, unlike proficiency in both Tagalog and English. Except for their practical/utilitarian purposes inside the house or for interpersonal use among other members of their linguistic group, the use of MTs does not seem to serve speakers with other functions related to higher studies, economic advancement, or linguistic diversity.

Lastly, teachers and parents who speak other MTs failed to see that without concrete steps related to language preservation, the language shift happening in their regions may render their languages moribund in a few years. Some even asserted that having several languages as MOI confuses the students—a behaviorist concept related to language learning that has since been debunked. As a result, many would like to return to the use of Tagalog and English from Kindergarten onward, consigning the MTs back to their auxiliary position. Thus, it is imperative on the part of DepEd to continuously train teachers on the benefit of MTE.

- **Teacher competence to teach in school's MOI was not fully assured before program rollout.**
  A review of program documents and group discussions with stakeholders revealed that mass training of teachers had been conducted merely a month before the nationwide implementation of the program in 2012 with no specialized training for classroom pedagogy in MTE. Teachers also claimed that there was no sufficient instruction on teaching in

the MT in the first few years of implementation. In addition, subsequent trainings, while carried out, were not continuous, resulting in some teachers teaching for three years without training at all.

Teachers who do not speak the school's MT found themselves in a difficult position. In some cases, the school head decided and asked the teacher to return to their own region. As a result, teachers often translated content from MT to either Tagalog or English. One teacher even asserted: "I would rather teach the student using the language he/she understands than using the DepEd-mandated language that he/she or I do not understand." There are, however, some teachers who were able to strategize and use the students' language.

Meanwhile, new hires who lack pedagogical competence and deal with precocious students were unable to adequately respond during teachable moments: when pupils learn to read in Tagalog, they do so syllabically, such as "*a-way*" (English, 'fight'), and yet are unable to bridge to learning English phonetically, such as "away" (English, 'at a distance' adverb).

In other words, the uneven implementation of the policy and the incomplete knowledge of policy guidelines among teachers that do not speak the MOI of the school had resulted in confusion and resistance to the policy. The continuous provision of trainings and workshops to teachers could have helped address this temporary problem.

- **Lack of adequate preparation has resulted in schools' inability to respond to challenges.**

  Due to the lack of mechanisms in place prior to program rollout, teachers resorted to various strategies, such as individualized instruction for children who do not speak their school's MOI. These children are either transferees from another community with a different language or speaking a different MT language other than the school's MOI. In such cases, teachers sometimes sought help from competent speakers of the language in the community. Unfortunately, there were documented cases of pupils being simply abandoned to their own devices until they learned to speak the school's MOI (the strategy of 'sink or swim') or stopped coming to school.

In an SS in Bulacan, a student whose first language was different from the school's MOI, was not served because the school did not have a plan of action in place. The child eventually stopped attending classes. But when asked about the status of the student, the teachers thought she returned home to the north. This was also the case in another school in the Visayas where a student whose L1 was English arrived. Although the student was accorded preferential treatment because many teachers speak English, the lack of mechanism designed as intervention in cases when students do not speak the school's MOI was simply glossed over at the school level. While a program of action for other school issues, such as bullying or sexual harassment, is in place, no similar plan is being articulated for MTB-MLE-related issues. It is therefore suggested to devise and institutionalize a similar plan of action for addressing MTB-MLE-related issues.

- **Mismatched MTs were causing confusion.**
  Field research revealed that a school's MOI is decided at either the regional or the national level, resulting in a mismatch between the language of the community and the school's MOI. For example, an IPEd-designated[21] elementary school in Mindanao where the immediate IP community speaks *Kinamayo* designated Sinugbuanong Binisaya as its MOI. Being an IPEd-implementing school, teachers were, however, enjoined to learn the language of the community to cater to L1 speakers of Kinamayo. Teachers were not very happy about the directive, which they consider an additional task to their already overburdened work schedule.

  Mismatched MTs were also causing problems in Tuba and Baguio, both in Benguet province. According to respondents from an LS in Baguio City, their location is a predominantly Tagalog-speaking region, yet, Ilokano was the DepEd-designated MOI. A research conducted by the region's PSDS also found that Baguio City is a predominantly Tagalog-speaking area. Furthermore, the Ilokano dialect used

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[21] Refers to schools where majority of the population in the immediate vicinity of the school speak an IP language based on a division-led language mapping activity.

in textbooks is that of Cagayan and Ilocos Norte provinces, not the Ilokano spoken by residents of Benguet province. As such, these textbooks written in the regional variety remained largely unused.

Similarly, an SS in Tuba, Benguet, also revised their designated MOI from Ilokano—used at policy inception in 2014—to *Ibaloi.* Few teachers know and speak Ibaloi because Benguet Ilokano is the predominant dialect in the area and spoken by more people in that school. School officials claimed that language mapping had been done in their areas, yet the division office decided to use Ibaloi. It is therefore suggested that regional offices design a more nuanced survey instrument to assess the linguistic makeup of communities and make decisions based on the results of such surveys.

- **Dearth (even absence) of textbooks and LMs was causing frustration.**

DepEd officials at the Bureau of Learning Resources (BLR) pointed to the procurement law[22] as a reason for the delay in delivering quality LMs to public schools. In an LS in Metro Manila, it was claimed that textbooks became available only in 2018, even though the MTB-MLE program had been running since 2012. Related to the abovementioned experience of a school in Tuba, Benguet, since the MOI had been revised, no books or LMs have reached the school as of the time of data collection. As a result, teachers depend on their own resources and creativity in conducting classes.

Generally, the number of textbooks was insufficient, with ratio of the textbook per student sometimes reaching 1:8 (one textbook per eight students), according to interviews with teachers in the field. Some textbooks also contained factual errors and employed archaic words that even MT speakers do not use anymore. There was a mismatch between the dialect or variety used in textbooks and the school's MOI. Dialectal differences caused confusion to students: *"Nagtatanong ang bata pag-uwi dahil hindi naiintindihan ang tinuturo sa klase dahil malalim na Ilocano ang ginagamit, and probably, dahil ibang variation ng*


Ilocano ang ginamit sa translation. (My child asks me questions when he/she comes home. He/she does not understand what is being taught in the classroom since an older form of Ilocano is being used, or probably, because another dialect of Ilocano is being taught.)" Another example was the case of an elementary school in Baguio City where the given textbooks were written in the "DepEd-designated MT" but classes were conducted in both Tagalog and English.

Apart from providing textbooks in the correct languages, schools had to deal with contextualizing materials for use in the region, which could also be an arduous process. Contextualization or localization of materials is an important part of the MTB-MLE program but, unless the process is fast-tracked, delivery of crucial LMs will suffer. Figure 6 articulates the process flow of contextualizing learning resources from the development of the master manuscript to the submission of the final learning resources. The whole process could take months.

- **Languages of assessment that do not match the MOI contravene the MTB-MLE policy rationale.**

  Many schools, both public and private, test students in three languages or sometimes translated questions to be understood,

Figure 6. Process of contextualizing learning resources
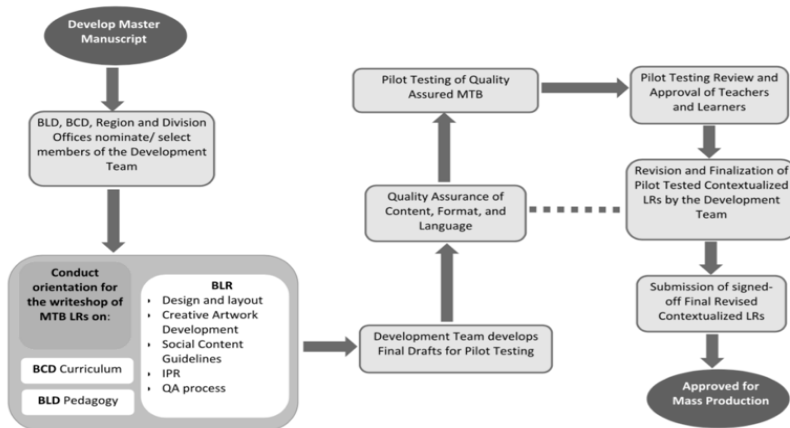
BLD = Bureau of Learning Delivery; BCD = Bureau of Curriculum Development; MTB = mother tongue-based; LR = learning resource; QA = quality assurance; IPR = intellectual property rights
Source: Bureau of Learning Delivery (BLD)

a clear contravention of the MTB-MLE policy. Although DO 74 specifies that students be tested in the MT until at least Grade 3, this does not happen on the ground. Thus, all assessments were conducted in three languages, i.e., English in English subjects, Filipino in ArPan and Filipino subjects, and MT in MTS.

When regional competitions were conducted, public schools feel cheated when private schools win because regional competitions, such as the Mathematics Teachers Association of the Philippines and other regional contests, were conducted in English, supposedly giving private schools an edge over public schools.

- **Schools' unwillingness to open channels of communication among stakeholders, such as parents and teachers, was unfair to learners.**
  Anticipating the potential messiness of listening to all stakeholders, a school head in an LS in Bulacan, for instance, admitted not seeking out inputs coming from parents and teachers who are important stakeholders in the educational system. The respondent articulated that she does not seek out parents' opinions at all. Thus, important pieces of information, such as program rationale, function, and accountability, were not disseminated to key stakeholders.

Service utilization

- **Teachers' linguistic biases could undermine support of MTB-MLE.**
  A total of 171 K to 3 teachers participated in the school-based FGDs. Questions ranged from teachers' stock knowledge of language learning theories, perceptions of DepEd's purposes for institutionalizing the MTB-MLE, adequacy of preparations before the program implementation in their school, and assessment of their own readiness in teaching using the school's MOI, as well as their attitudes toward their own languages. These are very important questions to ask since teachers are deemed to be the "soldiers" of the system who are responsible for carrying out the program with passion and precision.

Most teachers acknowledged that MTs, being the child's L1, are crucial in learning academic content, developing children's self-esteem and instilling pride, and keeping their linguistic heritage alive. Even among private school teachers where the local language was not used as MOI, the idea of making children learn in the MT to keep their linguistic heritage alive strongly resonated with many of them.

Many believed that the MTB-MLE paved the way for connecting children to their linguistic roots, where even teachers could learn along with their students. However, crucial government support is needed for the program to succeed. Nevertheless, some teachers still viewed the implementation of the MTB-MLE as a backward step, convinced in the belief that the program will be unsuccessful in helping their children in the long run. Many pointed to questions during job interviews being in English and not in the MT, and for them, this seriously will limit their children's chances of getting hired.

Not surprisingly, many teachers still thought that English is superior to local languages, and, thus, should be at the center of efforts in language learning. This idea also surfaced in discussions among parents in rural areas who think in terms of academic and economic benefits of learning English. Many claimed that since the bulk of academic content is in English, it therefore makes sense to learn in English. A school principal in an SS in the Visayas, for example, claimed that the ability to read in the MT has had a negative effect on children's reading ability in English. When asked for further details, however, the principal claimed that it was based on his own observations. Moreover, a respondent from a private MS in the Visayas claimed that the use of English for content delivery is successful, evidenced by their consistent winning in regional competitions—where English, and not the MT, is used—over public schools.

It was further asserted that proficiency in English translates to better wages. While the articulated goal of the MTB-MLE is to improve the learning of English thereby re-establishing the position of the Philippines as an English-speaking

country[23], the teachers down the hierarchy do not seem to clearly articulate that it should not be at the cost of children's learning or improved comprehension, in general. The anxiety that learning too much MT will take time away from learning English and seriously hamper students' shot at the economic rewards that English mastery provides appears to be unwarranted.

- **Parents' linguistic biases could also undermine program support for MTB-MLE.**

Many parent-respondents had a correct understanding of the program objectives, citing faster comprehension, better understanding, and early reading skills as strengths of the MTB-MLE program. Most parents reported being happy with the use of their own language for language preservation. They also believed that children's confidence is boosted when they are free to speak and express themselves without fear of committing mistakes.

Some of them believed, however, that MT should not be taught beyond Grade 3, should remain as a subject, and not as MOI. They were also anxious about which languages their children will need to secure employment and participate in social, legal, and economic activities in their communities. Meanwhile, some parents saw the MTB-MLE implementation as an additional burden to their children because it is an additional subject in school.

The influence exerted by the English-speaking children of their coparents from private schools exacerbated the situation, thinking that time spent studying MT is time spent away from learning English, the only "universal language worth speaking". K to 3 parents also backed up their claim that English is the superior language, particularly because the language used in regional competitions is usually English and not the MT. Hence, private schools, which do not implement the MT, are perceived to offer superior education because their delegates usually win as they can better understand the questions asked or written in English.

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[23] This is based on a personal interview with Dr. Lorna Dig-Dino, who at the time of the interview, was the DepEd Undersecretary for Curriculum and Instruction.

- **Teachers think the use of the MT in Math and Science is too cumbersome.**

    Generally, teacher-respondents understood the goals of the MTB-MLE but expressed that the success of its delivery depends on the availability of textbooks and other resources. CG and TG in English were perennial headaches to teachers who needed to translate curriculum, lesson plan, and other tools into the MT. A sample lesson plan provided to the MTB-MLE team was written in MT and English.

    Teacher-respondents initially thought of MTB-MLE only as a content area and considered the MT as MOI too cumbersome for teaching Math and Science subjects. They felt extremely stressed with delivering content in areas like Math and Science (in Grade 3) because some key terms and concepts can only be expressed in English and not in the MT.

    In addition, in areas where Tagalog is the predominant MT, the MTS was perceived as a "duplication" of the Filipino subject. However, ever the optimists, teachers considered the repetition as a chance for students to master content. Students, however, complained that their MTS was a repetition or simply a translation of the previous lesson.

    Teachers who are native speakers of a particular language commented that some of the contents were outdated and no longer relevant, with some of the vocabularies being archaic and no longer current.

    The early exit model—where children transition to L2 early—had negative effects on learning content. The chance to fully develop L1, which experts argue could take four to seven years, is being cut short (Malone 2012). Thus, when parents complained about not understanding the language even when they are native speakers, the effects of language shift can be seen.

Assessment of program organization

Teachers, for the most part, were adequate in number. However, some teachers lack the necessary linguistic competence to teach in the MT. Some schools experienced employing teachers who did not speak the school's

MOI, and principals responded to this challenge through various means: by mentoring, peer teaching, or in the case of one public school, advising the teacher to move to a school where the MOI is the teacher's MT.

Organizational capacity. The success of the program depends on the quality of service rendered by division offices (technical assistance and other support), leadership of school administrators, and partnerships with stakeholders, e.g., parents and community.
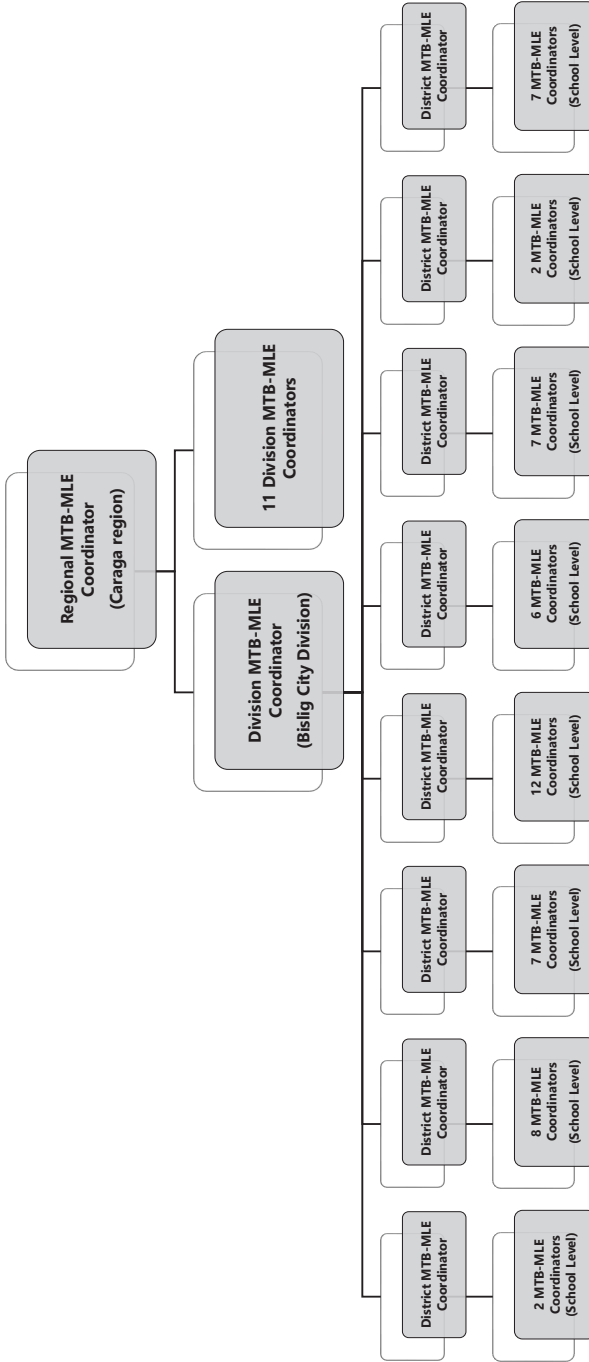
Figure 7 shows the organizational structure patterned after the MTB-MLE program in CAR, with a special focus on focal persons (FPs), whose important role is to systematize the delivery of MTB-MLE basic services from the DepEd-CO to the regional, division, district, and school levels.

Despite the FPs' important role in the basic delivery of services, the research team found that there was only one regional MTB-MLE FP overseeing 12 divisions in CAR. Each division (e.g., Bislig) has eight districts overseeing a total of 51 elementary schools. Individual schools are supposed to have a designated MTB-MLE FP. However, based on information given by the Bislig City Division MTB-MLE coordinator, there were six schools without a school-level MTB-MLE coordinator as of the data collection date.

Necessary program functions. Only a few schools had dedicated FPs that provide guidance through echoing seminars, i.e., when there are seminars to echo. Learning action cells (LACs) were utilized. However, teachers deemed these inadequate because they thought LACs do not address actual pedagogical concerns. Monitoring and evaluation of principals were also carried out inconsistently as schools, sometimes, had too many activities in a given year.

Coordination with other agencies. National agencies coordinated well with DepEd. In some places, LGU support was adequate, as in the case of Zamboanga. Likewise, schools in Surigao del Sur benefitted from LGU support through donations, such as vehicles that DepEd officials can use and office spaces for district supervisors and for other important functions that the department, with its limited budget, had been unable to do for schools, especially in far-flung areas.

Figure 7. Organizational structure of the MTB-MLE coordinators/focal persons

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                    Regional MTB-MLE
                      Coordinator
                     (Caraga region)
                           |
            ┌──────────────┴──────────────┐
     Division MTB-MLE              11 Division MTB-MLE
       Coordinator                    Coordinators
   (Bislig City Division)
            |
  ┌────┬────┬────┬────┬────┬────┬────┬────┐
District District District District District District District District
MTB-MLE  MTB-MLE  MTB-MLE  MTB-MLE  MTB-MLE  MTB-MLE  MTB-MLE  MTB-MLE
Coordinator Coordinator Coordinator Coordinator Coordinator Coordinator Coordinator Coordinator
  |        |        |        |        |        |        |        |
2 MTB-MLE 8 MTB-MLE 7 MTB-MLE 12 MTB-MLE 6 MTB-MLE 7 MTB-MLE 2 MTB-MLE 7 MTB-MLE
Coordinators Coordinators Coordinators Coordinators Coordinators Coordinators Coordinators Coordinators
(School Level) (School Level) (School Level) (School Level) (School Level) (School Level) (School Level) (School Level)
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MTB-MLE = Mother Tongue-Based Multilingual Education
Source: Authors' compilation

MTB-MLE-related activities

At the school level
Making of big books (see Box 2), indigenizing teaching materials, poetry reading, indigenous dancing, and other activities were conducted.

Box 2. Best practices: Teacher-made big books

Teachers in Sacsac Elementary School in Consolacion, Cebu, show the consultants a sample of a teacher-made big book. The school, being a *Basa Pilipinas*-adopted school, had a head start writing big books when the school received support from the partnership agreement between the Department of Education and a nongovernment organization.
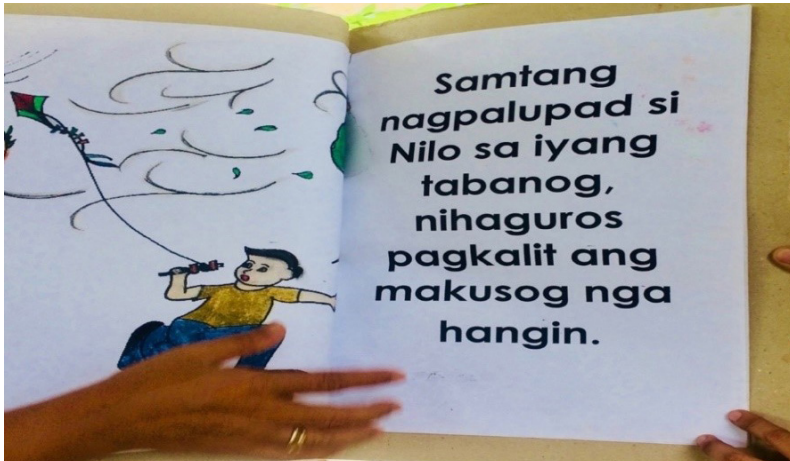
Translation: While Nilo was flying his kite, a strong wind blew.

Note: Permission to use this sample of a Big Book in this paper was granted by Sacsac Elementary School in Consolacion, Cebu.

Source: Sacsac Elementary School (2018)

At the district or region level
In some areas, monthly conferences (*sarampang*) with MTB-MLE coordinators were conducted. Among other tasks, the MTB-MLE FP in the division is in charge of identifying the least mastered skills of teachers, recognizing problem areas, and devising methods to address them.

Use of resources for MTB-MLE-related activities

At the school level
Since there are no dedicated funds for MTB-MLE activities, school heads sometimes used MOOE funds for printing of CGs and handouts to students, among others.

At the district or region level
There were also no dedicated funds for the required tasks of MTB-MLE FPs. Normally, their jobs were add-ons to their regular job.

Summary and Recommendations

The primary rationale of the MTB-MLE is starting where the children are. It is designed to implement a learner-centered education from the beginning of the education ladder. The program recognizes that when the language that a child has been exposed to from birth is used as the school's MOI or when language is being learned effortlessly at a young age, it will facilitate learning of academic content, as well as learning of other languages in the latter grades. This learning theory has strong theoretical and empirical support.[24]

Despite being implemented nationwide only recently through RA 10533, MTE has had a long and unrecognized history in Philippine education. In theory, the program uses the MT, or the L1 of the child, as medium of instruction from K to 3. The child is only introduced to L2 and L3 from Grade 4 onward. However, recognizing the operational impossibility of catering to the numerous languages in the Philippines, the implementation was initially limited to 12 languages during SY 2012–2013 and subsequently expanded to 19 languages a year later. There are talks of officially adopting more languages, but, as of this writing, it remains at 8 LFs and 11 LLs (for a total of 19 languages). Recognizing that there are more than 19 languages nationwide, schools have been encouraged to determine feasible ways to localize the policy in their areas. Since it was impossible to determine the different pathways for localization,

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[24] As cited in UNESCO (1953, 1999), August et al. (2002), Barrios and Bernardo (2012), and Reyes (2010).

the divisions and schools were essentially left on their own to pursue localization efforts.

Using a smaller set of languages, while deemed the most feasible strategy to attain the program objective, inadvertently created implementation problems, such as students unfamiliar with the chosen MOI of their school and teachers who are nonspeakers of the chosen MOI teaching in a regional language that is similar but not identical to the language used at home. In addition, there are dialectal differences that need to be recognized even among the 19 officially adopted languages. It is well known that Bikol in Naga is different from the Bikol language used a few kilometers from Naga. The Cebuano dialect in Cebu is different from that in Cagayan de Oro City, and the Iloko language in Ilocos is different from the Iloko in Baguio. This has spawned a lot of conceptual and operational issues, including resentment, teaching capability issues, and parents complaining that their children are being taught the archaic version of their own language when confronted with the more formal written version of the language.

A key conceptual issue is LD in classrooms (Metila et al. 2016). The theory is that L1 or the MT is taught and learned from K to 3. A gradual shift to L2 and L3 starts in Grade 4. In reality, however, children are exposed to different languages at home and in the community. In many cases, the L1 is not just one language but one of several. This happens even in L-LDCs. For instance, there are families whose parents come from two different linguistic backgrounds and live in communities not originally their own. This situation exposes the child to at least three languages—two from the parents and the other from the community. For reasons of feasibility of implementation, schools visited by the study team adopted the model that assumes only one L1. LMs are developed and distributed with this model in mind. Thus, there appears to be no clear guidance on how to practically deal with LD besides the general instruction to localize LMs. Thus, formulating a general guideline may not be effective in dealing with the numerous possibilities of a linguistically diverse classroom.

Another important conceptual issue is the lack of understanding and wrong appreciation of the basic rationale for the MTB-MLE program. The concept of 'starting where the children are' and 'learner-centered' education objectives conflict with the utilitarian objectives evident

in comments, such as *"Waray na nga sa loob ng bahay, Waray pa rin sa school"* or *"Hindi naman Waray ang gagamitin during job interviews."* These misconceptions engendered resistance among parents and teachers and undermined the successful implementation of the MTB-MLE. Llaneta (2010) also pointed out that many of the issues raised against the MTB-MLE are outside the purview of the program.

A key finding in service delivery revealed that while most schools claimed that they have implemented MTB-MLE, there were variations in the manner of its implementation. The survey revealed a telling indicator of the quality of implementation, saying that less than 10 percent of schools have done the four basic minima for implementing MTB-MLE.

On top of these conceptual and implementation issues, the program also faced procurement issues and inadequate funding for MTB-MLE-related operational activities, such as delayed delivery of LMs and MTB-MLE FP positions being a mere add-on responsibility. The MTB-MLE-related activities also had to compete for funding from the general MOOE funds of the schools, which hampered the delivery of MTB-MLE-related assistance to schools and monitoring activities. The localization activities, which are key to the success of the program, suffered the same fate. Schools are lucky if the local government is interested in funding their localization activities.

Notwithstanding the numerous problems it is facing, the MTB-MLE has a very solid pedagogical foundation. Thus, this study does not question the wisdom of implementing the program but rather seeks to highlight the challenges with a view of finding more effective, efficient, and acceptable ways of implementing the program.

Specific recommendations for improving the implementation of the MTB-MLE classified by assessment areas are as follows:

Program Logic

- **Step up information dissemination of empirical research, highlighting the efficacy of learning in the MT.** The DepEd-CO should spearhead the task of educating the stakeholders that knowledge of the MT is an important precursor in learning additional languages. When parents are convinced of the logic of the program, they are expected to help successfully

implement the program, such as providing moral support to the use of the MT in the home. In some cases, parents think that exposing their children to English assures them of learning the language faster and better. This, however, is not backed by research.

Effectiveness of the use of the MT should be continuously explored in both IP and non-IP communities. Likewise, its use as MOI in the first four grades needs to be sustained.

- **Encourage knowledge generation of how children learn many languages at once ('simultaneous bilingualism') to inform/refine program theory and delivery of service.** The DepEd-CO has a duty to review the current design of the MTB-MLE that assumes only one MT is being spoken in the home, which is the foundation for learning an L2 and then an L3 in a process called 'sequential bilingualism'. The Philippines' highly diverse linguistic communities expose children to several languages at once, and this exposure happens not only in the home but also from several sources outside the home (e.g., traditional and social media, peers who speak different languages, and reading materials, etc.). Identifying the best methods to teach languages in these unique contexts may refine the logic of implementation and modify service delivery.

- **Study the effects of exposure to various languages on education outcomes.** The regional offices may look into the effects of exposure to various languages spoken at home and whether these effects activate children's receptive knowledge of languages, which should be considered in designing language programs.

- **Study the impact of social media on language acquisition and learning and identify ways to harness these technological affordances.** All forms of media, whether traditional or digital, have been impacting children's ability to learn languages even before they take their first steps toward the school. Rather than ignore or fight these influences, schools should actively find a way to successfully factor in learning languages through the digital media.

Service delivery and utilization

Capacity building

- **Step up the creation of localized/indigenized LMs that are quality-prepared, reviewed, and constantly updated.** The DepEd-CO should enlist the help of linguists who could help teachers in documenting their language for grammar-writing and dictionary-making, as well as other expert validators who could help in producing big books and other culturally sound reading materials. The BLR should develop a system for the continuous updating of textbooks and LMs, especially if the initial versions do not fit the dialect/variety being used as the school's MOI. In IP communities, engagement and collaboration with community leaders when producing LMs must be sustained to ensure culturally appropriate content.
- **The regional offices should also continuously train teachers, whether new hires or veterans, in meaningful seminars.** At a minimum, teachers should have MTB-MLE-related training and seminars twice a year to update their knowledge base. Trainings should also be targeted to the language community to help teachers deal with new problems specific to their community. Most importantly, support must be extended to teachers' graduate education, focusing on elementary education, child language acquisition, and language learning, among others.
- **The regional offices should also regularly monitor and evaluate principals and teachers in implementing the MTB-MLE program.** Schools must set up programs of action to be followed to the letter when specific problems arise, such as when learners from other language communities come. Individualized and differentiated instruction, pull-out strategy, and other modifications to the program should be developed to cater to the specific needs of the learners without undermining the central aim of providing access to education via the MT.

- **The DepEd-CO must ensure precision in the use of common conceptual vocabulary in the program.** A common definition of words and concepts such as "lingua franca", regional language", "dialect", and other technical terms used in the MTB-MLE program would help ensure that teachers access and employ accurate terms for teaching and learning.

Advocacy work

- **Implement continuous advocacy work by regional MTB-MLE FPs.** At times, even school administrators need convincing in terms of the soundness of the program. FPs should develop sound consciousness-raising strategies for school administrators, teachers, and parents. In addition, the "parents as first teachers", while true, does not get support from schools. Enlisting the help of parents who take a supportive view of learning in the MT must be pursued. Further advocating MTB-MLE may also include designing leaflets, video resources, and conducting parent-teacher conferences to inform minority language parents about multilingual language learning. The notion that children no longer need to be educated in the language that they already know must also be addressed.

Linguistic landscape

- **Schools should instill pride and value of languages by making them visible in the landscape of the school.** Linguistic landscape (LL) refers to the language used in public spaces. The use of English in environmental print should be found in classrooms of Grade 4 onward, but MT should strictly be used in K to 3 classrooms. Unconsciously, children imbibe the sense that their local languages are valued when they see them on classroom walls around and outside of the school, for instance.[25]

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[25] The use of "Speak English Only" posters found in one regional office in Mindanao contravenes DepEd's MLE policy.

- **The DepEd-CO must ensure that MT is used in assessing content areas in K to 3.** Using MTs in language of assessments for all content areas in K to 3, as originally designed, will instill pride in its use. Thus, the use of MTs in regional and divisional competitions to spur its use in academic learning and intellectualize the language must be encouraged. Children imbibe the value of their languages when they are used in other academic pursuits. Schools must also consistently promote other uses for the MT in academic situations.

Program organization

- **The DepEd-CO must designate a fund for MTB-MLE operational activities.** Currently, only funding for textbooks supporting MTB-MLE is designated. The lack of designated funds hampers necessary operational activities, such as localization and monitoring of implementation.
- **Schools should systematize and institutionalize the use of language mapping to determine the MOI of schools.** Using enrollment data, schools must establish a plan of action to be mobilized in cases when learners who do not speak the MOI of the school are enrolled. Since language mapping is done every year (normally in January), there should be ample time to prepare before school openings.
- **The regional offices should strengthen dedicated MTB-MLE FP positions at the division level.** The primary responsibility of the FP is to concentrate on how the program is being delivered to stakeholders and to respond to the unique linguistic characteristics of schools. In some places, FP is only an add-on job without corresponding additional remuneration or de-loading of teaching assignments. DepEd should also allocate funds for this along with other MTB-MLE-related activities.
- **The regional offices should strengthen synergy among division, district, and schools in terms of best practices.** Active engagement and involvement with schools in other

districts will foster program ownership and sustainability of gains made. When teachers share best practices, strategies, and prior experiences, there are more opportunities for the program to succeed. One of the lessons learned in the Basa Pilipinas project is that the power of partnership is the key to sustaining success.

- **Schools should continuously enlist the help of local governments and the private sector, particularly in funding localization efforts.** Localization efforts are a good area where the local Special Education Fund can be invested.

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Appendix A. Other medium of instruction (MOI) used in schools

Languages used as MOI	Count
Adasen	13
Agta, Casiguran Dumagat	1
Agta, Umiray Dumaget	1
American Sign Language	1
Ayangan	3
Ayta, Ambala	1
Ayta, Mag-antsi	3
Ayta, Magbukun	1
Bag-o	15
Bagobo/Binagobo	2
Balangao	3
Bangon	1
Bantoanon, Asi	19
Banwaon	1
Batak/Binatak	1
Batangan	1
Bay Local Expressions	1
Baybayanon/Binaybayon	1
Bikol	2
Bikol, Buhinon	10
Bikol, Casiguranun	1
Bikol, Matnog	1
Bikol, Miraya	8
Bikol, Naga	2
Bikol, Rinconada	36
Bikol, Sorsogon	6
Bikol, West Albay	1
Binukid	14
Binukid, Talaandig	5
Bisakol/Bisaya-Bikol	1
Bisaya	118
Bisaya, Kinaray-a	1

Appendix A. (continued)

Languages used as MOI	Count
Bisaya, Misamis Oriental	1
B'laan/Bilaan/Blaan	37
Bolinao	18
Bontok	2
Bontok, Eastern/Finallig	1
Bontok, Minaligkhong	1
Buhid/Buhid-Mangyan	9
Busuanganen	1
Cagayanen	1
Capiznon	2
Castillanon	1
Cebuano, Boholano	4
Cebuano, Kana	8
Cebuano, Sinugbuanong Binisaya	598
Chinapyosen	1
Chinese	2
Cuyonon/Cuyono	24
Davawenyo	48
Dumagat	2
English	322
Filipino	28
Gaddang	1
Gubang	2
Hakhi	1
Hambilanon	1
Hanunoo/Hanunoo-Mangyan/Mangyan	10
Higaonon	28
Ibaloi/Ibaloy	5
Ibanag	1
Ifugao	4
Ifugao, Ayangan	13
Ifugao, Batad/Ayangan Ifugao	3
Ifugao, Tuwali	23
Ilocano/Ilokano/Iloko	25

Appendix A. (continued)

Languages used as MOI	Count
Ilonggo/Hiligaynon	16
Ilonggong Binisaya	2
Ilongot/Bogkalot	1
Inlaod	1
Inonhan/Onhan	9
Iranun/Iranon	4
Iraya	1
Isnag/Isneg	1
Itawit/Itawis	2
Itneg	6
Itneg, Banao	3
Itneg, Binongan/Tingguian	10
Itneg, Inlaod	1
Itneg, Maeng	5
Itneg, Masadiit	5
Itneg, Moyaden	3
I-wak/Iwaak	2
Kaagan/Kalagan/Kagan	4
Kagayanen/Kagay-anen	1
Kalanguya	37
Kamayo/Kinamayo	42
Kankanaey, Applai	3
Kankanaey, Bontok	1
Kankanaey/Kankanai/Kankanay	59
Kenachakran	2
Kinan-ew	1
Leytenio	2
Mabaka	5
Maguindanaon	1
Mamanwa/Minamanwa	7
Mambusaonon	1
Mandarin	1
Mandaya	9
Mandaya/Mandayan	54

Appendix A. (continued)

Languages used as MOI	Count
Manobo	50
Manobo, Agusan (Agusanong Minanobo)	5
Manobo, Ata/Minanobo	7
Manobo, Dibabawon	2
Manobo, Ilianen/Erumanen ne Menuvu	1
Manobo, Kinamiging/Kamigin/Kinamiguin	2
Manobo, Matigsalug/Tigwahanon	11
Manobo, Obo	3
Manobo, Tinananen	1
Mansaka	30
Mapun/Jama Mapun	12
Maranao/Maranaw	1
Masbatenyo, Minasbate	278
Masbatenyo, Tigaonon	17
Molbog	24
Nitibo	1
Obian	1
Palawano	9
Pampangan/ Kapampangan/ Pampan	2
Pangasenense/Pangasinan	2
Romblomanon	7
Sama, Balangingi	4
Sama, Central	5
Sambal	1
Sambal, Botolan	1
Sign Language	1
Subanen	10
Surigaonon	5
Tagabawa	2
Tagakaulo	25
Tagalog	29
Tagbanwa/Tagbanua	6

Appendix A. (continued)

Languages used as MOI	Count
Tagon-on	1
Talacognon	5
Tandaganon/Tagon-on	25
Tawbuid/Taubuid	2
Tboli/T'boli	13
Tiruray/Teduray	2
Waray-waray	24
Yogad	1
Ytawis	1

Source: Authors' compilation

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This study evaluates the implementation of the Mother Tongue-Based Multilingual Education (MTB-MLE) program. Using qualitative methods consisting of key informant interviews with former and current Department of Education officials and focus group discussions with teachers and parents, it looked into the program theory, service delivery and utilization, and program organization. An online survey was also conducted to determine the extent of implementation at the school level. Findings show the breadth of challenges faced by the program from conceptualization to execution. It had to deal with linguistic diversity in the classroom, which challenges the primary model of implementation that assumes that a child is exposed to only one mother tongue rather than several. Another important conceptual issue is the lack of understanding and wrong appreciation of the basic rationale of the program among school implementers and parents. In terms of implementation, the program has been hampered by procurement issues and the lack of designated funds for operational activities, forcing it to compete with other school needs to fund its activities.