Best Practices in Developing Reading Proficiency in the Mother-Tongue Among Public Schools in Butuan City

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ABSTRACT

The purpose of this paper is to determine best practices in the implementation of mother tongue (MT) as a subject in primary education – grades I, II and III. Accordingly, this paper examined the efficacy of mother-tongue-based instruction (MTBI) strategies in developing reading proficiency of primary graders. To address this research goal, the mixed method design embedded in correlation model was used. Survey questionnaires were administered to teacher and learner participants chosen at random from the elementary schools of East 1 Butuan District. Percent and mean were used to describe extent of practices and reading proficiency while pearson correlation or spearman correlation was used to describe and test correlation. Findings show that MTBI strategies such as making instructional materials, listening with MT words, translating first language (L1) to second language (L2) and vice versa, use-of- imagination strategy, team-building strategy, and strategy for cognitively challenged were highly employed in the schools of East 1 Butuan District while integration of technology and reading MT words are of moderate manifestation. Pupils have frustration or poor proficiency in terms of reading fluency which needs remediation while they are independent or have high proficiency in terms of listening and comprehensions skills. Analysis of the results and findings shows that the best practices in the MTBI include strategies on listening with materials in MT such as listening with Visayan stories and listening news from local radio station, on using of imagination and on making of instructional materials.

Keywords: best practices, Mother tongue, MTBI strategies, reading proficiency

1 Introduction

One of the changes in Basic Education Curriculum (BEC) brought about by the new K-12 program is the introduction of Mother Tongue-Based Multilingual Education (MTB-MLE) specifically in Kindergarten and in Grades 1, 2 and 3 to support the goal of “Every Child-A-Reader and A-Writer.” The program is meant to address the high functional illiteracy of Filipinos where language plays a significant role (Williams, Metila, Pradilla & Digo, 2014). Everyone is expectant on the outcomes of this newly implemented program;
thus, an assessment of some best practices in the implementation of MTBI will certainly contribute to the improvement of the program implementation.

Studies conducted along MTB-MLE reveal a great advantage of the curriculum on the language development of the learners. A large body of evidence from different countries as well as advances in the field of cognitive neuroscience show that children who have access to MTB-MLE develop better language skills in their mother tongues as well as national languages (Ministry of Education and Culture, 2014). It is claimed that when knowledge of a second language (L2) is added to a rich knowledge of a first language (L1), a child forms complex knowledge networks (additive bilingualism). Hence, having access to learning in more than one language also allows individuals to use different languages for different functions. On the contrary, children who have limited vocabulary in their first language will not benefit as thoroughly from bi/multilingual instruction and will use elements of the second language to replace the first (Ganschow, Sparks & Javorsky, 1998). Given that language and literacy develop during a child’s first five years, early childhood educators need to make a conscious effort to intentionally plan activities and experiences that optimize conditions for children to acquire positive attitudes, skills, and knowledge about language and literacy (Neuman, Copple & Bredekamp, 2000).

However, the implementation of MTB-MLE in the Philippines is challenged primarily with the teachers’ weak understanding of the curriculum and cynicism that this curriculum would work in the local setting with no definite mother tongue. Early in the work of Williams, et al. (2014) revealed MTB-MLE challenges such as limited MT pedagogic discourse, teachers’ low proficiency in MT, teachers’ feeling of forced compliance with the policy, teachers’ difficulty to distinguish learning competencies and differences between Filipino subject and MT subject, and, teachers’ confusion about spiraling for MT subject and Filipino subject a lot more. Neuman, et al. (2000) pointed that a teacher’s role is critical to a child’s learning and that teachers can inspire children to read, write, and learn through thoughtful planning and developmentally appropriate literacy instruction.

Hence, the best practices that will be captured in this research will restate the importance of MTB-MLE programs in schools, review and analyze the MTB-MLE program and its implementation in the local context of the Philippine setting. The main purpose of this paper is to determine some best practices in the implementation of MTBI in the primary grade level. These best practices are determined from MTBI strategies employed by the teachers that significantly and positively influenced the reading proficiency of the primary learners. Specifically, this study is aimed to identify the strategies employed by the teachers in the MTBI; determine the reading proficiency of the learners in terms of reading fluency, listening skill and comprehension skill; and correlate the extent of teachers’ implementation of MTBI strategies and the learners’ reading proficiency. Hypothesis on the correlation between the extent of implementation of MTBI strategies and learners’ reading proficiency is also tested.

2 Conceptual Framework

This study was anchored on the theory on readiness for change, middle-range theory and expectancy-value theory (Peach, Jimmieson & White, 2005; Talvio, Berg, Ketonen, Komulainen, & Lonka, 2015; Wong, Greenhalgh and Pawson, 2010). These theories are intertwined to establish the hypothesis of this present study; that is, there were MTBI strategies employed by teacher implementers that developed the reading proficiency of the primary grade learners in the East 1 District of Butuan City.

Readiness for change is a concept approached at either organizational or an individual level in organizations in various areas – education, health, industry, finance etc. Peach, et al. (2005) described readiness for change as individuals having positive thoughts of necessity for change and change will be favorable for both themselves and the one they serve. Whatever the aim or content is in the process of system changes, the most important issue that should not be forgotten is the leading actor in such changes. Hence, with the change in the educational landscape, it is not possible to accomplish the purported change successfully without taking the teachers’ thoughts and attitudes into consideration. Otherwise, it is more likely for teachers to show resistance to the change practices which are planned and developed independent
of themselves (Inandi & Gilic, 2016). One of the most controversial changes that K-12 program has made into the Philippine educational system is the MTB-MLE curriculum. Accordingly, those primary teachers who responded well to this curriculum were those teachers who were ready for changes – those who have positive thoughts for changes to bring favorable outcomes.

On the other hand, implementation of the MTB-MLE can be evaluated using the middle-range theory. Wong, et al. (2010) defined middle-range theory as a theory at the correct level of abstraction to be useful. Moreover, this theory stresses that an underlying mechanism helps explains an outcome across contexts (Wisdom, Chor, Hoagwood, & Horwitz, 2013). Teachers’ strategies of MTBI are some processes or techniques so that adoption of the new program can be made meaningful in the lives of the learners. These strategies are employed by the teachers with the belief that they can encourage active participation by children in the learning process – children understand what is being discussed and what is being asked of them. They can immediately use their mother tongue to construct and explain their world, articulate their thoughts and add new concepts to what they already know. Moreover, expectancy-value theory (Eccles & Wigfield, 2002) posited that expectancies and values influence one’s performance. Expectancies refer to beliefs about how a learner performs on different activities, while values refer to the reasons for completing an activity. Thus, expectancies and values influence teachers’ decisions and predict learners’ levels of engagement, interest and academic success. Hence, expectancies and values affect teachers’ performance, as well as learners’ social and emotional learning outcomes (Talvio, et al., 2015).

Accordingly, this study conjectured that the learners’ reading proficiency in MT in terms of reading fluency, listening skills and reading comprehension is significantly influenced by the MTBI strategies employed by the teachers such as reading MT words, listening with MT, translating L1 to L2 and vice versa, use-of-imagery strategy, team-building strategy, integrating technology, and use of differentiated activities for cognitively challenged. These strategies devised by the teachers determined by their readiness, understanding and valuation on the multilingual education (MLE) play a crucial in the learners’ language development with the mother tongue and other languages. It is assumed in this study that MLE can produce high levels of multilingualism among the learners and even among teachers. Study revealed that high-level multilingual group often does better than corresponding monolingual on tests measuring several aspects of intelligence, creativity, divergent thinking and cognitive flexibility (Skutnabb-Kangas, 2009).

As practiced, the medium of instruction in the Philippine educational system has been the English language for the majority of the school subjects. In particular, the MTB-MLE as implemented focused on bilingualism – the mother tongue (L1) and the English language (L2). Cummins (as cited in Paul Stone, 2012) defined two main types of bilingualism – (1) the additive bilingualism, in which L1 is continually developed as well as the home-culture value while L2 is added and (2) the subtractive bilingualism in which the L2 is added in favor to L1 and its culture that serves as an option. Hence, reading materials need to be culturally relevant to the students’ culture so that they may focus on developing reading skills rather than understanding the context of the story (Brown, 2014). If any translation were to be done, it would not sound very successful when translation into a foreign language and culture is not based on the cultural aspects of the foreign or second language because the translator is an alien to that culture regardless of the cultural references or phrases he/she memorizes (Newmark, 1988).

In developing fluency of reading, the skills gained during L1 reading such as visual and phonemic awareness, and speed of processing automatically contribute to reading the L2 and any other language even when the languages are typologically different and/or have different writing system. Reading comprehension skills allow readers to move from elementary reading to effective reading. Traditionally, reading begins as an exercise in decoding letters and sounding out word which is passive reading. Comprehension is the essence of reading and the active process of constructing meaning from text (Durkin, 1993). Moreover, the widely accepted model of the reading process (Gough & Tunmer, 1986) theorized that listening skill makes reading comprehension possible. Listening skill goes beyond what the child hears in his/her environment; rather, it is the ability of the child to interpret what is being heard. Hence, an increase in the listening comprehension will also increase the child’s reading ability.
3 Research Methodology

This study employed the descriptive research design particularly the mixed method established by Green and Caracelli (as cited in Creswell, 2014). More precisely, the embedded design in correlation model was utilized as follows: (1) quantitative data were used to answer the research questions in a correlational design using survey questionnaires and test questionnaires, and (2) qualitative data are embedded within the correlational design with the intent of explaining the mechanisms that relate the predictors and outcome variables.

The research locale, the East 1 Butuan District whose office is located in Ampayan, Butuan City, is composed of nine schools with 5 rural schools, namely, Daan Taligaman Elementary School, Imelda Elementary School, Brgsukan Elementary School, Camayahan Elementary Schools, and Basag Elementary School, and 4 urban schools namely, De Oro Elementary School, Taligaman Elementary School, Antongalon Elementary School, and Ampayan Central Elementary. From these schools, the primary participants of the study were composed of grade school teachers and pupils who were selected in a multi-stage process. Stratified random sampling was done in the selection of participating schools based on the list of schools as classified in the District. From each participating school, teacher participants were randomly selected – 50% from large school while complete enumeration for small schools as representative sampling. Finally, three pupil participants were randomly selected from the list of each teacher participant. The pupil participants’ mother tongue used at home and in the community is Cebuano. As to their profile, these pupils were classified regular in the present grade level, 63.3% female and 35.7% male and equally distributed in the grade levels 1, 2 and 3.

Two (2) types of instruments were used in this study. The first instrument is a test questionnaire for pupil participants comprised of three (3) parts – reading fluency, listening skills, and reading comprehension. This questionnaire was adapted from the Philippine-Informal Reading Inventory (Phil-IRI). For the validation, the instrument was evaluated by three experts for face and content validity and was pilot-tested in randomly sampled 30 primary grade school learners in F.R Sibayan Central Elementary School located at Baan Km.3, Butuan City. The second instrument is a survey questionnaire for teacher participants from Brown (2014) comprised of two parts – the demographic profile and the 20 semi-structured questions for MTBI strategies. Quantitative responses were scored in 4-point Likert scale; to wit, 4 for always, 3 for oftentimes, 2 for often and 1 for never. Again, it was subjected to the evaluation of three experts for improvement and validation.

Preliminary activities such as seeking permission from the Department of Education (DepEd) - East Butuan District 1 and setting schedule were done prior to the actual data gathering. Participation was voluntary and a statement of the informed consent was included in the questionnaire. The conduct of the data gathering was done separately for the teacher and pupil participants. During the actual data gathering, a validated test questionnaire was administered to the pupil participants. A brief orientation on the background, nature and scope of the study was given prior to the distribution of questionnaire. On the other hand, a survey questionnaire was also distributed to the teacher participants. A follow-up interview was done after the accomplished questionnaire was retrieved. Other means such as online and text messaging, and through email were employed to validate the responses of the teacher participants.

Data analysis employed descriptive measures and correlation analysis. The extent of implementation of MTBI practices were summarized by computing the mean interpreted as follows: 1.00-1.49 as very low, 1.50-2.09 as low, 2.10-2.89 as moderate, 2.90-3.49 as high, and 3.50-4.00 as very high. Reading proficiency in mother tongue is determined in terms of reading fluency, listening skill and comprehensions skill. Reading fluency was measured in terms of percentage of the number of words correctly read (PNWCR); listening skill was computed from the total score obtained from the rubric on spoken dialect divided by the total score times 100%; and comprehension skill was computed from the correct answers to questions from the selection divided by the number of questions times 100%. Finally, correlation analysis was performed with the mean percent scores to determine significant relationship between the extent of MTBI practices and the pupil’s proficiency in mother tongue. Since data gathered were non-normal, spearman rho correlation was used to test relationship. Test was gauged against 10%, 5% and 1% level of significance.
4 Results and Discussion

Teacher implementers of East 1 Butuan District employed the enlisted strategies in mother-tongue based instruction (MTBI). Overall results show that practices were employed to a high extent (mean ratings that range from 3.00 to 3.47) except for two (2) practices, namely, reading MT words and integration of technology.

4.1 Use-of-Imagination Strategy

The use-of-imagination strategy has the highest mean rating (mean = 3.47) with high extent of utilization. The teacher participants confirmed that this strategy is highly employed with the comments, “Mas dali ihatag ang instruction basta bisaya. Dali rami magkasabinet sa mga bata.” (Instruction in mother tongue is easier. Children can easily understand.)

In here, the mother tongue is used for instruction or in giving direction on the use-of-imagination activity. This suggests that the teacher can easily facilitate the activity on the use of imagination through mother tongue. The use of imagination is the ability of the learners to form a picture in their mind on something that is not seen or experienced.

More precisely, the preceding finding can be viewed in the context of the cognitive and emotional value of learning in mother tongue. Imagination is more potent when emotional or affective sense is reassured especially for minority who struggle to be recognized. Accordingly, minority pupils feel more respected when the mother tongue is used (Dutcher, 2003). Moreover, many initiatives around the world provide formal support for children to continue to develop competence in mother tongue and self-confidence as learners while also learning an additional language or languages.

Other highly employed MTBI strategies are the use of differentiated activities for cognitively challenged (Fig 2) and team-building strategy (mean = 3.18) (Fig 3).

4.2 Strategy for Cognitively Challenged

Some activities for the cognitively challenged were the lighter activity (mean = 3.37) and special class mentoring (mean = 3.00). Lighter activity refers to some less-laborious equivalent task designed separately on a particular competency for the cognitively challenged. This activity is further supplemented with a special class mentoring. Some teachers commented that “Mas maayo man gyud kini ang buhaton sa mga hinay pa kaayo para mas dali nila masabtan ang gusto nato ipasabot. Mas maayo ug naay special treatment sa mga nag-need ug tabang para mas ma-feel nila nga love sila ni teacher.” (It is better to do these [the differentiated
activities] for the slow learners— for them to comprehend what we impart. Special attention should be given to those who need it so they will feel that their teacher cares for them.)

Responses from the teacher participants stressed that strategies for cognitively challenged pupils are more achieved in the use of MTBI. These results show that the teachers employed varied activities that will provide some special treatment for those who are deficient in global intellectual performance, as with intellectual disabilities and specific deficits in cognitive abilities. Similarly, implementation of activities in MTBI that promote teamwork and trust is evident in the primary levels.

4.3 Team-Building Strategy

Some highly employed practices in the team-building strategy were implemented using ‘lalo ng lahi’ (mean = 3.20) and group activity with instruction in mother tongue (mean = 3.17) (Fig 2). Plainly, teacher participants defined team-building strategy through local games to fit into the MTBI. Their simple implementation of this strategy was group activity using games or tasks with Visayan instruction. In fact, teachers pointed out that “Dal n’ para sa mga bata sabton ang instruction kung bisaya. Mas okey lang nga e-bisaya ang instruction.” (Use of mother tongue makes instruction comprehensible to pupils). Thus, this strategy was claimed to be highly employed but not in the depth of its application. Teachers’ common knowledge about this strategy is only for learners working together to easily understand each other and generate ideas in their own language. MTBI should enable rich communication and deeper participation of students, helping learners feel more confident, and building a sense of identity in the classroom (Paul Stone, 2012).

4.4 Use of Teacher-Made Instructional Materials (IMs)

Following in the highly employed MTBI strategy is the use of teacher-made instructional materials (IMs) (mean = 3.13) (Fig 1). Teachers constructed IMs that are contextualized according to the learners’ needs. Most often, these teacher-made IMs utilized localized or indigenous materials that are readily available in the school or in the immediate community. As usually practiced, big books and small books are essential materials for teaching in the primary levels. The use of teacher-made IMs was commendable among teacher participants as expressed in their claims such as “translated stories in bisaya is better than stories in English language, para mas makita sa mga bata ang mga dagong drowing ng mabasa pag-ayo.” (for children to easily see the big pictures and read properly.) According to Krashen (1981), the learning materials developed tend to promote authentic language learning and higher order thinking and reinforce learning across the curriculum, especially for those learning a language as both a target language and a medium of instruction.

4.5 Translating L1 to L2 and Vice Versa

Translating mother tongue (L1) to English or Filipino language (L2) and vice versa marked as one of the highly employed strategies in the MTBI (mean = 3.12) (Fig 4). Some practices in translating L1 to L2 and vice that were manifested in the MTBI; to wit, the interpretation of some segments of English film to MT (mean = 3.03), listing of English films used (mean = 2.90), interpretation of some segments of Tagalog film MT (mean = 3.30), listing of Tagalog films used (mean = 3.17) and interpretation of story (mean = 3.20).
These practices are highlighted by teacher participants saying that “Mas dali masahatan kung ginabisa ang kada panghintab sa salida. Daghan, dili ra man sab cartoons lang. Naa sab kanang pambata nga sineskwela, mathinik nga gina-provide sa DepEd.” (It is easier for children to understand if events in the film are translated to mother tongue. Not just cartoons, there also are a lot of programs for children provided for by DepEd such as sineskwela, mathinik, and many more.) Apparently, there is an evidence that teachers in the field were implementing diverse activities that were recommended and were innovating additional materials to make MTBI meaningful. They even found interpreting English films beneficial and not a burden.

These positive outlooks from among the teachers in the primary grade levels simply showed their readiness to embrace the change as brought by the K-12 implementation in the country. This is in conformance to what Brown (2014) emphasized that translation activities are geared towards developing reading skills among children and not only on the understanding of the context or story of the materials.

4.6 Listening with Mother Tongue (MT)

Listening with mother tongue is another MTBI practice revealed to be highly employed (mean = 3.00) among teacher participants. Some particular practices which are highly manifested in the responses of teachers are listening news from local radio station (2.90), integration of Visayan song (2.90) and following directions in mother tongue (3.20) (Fig 5).

The most evident among the practices in listening with MT is the use of MT in directions or instructions. Instructions in MT, according to the teacher participants, were “mas dali sabtong bisaya; mas dali sa mga bata” (more comprehensible; makes it easier for the children). This practice in listening with MT is also very natural for teachers to devise, less effort and very practical in their day-to-day classroom activities.

As to the practice on listening with local news, more specific strategies were revealed as follow: “Para ma-test ilang (To test their) listening skills, I ask them [children] to listen to some local news as an assignment once a week; only just to check if they really understand the local news.” These practices are of great help in improving pupils’ listening skill and comprehension skill as claimed by the teachers, thus, their frequent use of the strategies. However, some teachers also commented that these practices were not carried out due to non-availability of radio both in school and/or at home. Considering that some schools in East 1 Butuan District were located in the urban settings, some homes of the grade school learners do not have a radio; children were most exposed to television programs and online resources.

The integration of Visayan songs as practice for listening with mother tongue is found to be necessary among teacher participants. As some of their comments reveal: “hilig man jud nila ang magkanta-kanta. Mao nang kun kinahanglan mag-mugna ug bisaya nga kanta, buhatan dayon.” (Children are fond of singing that is why Visayan songs are composed if desired.) Also, teachers found Visayan songs enjoyable among learners as contained in the following comments: “Para mahibo ang klase ug masahatan ang suliran sa kanta, para ganahan ang mga bata mosulod sa klase-- mas dali nila ma-memorise ang kanta basta bisaya.” (This is for children to enjoy the class and help them solve the riddles in the song, for them to be encouraged to attend the class—it is easier for them to memorize Visayan song.)

Teachers found the urgency and necessity to compose Visayan songs due to the scarcity or non-availability of Visayan songs for children. According to them, “Wala pa kaayo mga nursery rhymes nga bisaya. Wala


"kaayo time para ma-translate ang ubang kanta." (Visayan nursery rhymes are lacking. Also, we are short of time to translate known songs to MT.) This perhaps is one of the challenges that teachers should be addressing to improve MTBI in the primary levels. These results suggest some training or capability building for primary grade levels in the composition of nursery rhymes and relevant songs for school children. This activity will also provide opportunities for the contextualization and localization of instructional materials in a form of song. DepEd may also devise some venue to invite song writers to submit their pieces for instructional purposes.

The practices on reading MT (mean = 2.75) and integration of technology (mean = 2.55) are moderately implemented among the MTBI strategies as shown in Figure 1. The subsequent sections present both the quantitative and qualitative analyses on these aforementioned strategies.

4.7 Reading Mother Tongue

Fig 6 shows the four (4) practices implemented in reading MT. It is worth noting that reading Visayan sight words was highly manifested (mean = 3.27) along with reading Visayan short stories (mean = 2.77) and reading Visayan newspaper (mean = 2.70) while reading big books and small books (mean = 2.27) was moderately implemented.

Reading Visayan sight words was highly implemented since it is necessary and basic according to the teacher participants. This concept is revealed in their answers such as "kinahanglan ug basic man. Dapat maoy una." (These [sight words] are important as these are part of the basics. These must be taken up first.) Memorizing sight words is the basic technique employed because according to them this will facilitate reading MT. This claim is contained in their responses such as "Dali pag i-memorize. Mas maayo ma-memorize dayon ang mga basic sight words." (It is better and easier to memorize the sight words.)

Several reasons were given as to reading Visayan news as one MTBI practice employed by teachers in reading MT. One is learning to use newspaper as part of learners’ preparation as spelled out in their responses like "Para makahalo sab ang mga bata unsaan pag gamit sa newspaper." (This is so that the children learn what a newspaper is for.) Another reason given was for information about the local events and updates expressed as "Ma-aware ang mga bata sa local nga balita. Mas dali nila masabtaw ang mga panghitabo sa paliobot kung nagabasa sila niini; para updated." (Children will be made aware of the local news. They will understand what is happening around them if they read newspapers. They will get updates.) Finally, reading Visayan newspaper was for facilitating learning in language proficiency as teachers believe that "mas maayo makahalo-balot ug basa sa bisaya nga newspaper adeser sila sa lain nga linggwahe." (It is much better if children learn to read through Visayan newspapers before learning the other language.) Clearly, teachers implemented the additive bilingualism approach of Cummins (as cited in Paul Stone, 2012). Teachers in the East I Butuan District were more positive that learning the L1 would be more meaningful if learned prior to learning any other language. As a matter of fact, children especially in the urban areas are most conversant in L2 than in L1. This is one of the challenges that teachers were confronted with in the implementation of the MTB-MLE.

On the other hand, reading big books and small books was least practiced among teachers in reading MT in the District. Unanimously, teachers revealed lack of materials for MTBI in their classroom. Aside from lack of provision from DepEd itself, teachers were also constrained to devise their own big-books and small books due to lack of financial assistance. Aside from financial dearth and resources shortage, teachers do not have sufficient time to develop or construct these materials. These results are quite alarming considering that local materials are much needed for the effective implementation of MLE. Also, reading proficiency of
the primary grade school learners can be developed successfully only with the use of culture-based materials (Brown, 2014) that are adapted with local translation (Newmark, 1988) and equivalent translations that are neutral and inoffensive (Baker, 2011).

4.8 Integration of Technology

The least implemented MTBI strategy among the categories identified in this study was the integration of technology (Fig 7).

Use of audio-visual materials (mean = 2.73) was more likely employed than use of computer-based IMs (mean = 2.37). Teachers believed that integration of technology is of more advantage as they expressed as “Mas maayo nga naa sab gamit ang technology sa klase hilabi nag pwede na bisaya ang instruction. So, maka-pabor jud ug sabot ang mga bata.” (It would be advantageous for children if technology will be used in class with Visayan instruction.) The teachers were aware of the need of technology application and interactive materials in the classroom. However, they were challenged to develop their own materials in MT so that learners will really see or visualize the MT word along with the graphics and pictures in the presentation.

Computer-based instruction was not much used since most of the schools in the District do not have available facilities and equipment for the said strategy like source of electricity, laptop and internet connectivity. Responses of teacher participants included such as “Walay kuryente sa bukid. Walay wifi. Walay signal sa bukid. Useless ra.” (There is no source of electricity and internet connectivity in the highland. It is useless.) With this scarcity of resources, teachers’ integration of technology was limited only on either multimedia or audio-visual presentation.

Also, teachers were still constrained with pupils reading deficiency and found the use of technology not compelling. According to the teacher participants, their pupils were still non-reader and it would be useless to integrate technology. “Useless ra ilang nihabaw-an ug aha motoplok kay ultimo pagbanas unsa ilang gituplok sa computer dili kabasa.” (It would be useless to use computer in teaching since children do not even know how to read the letters in the keys.) According to them, however, these practices on technology integration were practical or less expensive than the bigbooks and small books. What makes this strategy challenging is the use of technology itself in the preparation of the IMs. Teachers still lack the necessary skills in basic information technology which led to least utilization among teacher participants in the District.

The results above suggest that teachers implemented diverse strategies in dealing with MTB-MLE program with the goal to maximize the learning outcomes with the aid of mother tongue instruction. According to Neuman, et al. (2000), a teacher’s role is critical to a child’s learning and that teachers can inspire children to read, write, and learn through thoughtful planning and developmentally appropriate literacy instruction. Thus, teachers’ readiness and understanding of the MTB-MLE should be developed further for the success of the program implementation.

4.9 Reading Proficiency in Mother Tongue (MT)

Reading proficiency is measured in the three (3) areas, namely, reading fluency, listening skills and comprehension skills. Overall results show that pupil participants were proficient in mother tongue except for the reading fluency (Fig 8A).

Fig 8A shows that the reading fluency is at a frustration level. In particular, the majority (53%) got the highest miscues in reading; that is, pupils were not yet proficient in terms of recognizing words and decoding them properly. This can be traced back to lack or no reading materials available for pupils to practice reading or perform oral reading. Considering that the words in mother tongue have complex form, pupils had difficulty to recognize words with precision or utter the words fluently. Moreover, this difficulty among primary grade learners in recognizing MT words is highly influenced by their high exposure foreign
programs and shows, and reading materials available online and on television. However, there is a significant number of learners (40%) who were at least instructional in their level of reading fluency.

The foregoing results suggest that transition period of the K-12 curriculum has optimized outcomes for MTB-MLE. It cannot be denied that this early outcome of the MTB-MLE showed significant improvement in the reading proficiency of the primary grade school learners despite some lapses that emerged in the implementation process. Whether it is additive or subtractive bilingualism that was applied by the teacher participants, still skills gained during L1 reading under any MTBI strategy contributed to reading the L2 – either English or Filipino.

On the other hand, the majority of the pupils were independent (56%) in terms of listening skill (Fig 8B). It is noteworthy that only a few (about 7%) were in the frustration level and a good number (about 37%) were in the instructional level. These results again supported some successful outcome of the MTB-MLE especially in the transition period. It is worth mentioning that both the linguistic and cultural elements in the source language and the target language were well-observed in order that translation is carried out successfully. Brown (2014) emphasized that translation activities in the MTB-MLE are geared towards developing reading skills among children and not only on the understanding of the context or story of the materials.

Similarly, the majority (90%) of the pupils in the primary levels were independent with no students in the frustration level (Fig 8C). This is just a natural consequence of the developed reading skills among the learners – an increased reading comprehension (Gough & Tunner, 1986). Listening comprehension is very essential in the future success of the learners in oral reading comprehension. As pointed out by Teale and Yokota (2000), children learn to process what they hear and read. Hence, teachers should encourage learners to engage in extended conversations by expanding and extending topics, asking questions, and connecting new ideas and information to learners’ prior knowledge and experiences. As a whole, language literacy and in particular, reading proficiency will be meaningful and successful if children will be directly oriented on the reading process of MTB-MLE. Thus, identifying effective and doable MTBI strategies will be beneficial to the curriculum implementation.

To give some empirical underpinning on the best practices of the teacher participants in the MTB-MLE implementation in the East 1 Butuan Division, tests of significant correlations were performed between the extent of MTBI strategies and the reading proficiency in the primary grade school levels. Computed correlation statistics provide both the substantial significance (coefficient, R) and practical significance (p-value) on the desired influence of MTBI practices in developing reading proficiency of the primary learners.

4.10 Correlation Between Extent of MTBI Strategies and Reading Proficiency

Overall analysis shows that strategies in reading MT words, listening with MT words, use-of-imagination strategy and use of teacher-made IMs revealed significant positive correlation on the variables of the learners’ reading proficiency in MT at 1% and 5% levels of significance. Hence, these MTBI strategies provide the best practices in developing the reading proficiency in MT (Tables 1, 2 and 3). Analysis and discussion of these best practices are provided.
Table 1
Correlation between reading MT word practices and MT proficiency variables

<table>
<thead>
<tr>
<th>Practices in MTBI</th>
<th>Reading fluency</th>
<th>Listening skill</th>
<th>Comprehension skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>p-value</td>
<td>R</td>
</tr>
<tr>
<td>Reading Mother Tongue (MT) words</td>
<td><strong>0.388</strong>*</td>
<td>0.034</td>
<td><strong>0.408</strong>*</td>
</tr>
<tr>
<td>Listening with MT</td>
<td>0.183</td>
<td>0.333</td>
<td>0.247</td>
</tr>
<tr>
<td>Translation between L1 &amp; L2 &amp; vice versa</td>
<td>0.123</td>
<td>0.518</td>
<td>0.063</td>
</tr>
<tr>
<td>Use-of- imagination strategy</td>
<td>-0.123</td>
<td>0.517</td>
<td>0.195</td>
</tr>
<tr>
<td>Team-building strategy</td>
<td>0.039</td>
<td>0.836</td>
<td>0.116</td>
</tr>
<tr>
<td>Use of differentiated activities for cognitively challenged</td>
<td>0.102</td>
<td>0.592</td>
<td>0.126</td>
</tr>
<tr>
<td>Integration of Technology</td>
<td>0.274</td>
<td>0.143</td>
<td>-0.181</td>
</tr>
<tr>
<td>Use of teacher-made IMs</td>
<td>0.169</td>
<td>0.373</td>
<td><strong>0.389</strong>*</td>
</tr>
<tr>
<td>Integration of Technology</td>
<td>0.274</td>
<td>0.143</td>
<td>-0.181</td>
</tr>
<tr>
<td>Use of teacher-made IMs</td>
<td>0.169</td>
<td>0.373</td>
<td><strong>0.389</strong>*</td>
</tr>
</tbody>
</table>

*** Correlation significant at 1%. ** Correlation significant at 5%.

Table 2
Correlation between reading MT word practices and MT proficiency variables

<table>
<thead>
<tr>
<th>Strategies in Reading with MT</th>
<th>Reading fluency</th>
<th>Listening skill</th>
<th>Comprehension skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>p-value</td>
<td>R</td>
</tr>
<tr>
<td>Reading Visayan short stories</td>
<td><strong>0.495</strong>*</td>
<td>0.005</td>
<td>0.362</td>
</tr>
<tr>
<td>Reading big books and small books</td>
<td><strong>0.378</strong></td>
<td>0.039</td>
<td><strong>0.439</strong></td>
</tr>
<tr>
<td>Reading Visayan newspaper</td>
<td>0.266</td>
<td>0.155</td>
<td>0.185</td>
</tr>
<tr>
<td>Reading Visayan sight words</td>
<td>0.034</td>
<td>0.857</td>
<td>0.055</td>
</tr>
</tbody>
</table>

*** Correlation significant at 1%. ** Correlation significant at 5%.

Table 3
Correlation between reading MT word practices and MT proficiency variables

<table>
<thead>
<tr>
<th>Strategies in Listening with MT</th>
<th>Reading fluency</th>
<th>Listening skill</th>
<th>Comprehension skills</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>p-value</td>
<td>R</td>
</tr>
<tr>
<td>listening news from, local radio station</td>
<td>0.246</td>
<td>0.191</td>
<td><strong>0.501</strong>*</td>
</tr>
<tr>
<td>integration of Visayan song</td>
<td>-0.031</td>
<td>0.873</td>
<td>0.011</td>
</tr>
<tr>
<td>following directions in mother tongue</td>
<td>0.183</td>
<td>0.333</td>
<td>0.063</td>
</tr>
</tbody>
</table>

*** Correlation significant at 1%. ** Correlation significant at 5%.

Analysis on the correlation between the extent of reading MT words and reading proficiency yielded significant results. That is, the extent of reading MT words is significantly correlated with reading fluency (R = 0.388, p-value = 0.034), listening skills (R = 0.408, p-value = 0.025) and comprehension skills (R = 0.369, p-value = 0.045). Hence, learners who got high scores in reading fluency, listening skills and comprehension skills tests were under the classes of the teachers who had implemented reading MT words to a high extent. Specific activities with reading MT words and reading proficiency correlations are presented in Table 2.

The strategy on listening with MT also yielded significant positive correlation with reading comprehension of the primary learners (R = 0.349, p-value = 0.058). Hence, listening with MT significantly improved the
reading comprehension which conforms to the simple view of Gough and Tunmer (1986). Specific activities with listening MT words and reading comprehension correlations are presented in Table 3.

Moreover, the use-of- imagination strategy shows significant positive correlation with the comprehension skill of primary graders (R = 0.327, p-value = 0.077). This implies that pupils’ comprehension skill may be improved with a more frequent use of imagination in performing assigned task. However, this practice is not widely used among primary graders.

Finally, the use of teacher-made IMs shows significant positive correlation with listening skills (R = 0.389, p-value = 0.034); that is, teachers who are more engaged with IMs-making are most likely developing pupils with better listening skill.

The extent of reading Visayan short stories has significant correlation with the reading proficiency indicators of the learners – reading fluency (R = 0.495, p-value = 0.005), listening skills (R = 0.362, p-value = 0.049) and comprehension skills (R = 0.401, p-value = 0.028) (Table 2). That is, primary grade learners who got high scores in reading fluency, listening skills and comprehension skills were pupils of the primary teachers who had employed reading Visayan short stories in their classes to a high extent.

The foregoing results indicate that development of the reading proficiency among primary grade learners is significantly influenced by strategy of reading Visayan short stories. Accordingly, teacher participants that confirmed effectiveness of Visayan stories said that “mas dalan man nila masahat ang estorya.” (Children can easily comprehend [lesson] through story.) It should be noted, however, that teacher participants were constrained with limited resources and materials for Visayan stories as contained in the following comments “... mag-pangita pamig storya nga bisaya kay kulang ang materials.” (We still have to look for Visayan short stories due to lack of materials.) The lack of proficiency in fluency of reading can be accounted to the deficiency of materials for Visayan stories. Improving materials acquisition and widespread implementation of reading Visayan stories will consequently increase or improve reading proficiency in MT.

Table 2 further shows that reading big books and small books shows significant correlation with the reading proficiency, particularly, reading fluency (R = 0.378, p-value = 0.039) and listening skills (R = 0.439, p-value = 0.015). In spite with the issues on the problem of lack of materials, still the teachers found ways to implement MTB-MLE with less material resources; that is, optimizing learning experience through listening activities and oral reading. Children benefit from conversations that include varied vocabulary that use open-ended questions and that are rich in explanatory talk (Dickinson & Tabors, 2001).

MTBI practice in listening with MT words shows significant correlation with the comprehension skills (R = 0.349, p-value = 0.058) of primary graders. Nonetheless, listening news from local radio station has significant correlation with the listening skills (R = 0.501, p-value = 0.005) and comprehension skills (R = 0.460, p-value = 0.011) (Table 3). This simply means that it is more easy for teachers to enhance learners’ listening skills through exposing them to a news from the radio other than that the giving of assignments. One of the teachers confirmed this saying, “I give them assignments to listen to the news.”

Despite the positive responses of the concerned teachers on the MTB-MLE, early implementation of the curriculum still bears the traditional practices of the teachers. According to Carbo (1986), a number of educators in the early 1970’s believed that poor readers had perceptual disorders which had to be remedied before any real reading progress could occur. Instead, much time was being spent in classrooms with children simply copying from textbooks or written notes in the blackboard, with little comprehension of the real meaning, or the ability to apply their learning to other circumstances (Boud, Keogh & Walker, 2013). As a result, there is poor achievements from students who felt even more unsuccessful because their learning style weaknesses were the focus of so much attention and concern. Not surprisingly, most attempts remediate perceptual deficits were largely ineffective, and did not result in academic gains.

It is therefore a must for teachers to strengthen each child’s learning experience through a variety of songs, stories, games, and activities. However, children acquire these skills in an overlapping sequence rather than by mastering one level before the next (Dickinson & Neuman, 2006). Learning materials developed contextually tend to promote authentic language learning and higher order thinking and reinforce learning across the curriculum, especially for those learning a language as both a target language and a medium of instruction (Krashen, 1981). In addition, through content studies with the classroom observation, the textbook
offered technical skill approach literacy and language learning has made a very little use of the children’s funds of knowledge. Hence, teachers should be exposed to the use of interactive writing and read-aloud to develop children’s’ print knowledge-left-to-right directionality. Knowledge of print concepts is developed through direct contact with books and explicit modeling by skilled readers as well as through exposure to environmental print (Adams, 1990). As for application during planned read-aloud, for example, teachers must emphasize vocabulary words and discuss a book character’s thinking, feelings, and actions. Further, teachers must explicitly teach vocabulary in an integrated, meaningful way and in the context of everyday experiences. Children learn the meaning of most words indirectly, through everyday experiences with oral and written language (Parker, et al., 2000).

5 Conclusions

The change in the landscape of educational system towards K-12 curriculum has propelled primary grade teachers to innovate strategies in the implementation of mother-tongue based multilingual education (MTB-MLE). In the case of East 1 Butuan District, Caraga, Philippines, the best MTBI practices include the practice of reading MT words, practice of listening with MT words, use-of-imagination strategy and use of teacher-made instructional materials in the development of primary learners’ reading proficiency in mother tongue. These strategies are intertwined in addressing the reading needs of the learners as they significantly determine specific dimensions of language literacy either using the additive bilingualism or the subtractive bilingualism. Moreover, positive thoughts for changes, expectancies and values from mother tongue based curriculum are essentials that teachers pursue to discover and innovate resources and strategies; hence, enriching the language proficiency of the small children for future challenges in life.

To improve the reading fluency, some best practices that may be employed are reading Visayan short stories and small book and big books in mother tongue. Reading Visayan stories and small/big books, listening with Visayan news and use of teacher-made instructional materials will increase listening skills of primary learners. On the other hand, comprehension skill is also developed in reading and listening Visayan stories, listening news from local station and use of imagination. All of these strategies are used to promote oral language and vocabulary development, which covers informal conversations, songs, rhymes, finger plays, movement activities, play, read-aloud and storytelling. Apparently, understanding and appreciation of one’s culture will inspire learners to read – not just to understand the context but to express one’s self. Hence, developing the language literacy of the small children will be made successful through their social and emotional learning experiences – in games, stories and songs written in mother tongue.

Conflict of Interests

The authors declare that there is no conflict of interests regarding the publication of this paper.

6 References


