MOTHER TONGUE BASED MULTILINGUAL EDUCATION MODEL

IN ENGLISH LANGUAGE LEARNING

NENI AFRIDA SARI HARAHAP[1], AMRIN SARAGIH[2] and SUMARSIH[3]

[1,2,3] Universitas Negeri Medan, Indonesia.

ABSTRACT

This study aimed at designing a valid, practical and effective MT-BMLE model in English language learning for elementary learners. A developmental research by Plomp used as the research method to fulfill some criteria in learning model components: learning syntax, social system, management reaction principle, support system and instructional impacts. The design of MT-BMLE learning model is intended to produce three final products: learning model book, teaching kits and research instruments. There were four main stages applied in conducting this developmental research, namely: Preliminary Research, Design and Prototype, Realization and Evaluation. As the result, this study produced a valid, practical and effective MT-BMLE Model in English language learning for elementary learners in rural learning area by providing English Lesson Plans, teaching materials, teachers and students' guide books, students' worksheets and teaching media designed by the teachers. Consequently, students are more active in English learning, increasing vocabulary mastery and having high positive responses to learn English in remote learning environment. The implication of this study encourages students to increase vocabulary mastery in English language learning. Further researches are recommended to implement this MT-BMLE learning model for higher level of education to improve foreign language students' language skills.

Keywords: Mother Tongue, Multilingual Education, Learning Model, Learning English

INTRODUCTION

Multilingual Education is as a form of education that emphasizes the use of the language of the home as a medium of instruction. It refers to the use of more than two languages as the medium of instruction in schools. Hakim (2020) explains multilingual education often includes the first language, the national language, and a language of wider communication. His study gives an example of using Bahasa Indonesia, Sundanese, and English in English language teaching. In Indonesia, multilingual education has been an education policy in the early started from elementary schools learners. It is supposed to prioritize Bahasa Indonesia, to preserve regional languages, and to strengthen foreign languages. Bahasa Indonesia serves as the language of instruction as implied in the Act of Education Number 20/2003. With reference to the Act 20/2003, Bahasa Indonesia should be taught and used as the medium of instruction.

Moreover, The Rencana Pembangunan Jangka Menengah Nasional (National Medium Term Development Plan of Indonesia) and The Rencana Strategis (Strategic Plans) for 2015-2019, RPJMN and the final version of the national RENSTRA state explicitly that "the mother tongue could be used as the language of instruction in the early grades as a means to diversify curriculum implementation". If a greater number of stakeholders are encouraged to adopt this national policy for the regency context, the success story of Indonesian spreading across the

country has confirmed. It is regulated in the Act of the National Educational System (No. 20 Year 2003, Chapter VII, Article 33) as follows: (1) Indonesian as the state language becomes language of instruction in national education; (2) local and regional languages can be used as languages of instruction in the early stage of education as far as they are needed to transmit certain knowledge and/or skills; (3) foreign languages can be used as language of instruction at certain levels of education to strengthen students ability in foreign languages. This causes the chances where people in Indonesia can be bilingual or multilingual.

Unfortunately, the difficulties in mastering multilingual education in English language learning at elementary schools in rural learning environment do not use Bahasa Indonesia as their instructional language at schools and they cannot learn English as well as the international language. Students almost use Karo language as the most dominant language in their daily communications inside and outside of schools. On the other hand, teachers used Bahasa Indonesia as the medium of instruction in English language learning. Teachers prohibited learners to use mother tongue and they tend to use Bahasa Indonesia in English foreign classroom. Miscommunication often happened in classroom interaction because messages cannot be successfully delivered and learning objectives cannot be achieved. This means multilingual education is not gained, but monolingual education is dominantly existed in the process of instructional teaching and learning, either for teachers and learners.

This phenomenon happened in one of remote learning environments in Karo Regency of North Sumatera, Indonesia. Monolingual interaction between teacher and students in English language learning distract the effective learning process and causes some difficulties tin mastering learning content so that learning objectives are not successfully achieved. The situation of this monolingual education in Karo regency is described in the following table.

Table 1. Students Teacher's Monolingual Education in English Language Learning

No	Teachers' Expressions	Students' Responses
1.	SL: Apa yang kamu lakukan di hari Minggu? TL: What are you doing on Sunday?	SL: man, tunduh, nonton TV, miss TL: eat, sleep, watch TV, miss
2.	SL: Coba sebutkan 5 contoh kata kerja yang kamu ketahui TL: Mention 5 examples of verbs that you know!	SL: man, tunduh, baca, rerdakan, kerja, erlagulagu TL: eat, sleep, read, cook, work, play, travel
3.	SL: Siapa yang tahu apa bahasa inggrisnya lampu? TL: Who knows, how to say 'lampu' in English?	SL: la kuteh kai maksud ndue, miss TL: we don't know what you mean, miss….
4.	SL: Sebutkan pekerjaan orang tuamu! TL: Mention your parents' job!	SL: Permakan, Perjuma, Ertukkang, Ersabah, Kirohroh taneh TL: stockbreeding, farmer,labour, farm worker
5.	SL: Sebutkan tugas dan tanggung jawab kamu sebagai siswa! TL: Mention your duties as a student!	SL: Ndedah, Muro, Kujuma, Erdakan TL: farm guarding, farming, cooking

Ideally, elementary learners can use their mother tongue as the transitional language to master the other new languages either in Bahasa Indonesia or English. Bahasa Karo as mother tongue even used by them as the barriers or obstacles to master other new kinds of languages, and it becomes the obstructions to master bi/multilingual education as instructed in curriculum and or education policy. Using local languages in education should not be prohibited. In practice, local languages are preferably used to create conviviality between teachers and students. The use of the mother tongue in English language learning is felt to have many benefits, it can foster student self-confidence, a sense of comfort and security when students study in class, and students are more enthusiastic and respond quickly to material and teacher explanations. In addition, the material can be delivered properly and maximally, and students can understand the explanation of the material and learning objectives delivered by the teacher. Another positive thing is that learning time is more efficient because the teacher is more focused on explaining the material than having to translate Indonesian into the local language or mother tongue.

The issue of using Mother Tongue Based in English language teaching of Elementary Schools has globally grown in importance of current educational research, especially in

Philippines. However, very little attention has been specifically given to this issue in Indonesian public schools, and only few studies have been conducted to investigate the role of mother tongue and Bahasa Indonesia in English classes. For example, Zacharias' research (2016) investigates the tertiary education English teachers' and its possible uses of Mother Tongue in English Foreign classroom including explaining the new words meaning and grammatical points, giving instructions, checking learners' understanding and giving feedback to individual learners. In addition, Usadiati's study (2009) declares that using Bahasa Indonesia interchangeably with English in the explanations of concepts and rules for teaching students to write English sentences in Present Perfect Tense improved the students' achievement. These two previous researches emphasize the correlation between mother tongue uses to the multilingual mastery for public schools in Indonesia, even there is still little related research investigate it before.

For all these reasons, it would be a huge mistake for school to cancel Mother Tongue-Based Multilingual Education (MT-BMLE) learning model at elementary schools in rural learning area. The grand instructional design of MT-BMLE model should be created to focus the efforts on improving multilingual education and making it more adaptable, so that the right languages are used in the right places and in the right way. In implementing MT-BMLE, the teachers need to make extra efforts. For example, if a teacher wants to teach English in rural areas by using mother-tongue based, before teaching teachers need to prepare words, sentences, terms, songs, pictures and videos based on mother tongue. In addition, teachers also provide teaching aids and media for language learning.

In Indonesia, MT-BMLE becomes the government national policy within the RPJMN and RENSTRA 2015 – 2019. It has committed to ensuring children who live in remote and rural areas can be taught in the mother tongue until the 3rd grade. MT-BMLE is also regulated in UU Sisdiknas Number 20 Year 2003 about the use of local language for elementary school students in rural areas. Peraturan Daerah (Perda) Papua Nomor 3/2013 Pasal 22:2 also emphasizes that local language can be used as the instructional language at schools if Bahasa Indonesia cannot be used as the instructional language in language teaching. The Analytical and Capacity Building Program (ACDP:2014) Indonesia reinforce the above regulations as the recommendation from the previous research. ACDP provided the broad structures into which this program now operates and also sets the parameters for how the roadmap for MT-BMLE is defined, while still allowing for some flexibility in how it is applied in specific communities (begin in preschool, kindergarten, 1st grade, etc.).

The students will gain literacy skills under the MT-BMLE reform: 1) Learners learn to read more quickly when in their first language (L1); 2) Pupils who have learned to read and write in their first language learn to speak, read, and write in a second language(L2) and third language (L3) more quickly than those who are taught in a second or third language first; and 3) In terms of cognitive development and its effects another academic areas, pupils taught to read and write in their first language acquire such competencies more quickly (Philippines Department of Education,2009, p. 1).

MT-BMLE refers to "first-language-first" education that is, schooling which begins in the mother tongue and transitions to additional languages particularly Bahasa Indonesia and English (Gorio:2014). It is meant to address the high functional literacy where language plays a significant factor. Since the child's own language enables her/ him to express him/herself easily, then, there is no fear of making mistakes. It encourages active participation by children in the learning process because they 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.

MT-BMLE is a type of education that emphasizes the use of the mother tongue as a medium of instruction. The MT-BMLE movement is an attempt to create equitable educational opportunities for indigenous language speakers. The Mother Tongue framework aims to increase access and quality of education by providing instruction in the first language before transitioning to other languages (Benson, 2004). The mother language can be used as the transitional bridge to teach new second language to the students. In mother tongue-based classrooms, children are more active and participatory. They feel more comfortable asking and answering questions, sharing their thoughts, and doing things on their own.

The same urgency of implementing MT-BMLE at elementary schools encouraged by some related studies conducted before. Gorio (2014) declares that teachers highly implement the objectives of MT-BMLE in Baguio and Benguet, Philipinnes Elementary Schools. Despite some problems experienced by the teachers, the research findings show that teachers still highly implement the language program. The teachers sometimes use varied teaching strategies and or activities in the implementation of MT-BMLE at elementary schools in Baguio and Bengeut, Phillipines.

Regarding the urgency of MT-BMLE program that had been observed before, it is considered to significantly search the use of BahasaKaro as the transitional language to master other kinds of languages in mastering Bahasa Indonesia and English as well as in mother tongue which is called by Multilingual Education. In relation to this phenomenon, this research is undertaken to design a learning model and find out the effectiveness of MT-BMLE in English language learning at Elementary schools in Karo regency.

LITERATURE REVIEW

The Concept of Multilingual Education

According to Goh and Silver (2004), multilingualism is a situation in society in which more than one language exists. It is the use of multiple languages, by an individual speaker or by a community of speakers. In a broad sense, a multilingual person is someone who can communicate in more than one language, either actively (through speaking, writing, or signing) or passively (through listening, reading, or perceiving). Meanwhile, Multilingual Education is as a form of education that emphasizes the use of the language of the home as a medium of instruction. Multilingual education refers to the use of more than two languages as

the medium of instruction in schools. Some literatures involved multilingual education as similar with bilingual education in which two different languages should be used in instructional activities at schools. Hakim (2020) explains multilingual education often includes the first language, the national language, and a language of wider communication. His study gives an example of using Bahasa Indonesia, Sundanese, and English in English language teaching.

The Nature of Students' Mother Tongue

Tulasiewicz (2015) defines mother tongue as a person's native language — that is, a language learned from birth. It is also called a first language, dominant language, home language, and native tongue (although these terms are not necessarily synonymous). Mother Tongue is used as a Medium of Instruction (MoI) for Grades 1, 2 and 3 in teaching Math, Music, Arts, Physical, Education and Health, Civic, History and other social sciences. Mother tongue is ideally taught as a separate Learning Area in Grades 1, 2 and 3 as Muatan Lokal (Mulok) in elementary schools. Nolasco (2010) cites that the child's mother tongue shall be the medium of learning in Grades 1 to 3 because the fundamental Math and Science concepts are introduced in these levels. The mother tongue of the students provides the foundation for the emergence of reading and writing behaviors into literacy is through the use of child's native language.

The term ─mother tongue refers to a variety of situations, including the language one identifies with, knows best, or uses the most. It could also refer to one's first language (L1).As for educational purposes, mother tongue (L1) defines as a language one speaks and understands competently enough to learn academic content at the appropriate age level (Kosones and Young 2009). Educational purposes can be achieved if the students know best their first language or mother tongue language, and then starting to use their second language at the upper class.

According to UNESCO (2008) mother tongue is the language which a child secures in early years and which ordinarily turns into their instrument of thought and communication. at the point when mother tongue is advanced in the school, it helps to develop not only the first language but also student abilities in the majority school language. Bilingual kids perform better in schools when the school adequately educates the mother tongue and where suitable, creates proficiency in that language. The use of the same language spoken at home, in early grades, helps improve the pupils' language and cognitive development in addition to strengthening their socio-cultural awareness. Local and international studies have shown that early use of mother tongue inside the classroom produce better and faster learners. It makes them adept at learning a second (Filipino) and third language (English) too. Serquince (2010) states that students' mother tongue provide the foundation emergence of reading and writing behaviors. It posts that the best entering into literacy is through the use of child's native language. The child's mother tongue shall be the medium of learning in elementary level because the basic concepts of knowledge are introduced in this way. They also learn a second language more quickly than those initially taught to read in an unfamiliar language. (UNICEF, 1999, p. 41).

Mother tongue education refers to any form of schooling that makes use of the language or languages that children are most familiar with. This is usually the language that children speak at home with their family. The 'mother tongue' does not have to be the language spoken by the mother. Children can and often do speak more than one or even two languages at home. For example, they may speak one language with their mother, another with their father and a third with their grandparents. Thus, MT-BMLE is bridging the new languages to be mastered by learners in the classroom. The process of transferring the new languages begin whenever learner is ready, depending on how much L2 or L3 s/he has acquired, and takes one to three years. Transfer can be facilitated by building a strong literacy and learning foundation in the L1, by exposing learners to the new language(s), and by explicitly teaching the sounds and letters that differ between the L1 and the new language(s).

Mother Tongue-Based Multilingual Education

MT-BMLE is a type of education system that emphasizes the use of the mother tongue as a medium of instruction. The MT-BMLE movement is an attempt to create equitable educational opportunities for indigenous language speakers. The Mother Tongue framework aims to increase access and quality of education by providing instruction in the first language before transitioning to other languages (Benson, 2004). The movement has spread globally, primarily through non-profit organizations working on small-scale projects.

Mother Tongue-Based Multilingual Education (MT-BMLE) is a form of education that emphasizes the use of the language of the home as a medium of instruction. The movement to MT-BMLE is an effort to establish equitable educational opportunities for speakers of indigenous languages. The Mother Tongue framework seeks to achieve increased access to education and increased quality of education through providing instruction in the first language before transitioning to other languages (Benson, 2004). MT-BMLE differentiates itself by utilizing the first language first as the language of instruction, followed by a regional or national language, and then often followed by English. In this way, MT-BMLE serves as a form of transitional language education with varying degrees of emphasis on the preservation of the mother tongue.

UNESCO (2005) suggests some stages in implementing MT-BMLE as learning model for elementary learners as following:

Stage I - Learning takes place entirely in the child's home language

Stage II - Building fluency in the mother tongue. Introduction to oral L2.

Stage III - Building oral fluency in L2. Introduction to literacy in L2.

Stage IV - Using both L1 and L2 for lifelong learning.

Vocabulary Mastery in English Language Learning

Vocabulary is as the stock of words used by a person, class or other entityin a community (Nation:2000). It is a list of words known and used by persons or other entity as a part of a

specific language. It can be also defined as (a) all the words of language (b) the sum of words used by or at the command of a particular person or group (c) a list of words and often phrases, usually arranged alphabetically and defined or translated; a lexicon or glossary. It can be concluded that vocabulary is defined as a list or set words in particular language that individual speaker or group might use with their meanings.

Vocabulary mastery plays necessary role in learning and understanding the language. Hornby (1995) states vocabulary is the total number of the words in a language. It refers to the ability of mastering a new language should firstly master the vocabulary. He also adds mastery as complete knowledge or complete skill. Furthermore, Hatch (1995) states mastery is comprehensive knowledge. From those two definitions, it can be concluded that mastery means the competency to understand and apply something learned. So, vocabulary mastery is the competency to understand and apply the stock of words for beginners.

The four kinds of language skills (reading, writing, listening and speaking) are integrative learned at elementary levels in which vocabulary is extremely needed to be mastered. The English syllabus for elementary learners is not specifically focused on any skill to be mastered because of the integrative four skills. That's why vocabulary mastery should be the basis to master the meaning of each word and increase their four language skills as explained in this following Elementary Learners Syllabus.

Table2. English Syllabus for Elementary Level (Grade 4, Semester 2)

Theme	Cognitive Achievement	Psychomotoric Achievement
Me and My Dream	1. Students can understand the meaning of English text about Me and My Dream.	1. Students can read EnglishText / Dialogue about Me and My Dream 2. Students can sing an English song about Me and My Dream
Ethnicand ReligionDiversity in My Country	1. Students can understand the meaning of English text about Ethnicand ReligionDiversity in My Country	1. Students can read an English text / Dialogue about Ethnicand ReligionDiversity in My Country 2. Students can sing an English song about Ethnicand ReligionDiversity in My Country
My Neighborhood	1. Students can understand the meaning of English text aboutMy Neighborhood	1. Students can readEnglish text / Dialogue about My Neighborhood 2. Students can sing an English song about My Neighborhood
Energy Wealth Sources in Indonesia	1. Students can understand the meaning of English text about Energy Wealth Sources in Indonesia	1. Students can read English text / Dialogue about Energy Wealth Sources in Indonesia 2. Students can sing an English song

The Design of MT-BMLE Learning Model

Dick and Carey (2005) explain a learning model is a complete activity that can create a systematic process in which every component is crucial to successful learning. He adds that the instructional process can be viewed as a system to bring out learning. The components of a system are learners, instructors, instructional materials and learning evaluation In relation to the design of MT-BMLE, the design of MT-BMLE model should be based on the theory from Sinaga (2007) states that there are five aspects in designing a teaching model in the classroom, namely: (1) the provision of the accurate learning syntax, (2) the implementation of social system; (3) the requirement of management reaction principles; (4) Support System of learning model; and (5) the instructional impacts of learning model. These five criteria should be involved in designing this MT-BMLE model to be implemented in the teaching and learning process in the classroom. This following figure describes the design of MT-BMLE Model in English language learning.
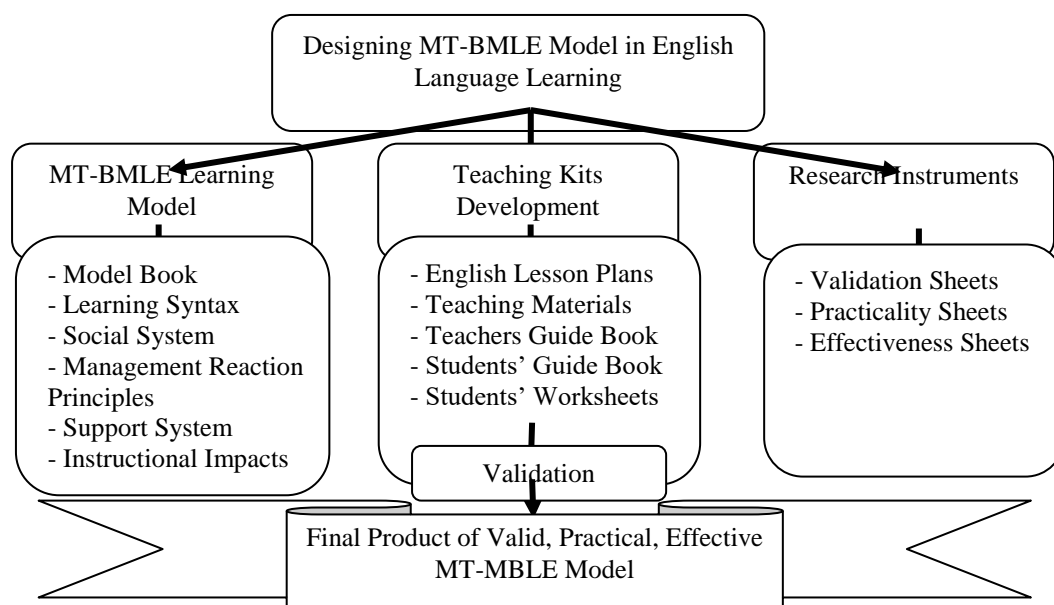
Figure 1. The Design of MT-BMLE Learning Model

Research Method

A developmental research method used in this study. This research developed a model of MT-BMLE, the teaching kits and all instruments needed in applying this model at elementary learners' level. The process of developing a product is related to the whole activities at each of stages procedurally. Therefore, the product of this research is an effective MT-BMLE Model for elementary learners. This research design will be conducted by implementing the four stages as in Plomp (1997).
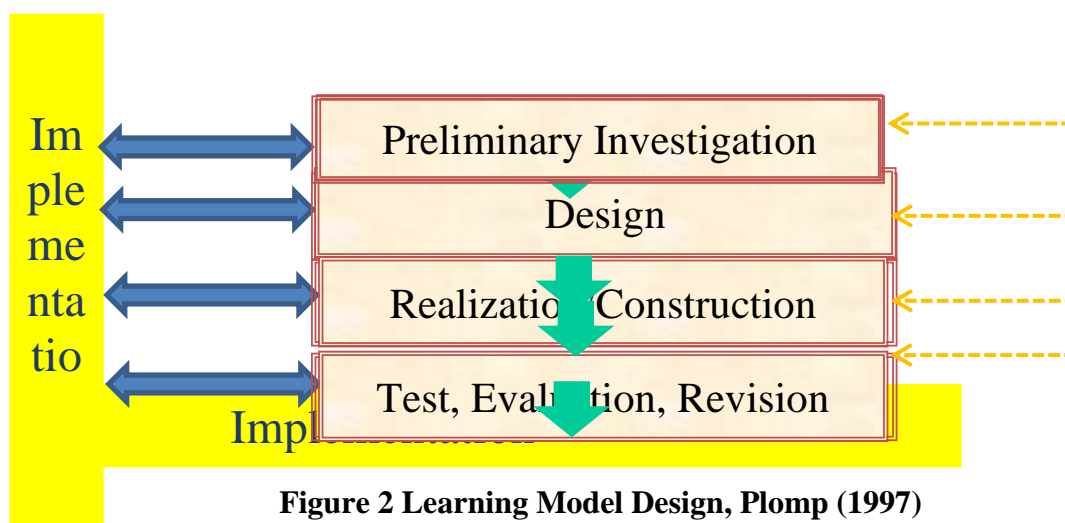

Figure 2 Learning Model Design, Plomp (1997)

This research is conducted in the even semester, 2022/2023 Academic Year. The location of this research located in three different public and private schools from three different areas in Karo Regency, they are: (1) SD Negeri 040492 BatuKarang, Kecamatan Payung, Karo Regency, (2) SD Negeri 043953 Singgamanik, KecamatanMunte, Karo Regency, (3) SD Swasta Letjen Djamin Ginting, Kabanjahe, Karo Regency.

The population will be all students in all elementary schools in Karo regency. The sample will be grade 4 students of parallel classes in three different schools from different districts in Karo regency. This sample will be taken by using "stratified purposive random sampling" technique regarding some criteria of students' social background, learning environments and English learning levels for 4 grade who are starting to learn English at the elementary schools. These three schools are as the representation urban, semi-urban and rural areas in Karo Regency. This school dominantly uses Bahasa Karo as the instructional language in the classroom.

The Effectiveness of Learning Model

In order to measure the quality of learning model design, Nieveen (1999) decides 3 material aspects should be fulfilled, they are: validity, practicality and effectiveness. The relationship among these 3 materials aspects in MT-BMLE Model represented in Table 2.2

Table3.Three Aspects of Materials Quality

Quality Aspects

Validity	Practicality	Effectiveness
Intended (idea+formal):	Consistency between:	Consistency between:
State of the art knowledge ⇔	Intended perceived	Intended experiential
Internally consistent ⇔	Intended operation	Intended attained

Source: Adaptad from Nieeven, 1999

Results and Discussion

The results of this study are: (1) MT-BMLE Model Book, (2) Teaching Kits, and (3) The Effectiveness of Learning Model elaborated in the following. MT-BMLE Model Book is consisted of (1) The Rationale, (2) The Supporting Theories, (3) The MT-BMLE Learning Model, (4) The Guidance of MT-BMLE Model, and (5) The Implementation of MT-BMLE Learning Model. This book model also explains six learning syntax in MT-BMLE Model, they are: Phase 1: Mother Tongue-Based Instruction (the entire learning program in children's L1); Phase 2: Bilingual Education (dual language instructions); Phase 3: Mother Tongue-Based Bilingual Education (L1 as premium media supported by L2); Phase 4: Transitional Bi/Multilingual Education (Bridging to L2); Phase 5: Immersion or Foreign Language Instruction (Learning in new language); Phase 6: Submersion (Forcing L2 at the expense of L1). The social system in this learning model refers to the learning interaction

among students and teacher in the classroom in terms of small group discussion and classical group discussion around 3-5 persons in group. The reaction principle management refers to teacher's roles as facilitator and instructor in conducting learning process to achieve the learning outcomes. The support system in this model forces teachers to provide MT-BMLE learning activities, students' guide book and worksheets, teaching media in line with students' needs. There are two main instructional impacts on students' knowledge and attitude by implementing this model, such as: increasing students' English mastery and improving students' learning behavior to be better and more effective.

Teaching kits for MT-BMLE Model produced some components in Lesson Plan, Teaching Materials, Teachers' Guide Book, Students' Guide Book and Students' Worksheets. The Lesson Plan applied MT-BMLE learning syntax in the whole activities structurally from the first step until the last one. For learning materials, the three different languages in Karo, Bahasa Indonesia and English are used to expose learning content. In Teachers' guide book, there are some instructions and learning evaluation are design to help teachers implementing this MT-BMLE model. Students' guide book consisted of some learning contents and instructions to master. Students' worksheet contained of some task and exercises to be done by the learners after learning process conducted. The detail activities in English MT-BMLE Classroom explained below.

Table4. Teaching Activities in MT-BMLE Learning Model

Stages	Teacher's Activities	Students' Activities	Time
Introduc-tion	-Greet students and ask someone to lead morning praying -Check students' attendance list -Remind students' last materials -Inform students' the today's topic	**-**Answer teacher's greeting and pray together -Respond teachers in attendance list -Respond teachers toward last and present teaching materials	5 minutes
Main Activities	**Phase 1:** Mother Tongue-Based Instruction (Children Home Language: Bahasa Karo for the entire learning) **Phase 2:** Bilingual Education (Dual Language Introductions: Bahasa Karo and introducing Bahasa Indonesia) **Phase 3:** Mother Tongue-Based Bilingual Education (Fostering L1 and	**Phase 1:** Mother Tongue-Based Instruction (Children Home Language: Bahasa Karo in entire leaning) **Phase 2:** Bilingual Education (Dual Language Introductions) **Phase 3:** Mother Tongue-Based Bilingual Education (Fostering L1 and learning L2) : **Phase 4:** Transitional Bi/Multilingual	75 minutes

	Learning L2) : **Phase 4:** Transitional Bi/Multilingual Education, or 'Bridging' from Karonese to Bahasa Indonesia **Phase 5:** Immersion or Foreign Language Instruction (The entire learning process in Foreign language; English) **Phase 6:** Submersion (Enforcing students to use non-dominant language or foreign language)	Education or 'Bridging' from Karonese to Bahasa Indonesia **Phase 5:** Immersion or Foreign Language Instruction (The entire learning process in English Foreign language) **Phase 6:** Submersion (Enforcing students to use non-dominant language; English Foreign Language)	
Closure	-Give feedback & conclude materials with students -Ask for home assignments -Close and greet meeting by praying together	-Conclude materials with teacher's guidance -Write for the home assignments -Greet for teacher and Pray together	10 minutes

The Effectiveness of MT-BMLE model was measured by the calculation of validity, practicality and the effectiveness of this learning model. The scoring and judgment from validators and observers concluded this result:

a. The Validity of Products consisted of: (1) The validity of MT-BMLE Model got Va = 4.7 means Valid; (2) The Validity of teaching Kits is Va = 4.23 means Valid, (3) The validity of research instruments is Va = 4.3 means Valid

b. The Practicality of Products consisted of: (1) The practicality of MT-BMLE Model got IO = 4.23 means high practical level. 1), (2) The practicality of Teaching Kits got IO = 4.21(high), (3) The practicality of Research Instruments got IO = 4.3 means high practical level.

c. The effectiveness of MT-BMLE Model got N-Gain 0,38 means in the medium level. It shows that students' responses in English language learning through the implementation of this MT-BMLE model is in medium category. The effectiveness of teaching kits = 4.0 and the practicality of research instruments = 4.3. The total scores for the three aspects of effectiveness are: MT-BMLE model got 4.43 (high), teaching kits got 4.13 (high), and research instruments got 4.3 (high).

Table 5 The Effectiveness of MT-BMLE Learning Model

No	The Aspects of Observation	Kinds of Product			Scores
		MT-BMLE	Teaching Kits	Research Instruments	
1	Validity of Product	4,7	4,2	4,3	4,4
2	Practicality of Product	4,2	4,2	4,3	4,2
3	Effectiveness of Product	4,4	4,0	4,3	4,2
Total Scores		4.43	4.13	4.3	4.23

The implication of this research to English language learning emphasize that the new concept of MT-BMLE learning model can be used as the transitional language to master the other new languages for being the multilingual speakers (bridging). The use of two or more languages as mediums of instruction can be realized through mother tongue used in classroom interaction. In context of education in Indonesia, the use of those three languages in mother tongue, national and international languages may describe the phenomenon of multilingual education. The use of different languages in this context will be influenced by various and interconnected factors, like students' needs, learning context and environment, learners and instructors' social background. The use of a non-single language as a medium of instruction should be used in the education system in terms of the instructional goals, instructional strategy, instructional materials and instructional evaluation.

In multilingual education, the effective transition from students' mother tongue into new languages allowed learners to develop adequate cognitive, linguistic and academic skills. They use their mother tongues to prior and to switch cognition in order to master second language acquisition. The effective transfer of cognitive and academic competences from the mother tongue to the second language is possible only when the learners have acquired adequate linguistic and academic competence in their mother tongues. The weight of current evidence strongly suggests that if the academic benefits of MT are to be achieved, then initial MT needs to be a minimum of six years of child education in which their cognition growth productively.

The use of mother tongue in the process of transitioning other new languages influenced the achievement in multilingual education. The faster mother tongue can transition a new langue, the better a multilingual education is. In this context, students at elementary levels are encouraged to be able to use their mother tongue to transitioning new other languages supported by qualified multilingual teachers and teaching materials.

For the practical implication, children with a solid foundation in their mother tongue develop stronger literacy abilities in the school language. Their knowledge and skills transfer across languages. This bridge enables the learners to use both or all their languages for success in school and for lifelong learning. It can be reflected from their ability in increasing vocabulary mastery of the other new languages thought by using MT-BMLE Model. The whole components of this model: learning syntax, social system, supporting system, management

reaction principles and instructional impacts give learners opportunities use more than two languages in language learning.

REFERENCES

ACDP Indonesia. (2014). Mother Tongue Based Multilingual Education in Papua Province. Jakarta: ACDP Indonesia.

ACDP. (2015). Framework for Monitoring and Evaluating the Mother Tongue Based Multilingual Education Program in Lanny Jaya, Papua. Jakarta: ACDP Indonesia.

ACDP. (2015). Support for Mother Tongue Based, Multilingual Education (MTB-MLE) for Schools in Rural and Remote Areas of Papua. Jakarta: ACDP 023.

Baker, C. (2001) Foundations of Bilingual Education and Bilingualism.Third edition.Clevedon: Multilingual Matters.

Benson, C. (2004) Bilingual schooling in Mozambique and Bolivia: From experimentation to implementation. Language Policy 3, 47-66.

Brown, H.D. (2000). Principles of Language and Teaching.San Francisco State University.

Cabansag, J.N. (2016). The Implementation of Mother Tongue-Based Multilingual Education: Seeing It from the Stakeholders' Perspective College of Arts and Sciences, Isabela State University, Echague, Isabela, Philippines.

Caet, A,Taylor,L Kerry (2015) Mother tongue-based multilingual education for Timor-Leste: a new direction for language-in-education. In: TLSA 2011: 3rd Timor-Leste Studies Association Conference: Communicating New Research on Timor-Leste , 30 Jun-1 Jul 2011, Dili, Timor-Leste.

Dick, W., Carey, L. (2005).The Systematic Design of Instruction.Sixth Edition. University of South Florida. Pearson. USA.

Dekker, D., Young, C. (2005). Bridging the gap: The development of appropriate educational strategies for minority language communities in the Philippines. Current Issues in Language Planning, 6(2), 182-199.

Department of Education, Republic of the Phillipines. (2012). Guidelines On The Implementation of The Mother Tongue Based-Multilingual Education (MTB-MLE).DepEd Complex, Meralco Avenue, Pasig City.

English Language Syllabus in Malaysian Schools, Tingkatan 4–5. 1975. Kuala Lumpur: DewanBahasa Dan Pustaka.

Goh, C.M, Silver, Rita, E. (2004). Language Acquisition and Development.A Teacher's Guide. Singapore: Prentice Hall.

Gorio, Dialyn. (2014). Factors Affecting the Implementation of the Mother Tongue-Based Multilingual Education as Perceived by Teachers in Baguio and Benguet.Retrieved, November 14, 2021, from https://sites.google.com/site/languageandmothertongue/home/research-on-mtbmle.

Hatch, Evelyn and Brown, Cheryl. 1995. Vocabulary, Semantics, and Language Education. Cambridge: Cambridge University Press.

Hakim, L, Pipit, P. 2020. "The Use of BahasaSunda in English Language Teaching".UniversitasPerjuanganTasikmalaya. Tasikmalaya.

Hornby, A. S. 1984. Oxford Advanced Learner' Dictionary of Current English. Oxford: Oxford University Press.

Krashen, S. D. (1987). Principles and Practice in Second Language Acquisition. Prentice-Hall International, 1987.

Krashen, S. D. (1988). Second Language Acquisition and Second Language Learning.Prentice-Hall International.

Kress, Van, L. (2011). What multilingualism? Agency and unintended consequences of multilingual practices in a Barcelona health clinic.Journal of Pragmatics 43(2011) 1209–1221.

Littlewood, W. (1984). Foreign and Second Language Learning: Language Acquisition Research and Its Implication for The Classroom. Cambridge University Press.

Nation, ISP. 2000. Learning Vocabulary in Another Language. Cambridge: Cambridge University Press

Philippines Department of Education. (2009). Institutionalizing mother tongue-based multilingual education (Order no. 74). Pasig City: Author.

Philippines Department of Education. (2012). Guidelines on the implementation of the mother tongue-based multilingual education (MTB-MLE) (Order no. 16). Pasig City: Author.

Plomp, T. (1997). Educational and training system design. Enschede, The Netherlands: Univercity of Twente.

Plomp, T. (2013). Educational design research: An introduction. Educational design research, 11-50.

Rencana Pembangunan JangkaMenengahNasional (RPJMN) 2015-2019. DokumenPerencanaandanPelaksanaan.Kementerian PPN/Bappenas. Jakarta.

Serquince. (2010). Attributes of Effective Reading Programs Among High-Performing, High Poverty Public Elementary School. Unpublished Dissertation.University of the Philippines, Quezon City.

Sinaga, B. (2007). Pengembangan Model Pembelajaran Matematika Berdasarkan Masalah Berbasis Budaya Batak. (Doctoral dissertation, Tidak Diterbitkan, Surabaya: Program Pascasarjana UNESA.

Taylor-Leech, K., & Caet, A. (2012). Mother tongue-based multilingual education: A new direction for Timor Leste. Howthorm: Swinburne Press. (pp. 295-301). Timor-Leste Studies Education.

Tulasiewicz, W. and A. Adams. (2005). "What Is Mother Tongue?" Teaching the Mother Tongue in a Multilingual Europe.Continuum.

UNESCO.(2005). Education in a multilingual world. Paris, France: UNESCO.Retrieved from http://unesdoc.unesco.org/images/0012/001297/129728e.pdf

UNESCO. (2008). Mother Tongue Instruction in Early Childhood Education: A Selected Bibliography. Paris: UNESCO.

UNESCO. (2008a). Mother Tongue Matters: Local Language as a Key to Effective Learning. Paris: UNESCO

UNICEF. (1999). The state of the world's children, 1999. New York: Author