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PARENTS' PERCEPTION ON MOTHER-TONGUE BASED INSTRUCTION AND PUPILS' MATHEMATICS PERFORMANCE

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KeyWords

Modular Mother Tongue-Based Instruction, Content, Time Allotment, Performance Tasks, Assessment of Learning

ABSTRACT

This examined the implementation of teaching Mother Tongue-Based Instruction in teaching elementary Mathematics in Tagoloan Central School. This study utilized mixed method, a combination of quantitative and qualitative research design that investigated the parents' perception on Modular MTB Instruction in Grade 1 Mathematics, the Third Quarter performance rating in Mathematics of the Grade 1 pupils and the significant relationship between the parent's perception on Modular MTB Instruction in Grade 1 Mathematics and the Third Quarter performance rating of Grade 1 pupils for School Year 2021-2022. Findings revealed that parents are strongly satisfied as they perceived Modular MTB Instruction in Grade 1 Mathematics in terms of Instruction, Content, and Performance Tasks. They have observed their children to find Mathematics lessons simple because it is in Mother Tongue. Furthermore, significant difference was also found on the parents' perception on modular MTB instruction in terms of Instruction, Content and Performance Tasks. In addition, there is a significant relationship of parents' perception on Modular MTB Instruction in Grade 1 Mathematics and pupils' Third Quarter performance rating. It is recommended to further investigate to help the parents on how to diligently and responsibly play their part as learning partners in their children's education in this new system brought about by the COVID-19.

INTRODUCTION

The Philippine Basic Education Curriculum changes its face so as the policies – from instruction to assessment. After years of using English as the medium of instruction, the policy makers believe that it is time to recognize the relevance of using the child's language at home for learning through the mandate of Republic Act No. 10533 or Enhanced Basic Education of 2013. This aims to help the children learn lessons more efficiently by using their mother tongue.

The Mother Tongue (MT) as a subject focuses on the development of beginning reading, and fluency from Grades 1 to 3. The learners' Mother Tongue (L1) shall be used as the Medium of Instruction (MOI) in all domains/learning areas from Kindergarten through Grade 3 except Filipino (L2) and English (L3). In other word this will be used in the subjects namely: Mathematics, Araling Panlipunan, Music, Art, Physical Education and Health (MAPEH) and Edukasyon sa Pagpapakatao (ESP) from Grades 1 to 2. The L1 or the mother tongue will continuously be used as a medium of instruction in the transition or bridging process through Grade 3 with the addition of the Science subject (DepEd Order No. 16, s. 2012).

The curriculum must adhere to the principles and framework of Mother Tongue-Based Multilingual Education (MTB-MLE), which starts with the learners where they are and what they already know and progress from there to the unknown; instructional materials and capable teachers are required to implement the MTB-MLE curriculum.

The MTB-MLE policy reverses a century-old practice among schoolchildren of abandoning their native tongues to study a second and third language in school. This practice not only denies children the right and opportunity to learn in their own mother tongues, but it also contradicts the sound pedagogical practice of beginning with what the learner knows and progressing to what the learner does not know. (Monje et al., 2021).

Englis and Boholano (2022) added that if educational systems allowed students to maximize their linguistic preference, it would be beneficial to them especially on their bilingual development and for their school achievement. Furthermore, when students speak a language other than the school's official language during their primary years of learning, they will benefit from the educational system that supports MTB programs.

On the other hand, teachers find it very irrelevant to use MTB or Sinugbuanong Binisaya to their pupils in the primary years. Teachers' attitudes toward the policy are generally negative, owing to colonial thinking, perceived complexity, and a nonutilitarian view of the local language. The challenges that impede teachers' effective policy implementation are a mismatch between the students' language and the language of instruction, a lack of equivalent local terms for some Mathematical terms, and haphazardly done teaching and learning materials (Tenorio, 2021).

Another thing that needs to be considered is the mode of learning in this pandemic time. COVID-19 has caused a lot of problems in the Philippines. There have been a lot of changes in the educational landscape. The current crisis has obliged most education systems to adopt alternatives to face-to-face teaching and learning. Tagoloan Central School is using two (2) modes of teaching, an online learning platform and modular distance learning. Only a few are using online learning platforms and many are using modular learning. This self-learning modules are already considered learning packages containing pre-test, discussion, and a series of evaluation/assessment. It will be distributed to all learners with the modular learning class schedule. The shift of the teaching-learning delivery in schools to modular distance learning made it more challenging, on the part of the teacher as well as the parents.

Based on the study conducted by Ambayon (2020), modular instruction is more operative in the teaching-learning method as equated to usual teaching approaches because in this modular approach the students learn in their own stride. Modular distance learning is student centered because it enables students to learn on their own. However, the implementation of modular instruction provided a variety of challenges to teachers, students, and parents.

The study of Dangle and Sumaoang (2020) showed that one of the main challenges is evident that there are struggles associated with the use of Modular Distance Learning (MDL) especially in Modular Mother Tongue-Based (MTB) Instruction in Mathematics. The implementation of MTB Instruction in Mathematics, using modular instruction and parents' lack of knowledge with the subject are just a few of the many challenges that face today's academe. Thus, this study aims to shed lights about the parents' perception on the Modular MTB Instruction in Grade 1 Mathematics and the pupils' performance of the subject based on their Third Quarter grade.

Theoretical Framework and Conceptual Framework

This study was anchored on the Theory of Interdependence developed by Cummins as cited by Morgan (2020). This theory explained the positive transfer of literacy skills from First Language or Home Language (L1-Sinigbuanong Binisaya) to Second Language (L2-Filipino). He argues that the level of literacy competence in L2 that a child attains is partially a function of the level of competence the child has in L1 at the time L2 teaching begins intensively. Thus, if an education system submerges learners in L2 without first trying to further develop the skill they already have in L1, the school risks impeding their competency in L2 for years to come, while also limiting continued, autonomous development of their L1. This means that once students have established a literate base in one language, they should be able to transfer knowledge and skills gained in that language to second language. As long as they are adequately exposed to the second language and motivated to acquire it.

Cummins Interdependence theory reveals that students who have had some schooling in their primary language will succeed academically as they are learning the second language. Teachers will be able to take advantage of the skills and linguistic knowledge (Language Arts) and content areas (Science, Math, Social Studies and Health) that the student already know.

When second language learners come to school with a good academic foundation in their primary language their learning of a second language broadens their foundation for further learning. As students are learning the second language it will be important for them to continue learning content in their primary language at home and at school. Giving students content rich literature in both languages will encourage their academic success. This theory supports the principle of instruction in the mother tongue, which aids in the development of competent and well-rounded individuals.

It is supported by Republic Act 10533 or known as the Basic Education Act of 2013 which clearly mentioned to observe the MTB-MLE concepts and frameworks that starting from where the learners are and what they already know and progresses from there to the unknown and in line with the guidelines of the DepEd (Department of Education) DepEd Order No. 74, s. 2009 in their implementation of the K-12 Curriculum which caused a significant change in the current educational landscape. This order institutionalized Mother Tongue-Based Multilingual Education (MTB MLE) nationwide, requiring the use of the learners' mother tongue (MT) in improving learning outcomes from Kindergarten to Grade Three.

Methodology

This study utilized mixed method, a combination of quantitative and qualitative research design that investigated the relationship between the Parent's Perception on Modular MTB Instruction in Grade 1 Mathematics and the Third Quarter Performance Rating of Grade 1 pupils of Tagoloan Central School for School Year 2021-2022. According to George (2021) in order to answer the research question, mixed methods research combines elements of quantitative and qualitative research. Because it incorporates the benefits of both methods. Mixed methods can provide a more complete picture than a standalone quantitative or qualitative study.

This study was conducted at Tagoloan Central School, Tagoloan District, Division of Misamis Oriental. The Tagoloan Central School was estimated to have started or founded in the year 1918 during World War 1. Tagoloan Central School is located in an urban community with busy street. The school is within the business and commercial center of the town, then accessible to all forms of land transportation. The people of Tagoloan are a mixture of different ethnic groups. Cebuano dialect is the most common dialect spoken by the people residing in the area. Majority is Roman Catholic but other religious groups are also present. There is even a Muslim community in a nearby barangay

It has ten barangays namely: Baluarte, Casinglot, Gracia, Mohon, Natumolan, Poblacion, Rosario, Sta. Ana, Sta. Cruz and Sugbongcogon. There are fishing grounds in Tagoloan particularly in Barangay Baluarte, Casinglot, and Sugbongcogon. Some residents of these barangays are fishermen and that has a volume catch of 4,500 kilograms per month. The marketplace in the municipality is rich in fresh meat and fish that are produced by the hardworking people of Tagoloan. A School Principal I manage Tagoloan Central School with 104 teaching and 4 non-teaching personnel; 10 Master Teachers, 15 Teacher III, 16 Teacher II and 61 Teacher I. There are 3,641 enrolled as learners as for School Year 2021-2022.

The respondents of the study were select parents of the Grade One pupils of Tagoloan Central School through random sampling using the online app. With the 454 parents' population in the Grade 1, at 0.5% margin of error, there were 208 parent-respondents in this study. The same number was the pupil-respondents whose Third Quarter Performance Rating in Grade I Mathematics was taken as data.

There were two research instruments that were utilized in this study. The researcher-made questionnaire and the Third Quarter Performance Rating in Mathematics of the Grade I pupils found in the Curriculum Management Support System (CMSS) form. The parents were requested to answer the survey questionnaire either through Google Form or through hard copy. They were assured that their answers were taken with utmost confidentiality. For the pupils' Third Quarter Performance Rating, the researcher wrote a letter asking permission from the school principal to allow her to copy the rating as her secondary data of her study.

The researcher-made questionnaire underwent validation, which was graded by licensed English and Math teachers. After obtaining permission from the validators, they rated the researcher-made questionnaire, and the researchers gathered the rating data for calculation. The overall mean of the ratings was 4.87. The result of 4.87 belongs to a scale of 5 which is Very Highly Valid. This means that the questionnaire was valid and could provide unbiased data for the study, allowing 0-5% margin of error.

The result of the Reliability Test using the Chronbach Alpha was done prior to the survey proper through asking parents who were not the respondents of the study to answer the researcher-made questionnaire. The researcher-made questionnaire has 0.95 reliability score which belongs to the range of Excellent. Therefore, the researcher-made questionnaire was acceptable to be used for the survey.

The following statistical treatments were utilized to analyze the data of the study:

Problem 1. Mean value and Standard Deviation were used to present the Parents' Perception on Modular MTB Instruction in Grade 1 Mathematics.

Problem 2. Frequency and Percentage were used to present the Third Quarter Performance Ratings of the Grade 1 pupils. **Problem 3.** T-test ANOVA was used to determine the significant difference of the Parents' Perception on Modular MTB

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Instruction in Grade 1 Mathematics.

Problem 4. Pearson Product Moment Correlation Coefficient was used to determine the significant relationship between the Parents' Perception on Modular MTB instruction and pupils' Third Quarter Performance Rating in Grade 1 Mathematics.

Results and Discussions

Problem 1. What is the parents' perception on modular MTB instruction in Grade 1 Mathematics in terms of: Instruction; Content; and Performance Tasks?

Table 1

Parents' Perception on Modular MTB Instruction in Grade 1 Mathematics in terms of Instruction

INDICATORS	MEAN	SD	DESCRIPTION	INTERPRETATION
In terms of Instruction, my child Understands Mother Tongue instruction in Mathe- matics.	3.81	0.55	Strongly Agree	Strongly Satisfied
Enjoys Mathematics subject because of Mother Tongue instruction.	3.65	0.68	Strongly Agree	Strongly Satisfied
Answers Mathematics module by himself/herself.	3.24	1.03	Agree	Satisfied
Asks me to translate some Mother Tongue instruc- tion.	3.70	0.57	Strongly Agree	Strongly Satisfied
Follows Mother Tongue instruction in Mathematics correctly.	3.72	0.64	Strongly Agree	Strongly Satisfied
Total	3.63	0.19	Strongly Agree	Strongly Satisfied

Note: 3.25 - 4.00 Strongly Agree: Strongly Satisfied; 2.50 - 3-24 Agree: Satisfied; 1.75 - 2.49 Disagree: Dissatisfied

1.00 - 1.74 Strongly Disagree: Strongly Dissatisfied

Table 1 shows the Parents' Perception on Modular MTB Instruction in Grade 1 Mathematics in terms of Instruction in Grade 1 Mathematics. The overall Mean is 3.63 (0.19 SD) with a description of Strongly Agree and interpreted as Strongly Satisfied. This implies that parents are strongly satisfied with the use of Mother Tongue-Based instruction in Grade I Mathematics. Their children can understand the Mother Tongue instruction. They can follow the instruction in Mother Tongue. This is the reason that they enjoy the subject. But they ask their parents to still translate it for confirmation because it says in the indicator that their children do not answer the modules by themselves.

The indicator, "My child understands Mother Tongue instruction in Mathematics," has the highest Mean of 3.81 (0.55 SD) with a description Strongly Agree and interpreted as Strongly Satisfied. This means that the Grade 1 pupils can understand MTB instruction in Mathematics. This implies that they can do and answer Mathematics competencies because they understand the MTB. "*Kaya ra sa akong anak kay binisaya man kini*", as one parent said. Another parent exclaimed, "*Okey ra kay binisaya*."

With the use of MTB, pupils will not anymore struggle to learn the concepts and skills required in the subject as Pilos et al., (2020) described as complicated. Alberto et al., (2016) said that the language used is particularly important in coping with circumstances that clarify the familiarity of learners with the medium of instruction used.

The indicator, "My child answers the Mathematics' module by himself/herself," has the lowest Mean of 3.24 (1.03 SD) with a description Agree and interpreted as Satisfied. This means that even the child can understand the MTB Instruction in Mathematics, children still depend with their parents. It may seem that the children specifically the Grade I pupils still need confirmation from their parents especially that they study at home. They have parents who assist them in their studies.

Parents' involvement is active in this time of COVID-19 pandemic. They know their roles in their pupils' learning (Malipot, 2021). They assist their pupils in their studies. Besides, Grade 1 pupils are still young. They still need assistance from their parents. Some parents said during the unstructured interview that their children will never answer without them even if they understand the instructions. *"Aguy! dili gyud mo answer kun wala ko, maski kasabot siya sa unsaon." Another parents said that their children can answer but there are times they asked help from me, " Oo, kaya ra kay binisaya man, peru usahay gapatabang giyud siya sa akua.*

According to Agaton and Cueto (2021) some students are self-directed learners but others struggle to grasp the key concepts of the lesson in the absence of a teacher. So parents must adjust and adapt to the new instructional setup for a better

learning outcome. Pupils must study alongside their parents. FlipScience (2020) reiterated that parents are extremely important in children's education. Their primary role in modular learning is to connect with the child and guide them.

Table 2

Parents' Perception on Modular MTB Instruction in Grade 1 Mathematics in terms of ContentINDICATORMEANSDDESCRIPTION

INDICATOR		50	DESCRIPTION	
In terms of Contents, my child Understands his/her Math lessons because these are discussed in Mother Tongue.	3.49	0.94	Strongly Agree	Strongly Satisfied
Reads and identifies shapes in Mother Tongue.	3.28	1.03	Strongly Agree	Strongly Satisfied
Names and identifies fractions 1/2 and1/4) in Mother Tongue.	3.25	1.03	Strongly Agree	Strongly Satisfied
Arranges repeating patterns in Mother Tongue.	3.22	1.12	Strongly Agree	Satisfied
Finds Math lessons simple because these are in Mother Tongue.	3.61	0.93	Strongly Agree	Strongly Satisfied
Total	3.37	0.08	Strongly Agree	Strongly Satisfied

Note: 3.25 - 4.00 Strongly Agree: Strongly Satisfied; 2.50 - 3-24 Agree: Satisfied; 1.75 - 2.49 Disagree: Dissatisfied

1.00- 1.74 Strongly Disagree: Strongly Dissatisfied

Table 2 presents the Parents' Perception on Modular MTB instruction in terms of Contents in Grade 1 Mathematics. The overall Mean is 3.37 (0.08 SD) which is described as Strongly Agree and interpreted as Strongly Satisfied. It means that the parents are Strongly Satisfied as they perceived modular MTB Instruction in Grade 1 Mathematics in terms of contents, they have observed their children to find Mathematics lessons simple because it is in Mother Tongue. As mentioned in Table 1, they understand Mother Tongue instruction so they also understand the contents.

Moreover, another idea came out during the KII that if their children can read, they can understand the contents in the module even in Mathematics. *"Oo, kaya ra niya kay kabasa naman akong anak,"* one parent answered. Competencies in Mathematics can easily be attained. Notwithstanding those other pupils who can read but there are times that they really ask help. *"Makaya ra sa akong anak kay kabasa naman siya. Naa lay usahay nga gapatabang siya."*

Furthermore, the indicator, "My child arranges repeating patterns in Mother Tongue got the lowest Mean of 3.22 (1.12 SD) which is still described as Strongly Agree and interpreted as Strongly Satisfied. Grade 1 pupils in the Third Quarter. As stipulated in the DepEd's K to 12 Curriculum Guide in Mathematics, Grade 1 should learn demonstrate understanding and appreciation of key concepts and skills involving numbers and number sense, patterns and Algebra. It is about continuous and repeating patterns and number sentences on which it needs mastery. Pupils should not only understand the contents in Mother Tongue but also how it is applied and mastered. It helps them to see relationships, connections and appreciation to creative and aesthetic qualities in Mathematics (https://wcedonline.westerncape.gov.za/ncs/mores/ma_ip.html). Some responses attest to this:

"Oo, maski kasabot siya tungod kay binisaya, akua lang gihapon siya ginaguidean kay naay uban words or instruction o topic nga maglisod siya ug sabot."

" Gapatabang siya sa Mathematics labi na ug wala siya nabal-an."

Table 3 reveals the Parents' Perception on Modular MTB Instruction in terms of Performance Tasks in Grade 1 Mathematics. The overall Mean is 3.41 (0.17 SD) with a description of Strongly Agree and interpreted as Strongly Satisfied. This means that parents can say that their children or the Kindergarten pupils can answer activities in Mathematics quickly. Kindergarten pupils can do the activities well because it is in MTB which make them have good grades. "...okeyhan raman ko sa Mathematics na binisaya, kaya ra sa bata," "Ganahan ko sa MTB kay sayon ra para sa akong anak. Unta lang dili mugamit ug lisod kayo nga mga binisaya. "

INTERPRETATION

Table 3

Parents' Perception on Modular MTB Instruction in Grade 1 Mathematics in terms of Performance Tasks

INDICATOR	MEAN	50	DESCRIPTION	INTERPRETATION
In terms of Performance Tasks, my child Answers Mathematics activities quickly because the activities are in Mother Tongue.	3.59	0.90	Strongly Agree	Strongly Satisfied
Does performance tasks in Mathematics well because the tasks are in Mother Tongue.	3.59	0.75	Strongly Agree	Strongly Satisfied
Does performance tasks in Mathematics by him- self/herself.	3.07	1.17	Agree	Satisfied
Shows mastery in Mathematics subject.	3.22	1.12	Strongly Agree	Satisfied
Gets good grades in Mathematics.	3.60	0.91	Strongly Agree	Strongly Satisfied
Total	3.41	0.17	Strongly Agree	Strongly Satisfied

Note: 3.25 - 4.00 Strongly Agree: Strongly Satisfied; 2.50 - 3-24 Agree: Satisfied; 1.75 - 2.49 Disagree: Dissatisfied

1.00 - 1.74 Strongly Disagree: Strongly Dissatisfied

The indicator, "My child gets good grades in Mathematics," has the highest Mean of 3.60 (0.91 SD) which is described as Strongly Agree and interpreted as Strongly Satisfactory. It implies that parents are Strongly Satisfied with the grades of their children. They consider it good grades.

The indicator, "My child does performance tasks in Mathematics by himself/herself," has the lowest Mean of 3.22 (SD=1.2) with a description of Agree and interpreted as Satisfied. Some parents admit that their children do not do the performance tasks in Mathematics by themselves. They are consistent with their answer in Table 3, third indicator which says, "My child answers modules by himself/herself," which also gets a description of Agree and interpreted as Satisfied. Some parents told the researcher that their children really asked for their assistance in doing the tasks in Mathematics. *"Mangayo sya usahay ug tabang sa pagbuhat sa mga tasks sa Mathematics."* One answered, *"Naa man gyud uban lisod kaayo ang bisaya mao magpatabang gyud ako anak."*

Lau and Lee (2021) mentioned in their study that most children struggled to complete distance learning at home. They added that majority of the children were unable to complete the learning tasks on their own. It means that children need assistance from parents. As Nalagon (2021) described parents and guardians as Module-ator, Bundy-clock and Home Innovator because they are the ones who assist their children in collecting modules, observing schedule for their studies and providing a good learning space and even in teaching and answering their children's modules.

Table 4 displays the overall parents' perception on modular MTB Instruction in Grade 1 Mathematics. The overall Mean is 3.47 (0.15 SD) with a description of Strongly Agree and interpreted as Strongly Satisfied. This implies that parents like to have Mother Tongue-Based Instruction in Mathematics. They found that their children, the Grade 1 pupils can understand the instruction in the subject. If they understand the instructions, it means they can get what the contents of the Mathematics' modules have. It is then expected that their children can answer the assessment of learning in the modules as they end their studies in the module.

The variable, "Instruction" has the highest Mean of 3.63 (0.19 SD) among the parents' perception on modular MTB Instruction in Grade 1 Mathematics. Parents appreciate the Mathematics Instruction to be in MTB because it is easier for their children to study and understand. This is an advantage to the children having MTB instruction because according to Bernardo, (2020) that proper language brings academic success. This is the basis of DepEd Order No. 16, s. 2012 (Guidelines on the implementation of the Mother Tongue-Based Multilingual Education) that if MTB is used as medium of instruction, pupils will acquire the competencies more quickly. Parents can prove it based on the responses during the Key Informant Interview (KII). That parents observe their children like the MTB Instruction. "*Ganahan man ko kay binisaya …*", "*Kaya ra kayo sa ako anak.*"

Overall Parents' Perception on Modular MTB Instruction in Grade I Mathematics.

INDICATORS	MEAN	SD	DESCRIPTION	INTERPRETATION
Instruction	3.63	0.19	Strongly Agree	Strongly Satisfied
Content	3.37	0.08	Strongly Agree	Strongly Satisfied
Performance Tasks	3.41	0.17	Strongly Agree	Strongly Satisfied
Overall	3.47	0.15	Strongly Agree	Strongly Satisfied

Note: 3.25 - 4.00 Strongly Agree: Strongly Satisfied; 2.50 - 3-24 Agree: Satisfied; 1.75 - 2.49 Disagree: Dissatisfied

1.00 - 1.74 Strongly Disagree: Strongly Dissatisfied

The variable, "Content" got the lowest Mean of 3.37 (0.08 SD) with a description still Strongly Agree and interpreted as Strongly Satisfied. Though the Grade 1 pupils understand MTB Instruction, they still cannot carry all the contents in the module. Grade 1 pupils are still young. They still need guidance from parents especially that there are MTB which are hard to understand. As most parents suggested that those common English words should be better used than using Sugbuhanong Bisaya.

" Basin pwede ra nga English nalang guro ang mga numbers, shapes and colors kay maoy naandan sa akong anak. " Basin pwede ra nga isagol ang binisaya ug English. Kanang binisaya ang instruction, English lang dayon ang uban terms." "Ganahan ko sa MTB kay sayon ra para sa akong anak. Unta lang dili mugamit ug lisod kayo nga mga binisaya. " "Ang kana lang siguro mga words sa binisaya nga medyu lisod sabton. Maski ako gakalibog usahay."

Problem 2. What is the Third Quarter performance of the Grade 1 pupils in Mathematics?

Table 5 Third Quarter Performance Rating in Grade 1 Mathematics Pupils' Performance Rating in Mathematics	atics	Frequency	Percentage
Outstanding		59	28.4
Very Satisfactory		90	43.3
Satisfactory		59	28.4
Fairly Satisfactory		0	0
Did not meet expectations		0	0
	TOTAL	208	100%

Table 5 exposes the pupils' Performance Rating in Grade 1 Mathematics for the Third Quarter. It shows the number of pupils who got each performance rating. There are 90 (43.3%) pupils who are Very Satisfactory. Outstanding and Satisfactory have the same number of pupils which is 59 (28.4%). There are no pupils who are Fairly Satisfactory and Did not meet expectations. Result implies that pupils in Grade 1 are already literate in Mathematics because no one gets the failed ratings nor the lowest passing marks. It means that pupils meet the competencies in Mathematics for the Third Quarter. These competencies are the key concepts and skills involving numbers and number sense like whole numbers up to 100, ordinal numbers up to 10th, money up to PhP100, addition and subtraction of whole numbers, fractions ½ and ¼ ; geometry of 2 and 3 dimensional objects, patterns and algebra in continuous and repeating patterns and number sentences and many more. According to Englis and Boholano (2021) that using the first language in learning Mathematics enables them to learn better and productive. Even in 2016, Alberto et al., said in their studies language used is particularly important in coping with circumstances that clarify the familiarity of learners with the medium of instruction used.

3. Is there a significant difference on parents' perception on Modular MTB Instruction in Grade 1 Mathematics?

Table 6 shows the Test Difference on parents' perception on Modular MTB Instruction in Grade 1 Mathematics. The computed P-value is 0.00 which is lower than the 0.05 alpha so the Null Hypothesis is rejected. Therefore, there is a Significant Difference on the parents' perception on Modular MTB instruction in terms of Instruction, Content and Performance Tasks. It means that a difference is detected between or among Instruction, Content and Performance Tasks.

Significant Difference on Parents' Perception on Modular MTB Instruction in Grade 1 Mathematics.							
Source of Variation	SS	df	MS	F	P-value	F crit	Interpretation
Between Groups	7.85	2.00	3.92	15.70	0.00	3.01	Significant
Within Groups	155.7	621.00	0.25				
Total	163.2	623.00					

Table 6 Significant Difference on Parents' Perception on Modular MTB Instruction in

Note: Alpha 0.05

The use of Mother Tongue enables pupils to be more active and confident in answering their modules for the reason that instructions were easy to follow. Contents allows learners to understand what they are meant to learn since the medium of instruction is in Mother Tongue. Performance task by pupils can be answered directly and as a result, pupils get good grades. Not all pupils are in the same position in terms of education acquisition in this remote learning process, as a result parents must understand their role as learning agents and as partners in the teaching- learning process.

4. Is there a significant relationship between the parents' perception on Modular MTB instruction and pupils' Third Quarter Performance Rating in Grade 1 Mathematics?

Table 7

Significant Relationship on Parents' Perception on Modular MTB Instruction and Pupils' Learning Performance

Math modular MTB Instruction in terms of:		r value	P value	Remarks	Decision	Interpretation
Instruction		0.52	0.00	Moderate high positive corre- lation	Reject null hy- pothesis	Significant rela- tionship
Content	Performance Rating	0.61	0.00	Moderate high positive corre- lation	Reject null hy- pothesis	Significant rela- tionship
Performance		0.62	0.00	Moderate high positive corre- lation	Reject null hy- pothesis	Significant rela- tionship
OVERALL Instruction Content Performance		0.80	0.00	Very High positive corre- lation	Reject null hy- pothesis	Significant rela- tionship

Table 7 presents the Significant Relationship of parents' perception on Modular MTB Instruction and pupils' Third Quarter Performance Rating in Grade 1 Mathematics. It reveals that the P-value of 0.00 is lower than the 0.05 alpha which indicates that the Null Hypothesis is rejected because it shows a Significant Relationship.

It implies that parents' perception on modular Mother-Tongue based Instruction (MTB) in Grade 1 Mathematics in terms of Instruction, Content and Performance Tasks has something to do with the pupils rating specifically in the Third Quarter. MTB instruction relates to the rating the pupils get. Since their rating is higher than the passing rating of 75 or Fairly Satisfactory, it means that MTB instruction even if it is modular has helped their rating on the Satisfactory, Very Satisfactory and Outstanding as shown in Table 7. It can be concluded that pupils who were taught using their mother tongue showed a remarkable learning.

Teachers should use the findings of this study to develop academic interventions with MTB instruction not only in Mathematics but for other subjects which MTB can be applied for low-achieving pupils. Besides, the Department of Education implemented this program because it has been proven that pupils taught using the L1 as the medium of instruction improve their studies better.

However, in this highly sophisticated world, where children have various programs to watch over the television or via Internet with English as the medium of communication, some children now could hardly understand all of their L1. Parents are suggesting in the KII that some words in the module especially in Mathematics need not be translated to MTB. Below are some suggestions of the parents: " Tsada man siya kay nakabinisaya pru dili lang unta tanan kay naay mga words nga pati ako dili kasabot. Siguro mas nice if ang money nga lesson is naka English kay sa akong obserbasyon, galisod akong anak ug ila sa kwarta kung binisaya akong itudlo niya."

"Nice man siya kay nakabinisaya masabtan jud sa mga bata peru basin pwde ra nga English nalang ang uban mga terms, dili jud pure binisaya. Like sa numbers, mas maayo ang akong anak sa English kaysa binisaya."

" Unta machange ang uban mga words nga grabi kalahom nga binisaya. Example, katakos, pagtulon-an, use the word Zero instead of wala, ug uban pa."

" Mas sayon nga mga terms ang gamiton kay naa mga uban words nga lisod para sa mga bata. Peru overall, nice ang MTB kay mao may naandan gud sa bata nga inistoryahan kay maoy gamit namu dani sa balay"

"Ganahan ko sa MTB kay sayon ra para sa akong anak. Unta lang dili mugamit ug lisod kayo nga mga binisaya.

"Ang kana lang siguro mga words sa binisaya nga medyu lisod sabton. Maski ako gakalibog usahay.

" Basin pwede ra nga isagol ang binisaya ug English. Kanang binisaya ang instruction, English lang dayon ang uban terms."

Conclusions

Based on the findings gained, the following conclusions were drawn. On the basis of the parents' perception on Modular Mother-Tongue Based instruction in terms of Instruction, Content and Performance Tasks below are the conclusions.

1. Parents are strongly satisfied with the use of Mother Tongue-Based Instruction in Grade 1 Mathematics because their children can understand and follow instruction. Since pupils can understand MTB instruction, they can also carry out the contents in MTB in the Grade 1 Mathematics modules. They can also do most of the performance tasks based on the Most Essential Competencies for the Third Quarter.

2. Grade 1 pupils have met the Mathematics' competencies for the Third Quarter because most of the pupils have the Very Satisfactory rating. Not one of the respondents has failed. The use of Mother-Tongue in Mathematics can be one of the reasons of the pupils' good grades.

3. Since there is a Significant Difference, the null hypothesis is Rejected. It means that a difference is detected between or among Instruction, Content and Performance Tasks. The use of Mother Tongue enables pupils to be more active and confident in answering their modules for the reason that instructions were easy to follow. Contents allows learners to understand what they are meant to learn since the medium of instruction is in Mother Tongue. Performance task by pupils can be answered directly and as a result, pupils get good grades.

4. There is a Significant Relationship between the Parents' Perception on Mother-Tongue Based Instruction in Grade 1 Mathematics to the pupils Third Quarter performance rating. The Mother-Tongue Based instruction is effective even if it is modular because it has helped improve the pupils' rating. Pupils who were taught using their mother tongue showed a remarkable learning.

References

- [1] Education. Retrieved from https://www.dpublication.com/abstract-of-3rd-icate/27-427/.
- [2] Daniela, Linda et. al. (2021, March 25). *Parents' perspectives on remote learning in the pandemic context*. MDPI. <u>https://www.mdpi.com/2071-1050/13/7/3640</u>
- [3] Department of Education. (2020, May 20). *Towards A Sustainable and Working Deped Commons*. Department of Education Commons. <u>https://commons.deped.gov.ph/deped-commons-framework.pdf</u>
- [4] Department of Education. (2021, November 17). DepEd empowers parents for a better home learning experience with children. Department of Education. <u>https://www.deped.gov.ph/2021/11/17/deped-empowers-parents-for-a-better-homelearning-experience-with-children/?utm_source=rss&utm_medium=rss&utm_campaign=deped-empowers-parents-for-abetter-home-learning-experience-with-children</u>
- [5] DO 031, S. 2020. (2020, October 2). *Interim guidelines for assessment and grading in light of the basic education learning continuity plan*. Department of Education. <u>https://www.deped.gov.ph/2020/10/02/october-2-2020-do-031-s-2020-in-terim-guidelines-for-assessment-and-grading-in-light-of-the-basic-education-learning-continuity-plan/</u>
- [6] D0 16, S. 2012. (2012, February 17). Guidelines on the implementation of the mother tongue-based- Multilingual education (MTB-MLE). Department of Education. <u>https://www.deped.gov.ph/2012/02/17/do-16-s-2012-guidelines-on-the-imple-mentation-of-the-mother-tongue-based-multilingual-education-mtb-mle/</u>
- [7] D0 74, S. 2009. (2009, July 14). *Institutionalizing mother tongue-based multilingual education (MLE)*. Department of Education. <u>https://www.deped.gov.ph/2009/07/14/do-74-s-2009-institutionalizing-mother-tongue-based-multilingual-education-mle/</u>
- [8] D0 8, S. 2015. (2015, April 1). Policy guidelines on classroom assessment for the K to 12 basic education program. Department

of Education. <u>https://www.deped.gov.ph/2015/04/01/do-8-s-2015-policy-guidelines-on-classroom-assessment-for-the-k-to-12-basic-education-program/</u>

- [9] Englis, T. P., & Boholano, H. B. (2021, March). Mother tongue -based instruction in teaching elementary mathematics. ResearchGate. <u>https://www.researchgate.net/publication/350276236 Mother Tongue -Based Instruction in Teaching Elementary Mathematics</u>
- [10] FlipScience. (2020, October 5). '*Tagapagdaloy':How Filipino parents can help ensure successful modular distance learning. FlipScience - Top Philippine Science News and Features for the Inquisitive Filipino*. <u>https://www.flipscience.ph/news/fea-</u> <u>tures-news/tagapagdaloymodular-distance-learning</u>
- [11] Goerge, Tegan. (2021, August 16). *An introduction to mixed methods research*. Scribbr. <u>https://www.scribbr.com/meth-odology/mixed-methods-research/</u>
- [12] Han, M. (2018). EFL learners' reading test-taking strategies and English proficiency. *Journal of Language Sciences*, *25*(2), 143-166. <u>https://doi.org/10.14384/kals.2017.25.2.143</u>
- [13] Lapada, A. A., Miguel, F. F., Robledo, D. A., & Alam, Z. F. (2020). Teachers' COVID-19 awareness, distance learning education experiences and perceptions towards institutional readiness and challenges. *International Journal of Learning, Teaching and Educational Research*, 19(6), 127-144. <u>https://doi.org/10.26803/ijlter.19.6.8</u>
- [14] Lau, E. Y. H., & Lee, K. (2020, November 11). Parents' views on young children's distance learning and screen time duringCOVID-19classsuspensioninHongKong.Taylor&Francis.https://www.tandfonline.com/doi/full/10.1080/10409289.2020.1843925
- [15] Llego, Mark Anthony. (2021). *DepEd learning delivery modalities for school year 2020-2021*. TeacherPH. <u>https://www.teacherph.com/deped-learning-delivery-modalities/</u>
- [16] Luistro. (2013, July 10). DepEd strengthens mother tongue-based education to improve studentsâ€[™] learning. Latest News & Current Event Updates | Yahoo Philippines. <u>https://ph.news.yahoo.com/deped-strengthens-mother-tongue-based-education-improve-students-171203454.html</u>
- [17] Malipot, M. H. (2020, August 4). *Manila Bulletin*. <u>https://mb.com.ph/2020/08/04/teachers-air-problems-on-modular-learning-system/</u>
- [18] Malipot, Merlina H. (2021, November 19). *DepEd cites vital role of parents on children's home learning experience*. Manila Bulletin. <u>https://mb.com.ph/2021/11/19/deped-cites-vital-role-of-parents-on-childrens-home-learning-experience/</u>.
- [19] Martineau, M. D., Charland, P., Arvisais, O., & Vinuesa, V. (2020, September 14). *Education and COVID-19: Challenges and opportunities*. Canadian Commission for UNESCO. <u>https://en.ccunesco.ca/idealab/education-and-covid-19-challenges-and-opportunities</u>
- [20] Middleton, F. (2021). The Four Types of Reliability. Scribbr..com
- [21] Monje, Jennifer D, Orbeta, Aniceto Jr. C, Francisco, Kris A, Capones, Erlinda M. (2021). 'Starting Where the Children Are': Process Evaluation of the Mother Tongue-Based Multilingual Education Program Implementation. Think Asia Go to Knowledge from Asia's Top Think Tanks. <u>https://think-asia.org/bitstream/handle/11540/13661/pidsrp2102.pdf?sequence=1</u>
- [22] Morgan, B. M. (2020). Bridging the L1-L2 divide. *Language Learning and Literacy*, 309-325. <u>https://doi.org/10.4018/978-1-5225-9618-9.ch016</u>
- [23] Pascua, Alain Del, B. (2020). *Department of Education Commons*. <u>https://commons.deped.gov.ph/depedcommons-framework.pdf</u>
- [24] Pe Dangle, Y. R. (2020). The implementation of modular distance learning in the Philippine secondary public schools. *Proceedings of The 3rd International Conference on Advanced Research in Teaching and Educa-tion*. <u>https://doi.org/10.33422/3rd.icate.2020.11.132</u>
- [25] Perez, A. L., & Alieto, E. (2018, December). Change of "Tongue" from English to a Local Language: A Correlation of Mother Tongue Proficiency and Mathematics Achievement. *ERIC Education Resources Information Center*. <u>https://eric.ed.gov/?id=ED597105</u>
- [26] Pillos, Marymay B., et al. (2020, November 1). Effect of mother-tongue based instruction on pupils mathematical word problem solving skills. ResearchGate. <u>https://www.researchgate.net/publication/345655192 Effect of Mother-Tongue Based Instruction on Pupils Mathematical Word Problem Solving Skills</u>
- [27] Quinones, M. T. (2020, July 3). *DepEd clarifies blended, distance learning modalities for SY 2020- 2021. Philippine Information Agency.* PIA. <u>https://pia.gov.ph/news/articles/1046619</u>
- education [28] Republic Act No. 10533 or enhanced basic of 2013 -Google search. (n.d.). Google. https://www.google.com/search?q=Republic+Act+No.+10533+or+Enhanced+Basic+Education+of+2013&oq=republic+act&ags=chrome.2.69i59i69i57i69i59i0i512l2i0i433i512i69i60l2.5902j0j7&sourceid=chrome&ie=UTF-8
- [29] Roguel, S. M. (2018, May 5). *Instructional module and its components*. Documents Free Download PDF. <u>https://nano-pdf.com/download/instructional-module-and-its-components_pdf</u>
- [30] Tenorio, A. D. (2022). When language gets into the equation: Mother tongue-based multilingual education (MTB-MLE) policy appropriation in elementary mathematics instruction. *Journal of Multilingual and Multicultural Development*, 1-14.

- [31] Torres, Rossana C. (2021, June). <u>https://www.researchgate.net/profile/Rossana-Torres/publication/352551820 Ad-dressing the Learning Gaps in the Distance Learning Modalities/links/60cf2c1b458515dc1795c534/Addressing-the-Learning-Gaps-in-the-Distance-Learning-Modalities.pdf</u>
- [32] Tupas, R., & Martin, I. P. (2017). Bilingual and mother tongue-based multilingual education in the Philippines. *Bilingual and Multilingual Education*, 247-258. <u>https://doi.org/10.1007/978-3-319-02258-1_18</u>

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