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Effectiveness Of Marungko Approach In Teaching Mother-Tongue-Based Language For Kindergarten Learners Using Online Classes

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Abstract

This study determined the effectiveness of the Marungko approach in teaching mother tongue–based language to kindergarten learners using online classes in two identified public elementary schools. It utilized the quantitative-qualitative research method following the quasi-experimental design. The study used the Analysis of Covariance (ANCOVA) in testing the significant differences between the pre-test and post-test performances of the kindergarten learners in the mother tongue–based language in terms of reading, writing, and numeracy for the control and experimental groups. A phenomenological design was utilized for the qualitative research in which the lived experiences of the parents were identified. Results showed a significant difference between the control and experimental groups in Cebu City Division for reading but not in writing and numeracy. However, there was a significant difference between the control and experimental groups in reading, writing, and numeracy in the Lapu-Lapu City Division. Therefore, integrating the Marungko approach in online classes for mother tongue–based language for kindergarten was effective. Challenges parents encountered in the online class include the limited time to assist the child's learning needs, internet connectivity at home, and limited knowledge of techniques in teaching kindergarten. The study further recommended that its output be adopted.

Keywords: Early Childhood Education, Marungko Approach; Mother Tongue–Based Language for Kindergarten; Quantitative-Qualitative Research, Cebu

I. Introduction

Basic education shall be taught in languages understood by the learners because it plays a strategic role in molding the formative years of learners. Language in education is pivotal to meaningful and successful teaching-learning (Trujillo, 2020). Filipino teachings innovate and continuously adapt to the onset changes of what the education department has declared for ages(Zuhairi et al., 2020). This innovation includes applying today's ways of "new normal" in education, shifting from traditional face-to-face to online classes(Bağcı, 2022). However, many circumstances met upon adapting the digital way of learning(Hofer et al., 2021) and disregarding the primary language that the child naturally(Cenoz & Gorter, 2020) should and will always be spoken. According to Adriano et al. (2021), the mother tongue has been the issue that has started to be resolved with the implementation granted in every school. Enforcing the Marungko Approach in teaching reading(Baldevarona, 2020) through online classes using the mother tongue for kindergarten would be a reform of effectiveness queries.

Using the mother tongue in the Philippines enables equal opportunity to access and facilitate children's learning(Lang-ay & Sannadan, 2021). The study of He et al. (2020) revealed that children learn to read and write and learn academic content and other languages using one of the most critical factors - the child's first language, home language, or

heritage language. Jovchelovitch (2019) claimed that children acquire the learning competencies based on what they already know from their community and culture; primary education programs(Kokkalia et al., 2019) that start in children's mother tongue are believed to help students build up early reading skills more quickly, as well as transfer critical skills to a second or a third language. None of the substitutes for face-to-face instruction as classroom teaching have been used for ages(Stoian et al., 2022).

There is an exciting concept that can be learned virtually and done so effectively, and there are other things that kids need to meet and work together. This pandemic has taught us to be equipped with new ideas, skills, and online teaching knowledge. Kindergarten learners are expected to be more interested when technology is integrated into lessons. It also provides varied opportunities to make learning more meaningful by teaching the same things in new ways. Technology can encourage dynamic participation in learning when teachers are well-equipped with technical skills and knowledge.

In Cebu, the child's first language is called Sinugbuanong Bisaya. The language mentioned pictures an example of other native languages and considerably functions as a significant courier in transporting ideas, beliefs, and culture of a particular area. Preferably, the children speak most of Sinugbuanong Bisaya and find comfort in translating, interpreting, visualizing, and delivering messages when used as the medium of instruction.

Parent involvement has been recognized throughout the years(Lara & Saracostti, 2019). Parents want their children to succeed academically, especially in school, and their children's welfare, regardless of their economic status (Reis & Renzulli, 2021). Despite the pandemic, teacher-parent collaboration in teaching kindergarten learners is essential. Since it has been announced that the mode of teaching this School Year 2020-2021 is an online class, parents should guide their children in learning, and teachers should know about Technology. essential

As today's educators struggle to face the same pressure to start exposing children to academic skills at an early age, the Marungko approach in teaching the mother tongue for kindergarten may become a progressive tool that will enable the further growth of each child. Hence, the Marungko approach is designed to prepare kindergarten pupils' necessary reading skills. Thus, it aims to improve the teachers' competence in teaching reading skills in the primary years, specifically kindergarten. It targets kindergarten learners to appreciate literature made purposively for them and effectively communicate in written and oral forms using efficient reading instruction. Moreover, a study points out that the native language, first language, or home language of the learners is used in the classroom to provide a bridge from the familiar to the unfamiliar, to improve the security of the learners, and to derive the meanings of the target language words clear.

1.1. Purpose of the study

This study determined the effectiveness of the Marungko Approach in teaching Mother-Tongue Based Language to Kindergarten Learners in two identified public elementary schools in Cebu City Division and Lapulapu City Division using online classes. The findings of the study served as the basis for crafting intervention plans. Specifically, it sought answers to the following questions such as the demographic profile of the kindergarten learners, the pre-test and post-test performance of the Kindergarten learners in mother tongue-based language using the regular online classes and using the Marungko approach in online classes for both Divisions in terms of reading, writing, and numeracy; the test of significant difference between the pre-test and post-test performances in regular online classes and in using the Marungko approach; and lastly the challenges encountered by the Kindergarten parents regarding mother tongue-based language.

2. Materials and Methods

This section presents the research design, respondents, instrument, data gathering procedure, and statistical treatment of the data.

2.1 Research design

This research employed the quantitative-qualitative research method following the quasi-experimental design, supported by interviews, to determine the effectiveness of the Marungko approach in teaching the mother tongue-based language to kindergarten learners.

2.2 Subjects

This study used two types of research subjects as necessary data sources. The first subjects were the kindergarten learners from Cebu City Division and Lapu-Lapu City Division. The second set of research subjects were the mothers of kindergarten learners who were subjected as informants for the interview. Due to the world crises that COVID-19 brought, the number of research subjects was limited to only 60, of which 30 came from the Cebu City Division and the other 30 from the Lapu-Lapu City Division. Of 30 respondents from each division, 15 were in the control group, while 15 used the Marungko approach. The number of mothers that would serve as informants for the phone interview was also limited to only 20, of which 10 represent each division.

2.3 Instrument

This study used two (2) major types of instruments in collecting the necessary data: the one that was used to collect the data from learners and the other one from the mothers of the learners. The first research instrument is a modified and adapted questionnaire from the study by Quilla (2014) on "The Effectiveness of Marungko Approach on the Reading Performance of Kindergarten Learners in Filipino.". The instrument was tailored so that the data pertains to the extent of application of the kindergarten learners ." Marungko's approach in teaching the learners the mother tongue–based language using online classes would be ascertained based on learning resources, classroom activities, learners' applications, and learners' assessments. The second research instrument was a set of guide questions used during the phone interview with the mothers using the semi-structured format, which aims to determine the lived experiences of challenges encountered by the kindergarten parents regarding the child's learning in mother tongue-based language.

2.4 Data Gathering Procedure

Before collecting the data using the traditional survey and online methods, the researchers sent a request letter to the principals of the schools in Cebu City Division and Lapu-Lapu City Division. The letters bear information as to the importance of the study and its purpose.

Once the school principals granted the request, the survey was conducted in their school. The researchers coordinated with the said schools' kindergarten to determine the respondents. Once the actual respondents were determined, the researchers sent a letter to the parents of the kindergarten learners. The letter also included that the information generated from the study would be exclusively used for educational purposes only; they could not gain a reward from participating nor have a consequence for their non-participation. The parents were well-informed that their participation in the study was purely voluntary. The parents who opted for an electronic version of the questionnaire were provided with a link via email or Facebook Messenger, where their answers would go directly to Google Forms.

During the phone interview with parents of kindergarten learners, the researchers used an audio recorder feature in their mobile phones to facilitate a spontaneous flow of conversation. For parents located in distant places, the interviews were conducted over the phone. Before the interview, the informants/parents were informed that the conversation would be recorded. To establish a spontaneous and confident conversation, the interview was done in Cebuano-Vidayan, which was later translated into English during the coding stage. Once all data were gathered using the survey method, the data collected data were structured and consolidated in a spreadsheet program such as Microsoft Excel.

2.5 Statistical Treatment

To treat the data on the demographic profile of the two (2) groups of respondents, descriptive statistics such as frequency, simple percentage, mean, and standard deviation, ANCOVA, and a Thematic analysis following the Colaizzi method of phenomenological approach were used.

2. Results

2.1 Demographic Profile of the Kindergarten Learners

Table 1 Demographic Profile of the Kindergarten Learners as to Age
n = 60

	Control Group		Experimental Group	
Age	Frequency	Percent	Frequency	Percentage
6 years old	6	20	4	13.33
5 years old	24	80	26	86.66
Total	30	100	30	100

The data in Table 1 revealed that for the control group, there were one-fifths or a frequency of 5 of the respondents who were six years old, while most of the respondents from the control group were five years old. For the experimental group, a significant majority, 86.66 percent, of the respondents were also five years old. The control and experimental groups have almost the same result, and this could be because five years old is the optimum age for a preschooler to be sent to kindergarten as a first step under the current K – 12 curricula.

Table 2 Demographic Profile of the Kindergarten Learners as to Gender
n = 60

	Control Group		Experimental Group	
Gender	**Frequency**	**Percent**	**Frequency**	**Percentage**
Male	22	73.33	19	63.33
Female	8	26.66	11	36.66
Total	30	100	30	100

The data in Table 2 revealed that the control group is dominated by male learners, comprising almost three-fourths or 73.33 percent of the total sample. In comparison, their female counterparts only comprised more than one–fourth or 26.66 percent, with a frequency of eight (8). For the experimental group, 11 learners, or almost two-fifths, are males, while the other nearly two–thirds, or 63.33 percent, with a frequency of 19, were females. The result showed that male learners dominated both respondent groups.

Table 3 Demographic Profile of the Respondents According to their Mother's Educational Background
n= 60

	Control Group		Experimental Group	
Gender	**Frequency**	**Percent**	**Frequency**	**Percentage**
College Graduate	1	3.33	1	3.33
College Level	3	10	4	13.33
Elementary Level	7	23.33	1	3.33
High School Graduate	19	63.33	24	80
Total	30	100	30	100

The data in Table 3 showed that most of the parents of the learners from the control group are High School Graduates since there were more than three-fifths or 63.33 percent of them. Almost one-fourth, or 23.33 percent, of the parents from the control group were at the elementary level. A lone parent from the control group is a college graduate. Meanwhile, survey results revealed that most of the parents of the kindergarten learners from the experimental group are high school graduates.

Table 4 Demographic Profile of the Respondents According to the Combined Monthly Family Income
n= 60

	Control Group		Experimental Group	
Family Income	**Frequency**	**Percent**	**Frequency**	**Percentage**
₱ 10,001 - and above	8	73.33	16	53.33
₱5,000 - ₱ 10,000	22	26.66	14	46.66
Total	30	100	30	100

The data in Table 4 presented the total monetary income accumulated by the household members of the kindergarten learners for both control and experimental groups in a month. Results revealed that almost three-fourths of the learners from the control group, or 73.33 percent of them, have a combined family income of more than ₱10,001 in a month. Only more than one-fourth, or 26.66 percent, have a monthly family income that ranges above. Meanwhile, the remaining almost half fell under the monthly income category of ₱5,000 to ₱10,000.

2.2. Pre-Test and Post-test Performances of the Kindergarten Learners in Mother Tongue–Based Language from Control Group Using the Regular Online Classes

Table 5 Pre-Test Performances of the Kindergarten Learners in Mother Tongue–Based Language from Control Group Using the Regular Online Classes
n= 30

Scores	**Scores**	**Reading**		**Writing**		**Numeracy**	
		f	***%***	***F***	***%***	***f***	***%***
Cebu City Division	**0**	3	20	0	0	0	0
	1	11	73.33	4	26.66	4	26.66
	2	1	6.66	7	46.66	10	66.66
	3	0	0	4	26.66	1	6.66
	4	0	0	0	0	0	0
	5	0	0	0	0	0	0

			mean 0.87	**Std dev. 0.52**	**mean 2.0**	**Std dev. 0.76**	**mean 1.80**	**Std dev. 0.56**
Lapulapu Division	**City**	**0**	3	20	5	33.33	2	13.33
		1	7	46.66	7	46.66	7	46.66
		2	4	26.66	3	20	4	26.66
		3	1	6.66	0	0	2	13.33
		4	0	0	0	0	0	0
		5	0	0	0	0	0	0
			mean 1.20	**Std dev. 0.86**	**mean 0.87**	**Std dev. 0.74**	**mean 1.40**	**Std dev. 0.91**

Table 5 presents the pre-test results regarding the kindergarten learners' performance in Mother Tongue - Based Language from the control groups of the two divisions. These control groups are the ones that use the regular online class. Results revealed that in the Cebu City Division, most of the respondents, or almost three-fourths or 73.33 percent, got a score of 1 out of 5 for the pre-test in reading. For the pre-test result in writing, almost half of the learners from Cebu City Division, or 46.66 percent, have a 2 out of 5 score. The number of learners who got a score of 1 and 3 for the pre-test in writing is equally distributed to more than half, or 26.66 percent of the total respondents. As to pre-test scores in numeracy, two-thirds, or 66 percent of the kindergarten learners from the Cebu city division, score 2 out of 5. More than half of them (26.66%) scored "1," while a lone respondent has a score of "3". The pretest results for Cebu City Division for reading, writing, and numeracy could be much higher.

As to pre-test results for Lapulapu City Division, results revealed that in the reading category, almost half (46.66%) of the respondents scored "1"; more than one-fourth (26.66%) scored "2"; and one-fifth (20%) of the respondents got no score ("0") at all. For the writing category, results revealed that almost half (46.66%) of the learners scored "1"; – thirds (33.33%) of them had no correct answers at all, and one-fifth (20%) of the respondents scored "2" for the pre-test in writing. As to the last category, which is numeracy, the pre-test results revealed that almost half (46.66%) of the learners from Lapulapu City Division scored "1"; more than one-fourth (26.66%) of the respondents scored "2"; the number of learners who got no correct answers and those who scored "3" has an equal number of learners which is two (2). The pretest results for Lapulapu City Division for reading, writing, and numeracy were generally considerably low.

Table 6 Post-test Performances of the Kindergarten Learners in Mother Tongue–Based Language from Control Group Using the Regular Online Classes
n= 30

Scores	**Scores**	**Reading**		**Writing**		**Numeracy**	
Cebu City Division		***f***	***%***	***F***	***%***	***f***	***%***
	0	0	0	0	0	0	0
	1	0	0	0	0	0	0
	2	0	0	0	0	0	0
	3	4	26.66	2	13.33	2	13.33
	4	8	53.33	6	40	10	66.66
	5	3	20	7	46.66	3	20
		mean 3.93	**Std dev. 0.70**	**mean 4.33**	**Std dev. 0.72**	**mean 4.07**	**Std dev. 0.59**
Lapulapu City Division	**0**	1	6.66	1	6.66	0	0
	1	4	26.66	7	46.66	5	33.33
	2	9	60	6	40	7	46.66
	3	1	6.66	1	6.66	3	20
	4	0	0	0	0	0	0
	5	0	0	0	0	0	0
		mean 1.67	**Std dev. 0.72**	**mean 1.47**	**Std dev. 0.74**	**mean 1.87**	**Std dev. 0.74**

Table 6 presented the post-test results regarding the kindergarten learners' performance in Mother Tongue - Based Language from the control groups of the two divisions. These control groups are the ones that use the regular online class. Results revealed that in the category of reading for Cebu City Division, more than half (53.33%) of the kindergarten learners from the control group scored four from a five – points quiz; more than one-fourth (26.66%) of the control group of respondents scored "3" while one – fifth (20%) have a perfect score. Post-test results in writing for the control group revealed that almost half (46.66%) of the respondents got a perfect score; two-fifths (40%) of the respondents scored 4

out of 5; and a couple of learners scored "3," and they comprised 13.33% from the control group. As to the category of numeracy, the pre-test results for the control group from Cebu City Division revealed that two–thirds (66.66%) of them scored 4 out of 5; one-fifth (20%) of them got a perfect score, and a couple of them which comprised 13.33% got a score of "3". Based on a five-point post-test, the scores obtained could be considered significantly high.

As to post-test results for Lapulapu City Division, results revealed that in the reading category, three-fifths (60%) of the respondents scored "2"; more than one-fourth (26.66%) scored "1"; a lone respondent, which comprised 6.66% got no score ("0") at all, and the same thing happened for the other one who scored "3". For the writing category, post-test results revealed that almost half (46.66%) of the learners scored "1"; two–fifths (40%) of them scored 2 out of 5; a lone respondent had no score, and another one scored "3". As to the last category, which is numeracy, the post-test results revealed that almost half (46.66%) of the learners from Lapu-Lapu City Division scored "2"; one-third (33.33%) of the respondents scored "1" while the learners who scored 3 out of 5 comprised one-fifths or 20% from the control group. In general, the post-test results for the Lapulapu City Division for reading, writing, and numeracy are considerably lower than those in the Cebu City Division.

Although the descriptive statistics showed an increase between the pre-test and post-test results, the increase was not impressive for the control groups, especially the one in the Lapu-Lapu division, since there were still students who scored "0" and "1" during the post-test.

2.3 Pre-Test and Post-test Performances of the Kindergarten Learners in Mother Tongue–Based Language from Experimental Group Using the Marungko Approach in Online Classes

Table 7 Pre-Test Performances of the Kindergarten Learners in Mother Tongue–Based Language from Experimental Group Using the Marungko Approach in Online Classes

n= 30

Scores	**Scores**	**Reading**		**Writing**		**Numeracy**	
		f	***%***	***F***	***%***	***f***	***%***
Cebu City Division	**0**	4	26.66	0	0	0	0
	1	11	73.33	2	13.33	2	13.33
	2	0	0	9	60	13	86.66
	3	0	0	4	26.66	0	0
	4	0	0	0	0	0	0
	5	0	0	0	0	0	0
		mean 0.73	**Std dev. 0.46**	**mean 2.13**	**Std dev. 0.64**	**mean 1.87**	**Std dev. 0.35**
Lapulapu City Division	**0**	2	13.33	0	0	0	0
	1	9	60	4	26.66	2	13.33
	2	4	26.66	9	60	7	46.66
	3	0	0	2	13.33	4	26.66
	4	0	0	0	0	2	13.33
	5	0	0	0	0	0	0
		mean 1.13	**Std dev. 0.64**	**mean 1.87**	**Std dev. 0.64**	**mean 2.40**	**Std dev. 0.91**

Table 7 shows the pre-test results of the kindergarten learners' performance in Mother Tongue - Based Language from the experimental groups of the two divisions. These experimental groups are the ones that employ the Marungko approach in the online class. Pre-test results revealed that in the Cebu City Division, most respondents, or almost three-fourths or 73.33%, got a 1 out of 5 for the pre-test in reading, while more than one-fourth (26.66%) had no score. For the pre-test result in writing, three-fifths (60%) of the learners from the experimental group of Cebu City Division had a score of 2 out of 5; more than one-fourth (26.66%) of them had a score of 3 out of 5; and a couple of them has a score "1".
As to pre-test scores in numerary, a great majority of more than four-fifths (86.66%) of the experimental group of kindergarten learners from the Cebu city division have scores of 2 out of 5. Generally, the pretest results for the experimental group of kindergarten learners from Cebu Cebu City Division for reading, writing, and numeracy are considerably low. While from Lapu-Lapu City Division, results revealed that in the reading category, three - fifth (60%) of the respondents scored “1”; more than one-fourth (26.66%) scored “2”; and a couple of learners, which comprised 13.33% has a score of “3”.

For the writing category, results revealed that three-fifths (60%) of the learners scored "2"; more than one–fourth (26.66%) of them scored 1 out of 5; a couple of respondents scored "3"; which comprised 13.33% from the experimental

group. As to the last category, which is numeracy, the pre-test results revealed that almost half (46.66%) of the experimental group of learners from Lapu-Lapu City Division scored "2"; more than one-fourth (26.66%) of the respondents scored "3"; the number of learners who got no correct answers and those who scored "4" has an equal number of learners which is two (2). In general, the pre-test results for Lapu-Lapu City Division for reading, writing, and numeracy are considerably low.

Table 8 Post-test Performances of the Kindergarten Learners in Mother Tongue–Based Language from Experimental Group Using the Marungko Approach in Online Classes
n= 30

Scores		**Scores**	**Reading**		**Writing**		**Numeracy**	
			f	***%***	***f***	***%***	***f***	***%***
Cebu City Division		**0**	0	0	0	0	0	0
		1	0	0	0	0	0	0
		2	0	0	0	0	0	0
		3	1	6.66	1	6.66	0	0
		4	6	40	5	33.33	10	66.66
		5	8	53.33	9	60	5	33.33
			mean 4.47	**Std dev. 0.64**	**mean 2.13**	**Std dev. 0.63**	**mean 1.87**	**Std dev. 0.35**
Lapulapu City Division		**0**	0	0	0	0	0	0
		1	0	0	0	0	0	0
		2	0	0	0	0	0	0
		3	1	6.66	0	0	0	0
		4	8	53.33	3	20	5	33.33
		5	6	40	13	80	10	66.66
			mean 1.13	**Std dev. 0.64**	**mean 1.87**	**Std dev. 0.64**	**mean 4.67**	**Std dev. 0.49**

Table 8 presented the post-test results regarding the kindergarten learners' performance in Mother Tongue - Based Language from the experimental groups of Cebu City and Lapu-Lapu City Divisions. These experimental groups are the ones that use the Marungko approach in an online class. Results revealed that in the category of reading for Cebu City Division, more than half (53.33%) of the kindergarten learners from the experimental group had a perfect score; two-fifths (40%) of the experimental group of respondents scored "4"; while a lone respondent scored "3". Post-test results in writing for the experimental group revealed that three-fifths (60%) of the respondents got a perfect score; one-third (33.33%) of the respondents scored 4 out of 5; and a lone learner scored "3," which comprised 6.66% from the experimental group of Cebu City Division. Regarding numeracy, the pre-test results for the experimental group revealed that two–thirds (66.66%) of them scored 4 out of 5. Meanwhile, one-third (33.33%) of them got a perfect score. Based on a five-point post-test, the scores obtained could be considered significantly high.

As to post-test results for the experimental group from Lapu-Lapu City Division, results revealed that in the reading category, more than half (53.33%) of the learners scored "4"; two-thirds (40%) of them scored "5"; a lone respondent which comprised 6.66% scored "3". For the writing category, post-test results revealed that four–fifth (80%) of the learners got a perfect score, and one–fifth (20%) scored 4 out of 5. In the last category, numeracy, the post-test results revealed that two-thirds (66.66%) of the experimental group of learners from Lapulapu City Division had perfect scores. The other one-third (33.33%) scored 4 out of 5. In general, the post-test results for the experimental group from the Lapulapu City Division for reading, writing, and numeracy are considerably higher than those in the Cebu City Division.

2.4 Significant Difference Between Pre-Test and Post-test Performances of the Control and Experimental Groups in Both Divisions

Table 9 Significant Difference Between Pre-Test and Post-test Performances of the Control and Experimental Groups from Cebu City Division

n = 30

	Pre-test in Reading		**Post-test in Reading**	
	mean	***sd***	***mean***	***Sd***
Control Group	0.87	0.52	3.93	0.70
Experimental Group	0.73	0.46	4.47	0.64
Treatments	***df***	***Mean square***	***Sig.***	***Decision***
	1	2.542	0.022	**Significant**
	Pre-test in Writing		**Post-test in Writing**	
	mean	***sd***	***mean***	***Sd***
Control Group	2.0	0.7559	4.33	0.72375
Experimental Group	2.133	0.639	4.533	0.63
Treatments	***df***	***Mean square***	***Sig.***	***Decision***
	1	0.131	0.549	**Not Significant**
	Pre-test in Numeracy		**Post-test in Numeracy**	
	mean	***sd***	***mean***	***Sd***
Control Group	1.80	0.56	4.07	0.59
Experimental Group	1.87	0.35	4.33	0.49
Treatments	***df***	***Mean square***	***Sig.***	***Decision***
	1	0.627	0.145	**Not Significant**

Table 9 presents the test results between subjects of the control and experimental groups in the Cebu City Division. Results show a significant difference between the control and experimental groups for reading. The change in the control (0.87 to 3.93) is observed to be less than the change in the experimental group (0.73 to 4.47), which is indicated by a *p*-value of 0.022, less than the 0.05 standard alpha value at 95% confidence. This means that the experimental group showed statistically better results than the control. The Partial Eta squared value is 0.180, interpreted as a medium effect.

Table 10 Significant Difference Between Pre-Test and Post-test Performances of the Control and Experimental Groups from Lapulapu City Division n = 30

	Pre-test in Reading		**Post-test in Reading**	
	mean	***sd***	***mean***	***Sd***
Control Group	1.20	0.86	1.67	0.72
Experimental Group	1.13	0.64	4.33	0.62
Treatments	***df***	***Mean square***	***Sig.***	***Decision***
	1	54.78	0.00	**Significant**
	Pre-test in Writing		**Post-test in Writing**	
	mean	***sd***	***mean***	***Sd***
Control Group	0.87	0.74	1.47	0.74
Experimental Group	1.87	0.64	4.80	0.41
Treatments	***df***	***Mean square***	***Sig.***	***Decision***
	1	41.14	0.00	**Significant**
	Pre-test in Numeracy		**Post-test in Numeracy**	
	mean	***sd***	***mean***	***Sd***
Control Group	1.40	0.91	1.87	0.74
Experimental Group	2.40	0.91	4.67	0.49
Treatments	***df***	***Mean square***	***Sig.***	***Decision***
	1	30.89	0.000	**Significant**

Table 10 presents the test results between – subjects of the control and experimental groups in the Lapulapu City Division. Results showed a significant difference between the control and experimental groups for reading. It was observed that the change in the control (1.20 to 1.67) is lesser compared to the change in the experimental group (1.13 to 4.33), which is indicated by a *p*-value of 0.000, which is lesser than the .01 alpha value, which is lesser than the 0.05 alpha at 95 percent confidence. The p-value 0.01 is at 99 percent confidence, which makes it a more reliable result. The result means that the experimental group showed statistically better results than the control group. The Partial Eta squared value is 0.883, which is a tremendous effect.

2.5 Challenges Encountered by the Kindergarten Parents Regarding The Child's Learning In The Mother Tongue-Based Language

This section presents the results and discussions on the qualitative data generated from the interview of the five (5) informants who are the parents of kindergarten learners. The data's presentation and discussion are arranged according to the themes of their challenges regarding the child's learning in mother tongue-based language.

Theme 1: Limited Time to Assist the Learning Needs of the Child

When the parents of the kindergarten learners were asked about the challenges they have encountered regarding the child's learning in Mother Tongue - Based language, it has been a recurring answer that they have limited time to assist their child. Although they have stated it in different ways, the five informants unanimously claimed that finding time to assist their children's learning needs is a great challenge since they have lots of things to do, especially those related to their jobs and household chores.

Theme 2: Internet Connectivity Issues

One of the issues and concerns kindergarten parents encounter in their child's learning in MTB during the Alternative Delivery Mode (ADM) system is the problems with connecting to the internet. In pursuit of providing quality education during the COVID–19 pandemic threats, the education system heavily banks internet connectivity since modular instructions are deemed less effective among early learners such as kindergarten. However, some informants experienced trouble with their internet connection.

Theme 3: Limited Knowledge of Techniques in Teaching Kindergarten

One of the challenges the parents experienced was that they needed more knowledge of techniques in teaching kindergarten.

3. Discussion

Most of the Kindergarten learners were aged five years old and dominated by males; most parents were high school graduates; most of the households they belonged to had an accumulated monthly income of more than ₱10,001.
The results indicated that age is a significant factor that needs to be considered in early childhood education since it plays a vital role in considering the learning competencies expected from them. It also showed that the sooner a learner could access kindergarten, the more it helps them gain social and cognitive experiences to become independent and develop a positive learning attitude. As Brown et al. (2019) claimed, kindergarten's focus evolved globally from developing social and emotional skills to obtaining academic skills. There are two types of preschool and kindergarten in the early years (Gao et al., 2020). Both help with social security and are beneficial for young people's education.
Furthermore, children's reading skills improve because of Early Childhood Education (ECE). Children who have ECE in the future will be better off because it will help them already (Asghar et al., 2021). Burghardt et al. (2020) support this claim by stating that different factors of a child's learning environment, such as kindergarten education, might predict a child's development during early life.

On the other hand, teachers should consider learning activities that align with the learning needs of most of the learners, which are males. The pedagogical approach that the teacher would apply should be gender–sensitive for both males and females since, according to Reilly et al. (2019), gender gaps in reading ability, according to estimates derived from large-scale studies, are significant in terms of magnitude. Furthermore, teachers should consider the parents' educational attainment in giving assignments to the learners since the parents play an essential role in their children's education, especially at home. Considering the parents' educational attainment is essential, (Deary & Johnson, 2017) found that the parents' educational attainment associates favorably with their children's intelligence test scores since they tend to mentor their children at home. The positive correlation, however, may also be attributed to previous intelligence collection, whereby persons with higher intelligence test scores appear to advance in the educational system before the differences in educational attainment. The result is also coherent with the claims of Hegelund et al. (2018) that parents with higher educational attainment are associated with having a higher intelligence level.

On the other hand, the results showed that combined parent income significantly influences how a learner's educational level increases as it guarantees the need to attend basic education. The result implies that parents' income was evident in providing the early education of a kindergarten. The results are coherent with the claims of Cabrera (2018) that parents with a high income and a high level of education are more likely to engage in their children's education, which is a critical element in determining their children's future academic success. Parents with more economic freedom could provide the materials such as gadgets, computers, and internet connectivity that are primary needs for an online class. These materials are necessary to enable their children to attend an online class.

As to performances of the kindergarten learners in the Mother Tongue–Based Language for the control groups from Divisions of Cebu City and Lapu-Lapu City, the experimental group, which uses a regular online class, turned out to have an increase in the post-test results for reading. However, there is a lesser increase in writing and numeracy. The results indicated that the pre-test scores for the control groups for both divisions are considerably low since most of the learner's scores for reading, writing, and numeracy are only 1 and 2 out of 5 items; there is a need for an intervention program to alleviate the poor pre-test results. The intervention program provided among the respondents should involve human cognitive skills since children benefit from training that teaches both the letter names and the sounds associated with the letters. This could also be attributed to the fact that they can utilize the names as triggers to remember corresponding sounds. According to Roberts et al. (2020), focusing children's attention on individual letters and sounds instead of incorporating alphabet training into narrative reading offers several advantages. Therefore, the most successful instruction emphasized written letters combined with names or sounds. In this connection, the control groups of learners or those that use a regular online class showed low competency levels in reading, writing, and numeracy. Thus, a sensible program to address the issue is necessary for them.

As to performances of the kindergarten learners in the Mother Tongue–Based Language for the experimental groups from Divisions of Cebu City and Lapu-Lapu City; the experimental group, which uses the Marungko approach in online classes turned out to have a more significant increase in the post-test results for reading, writing, and numeracy. The results showed that the pre-test results for the experimental groups for both divisions are considerably low, which indicates that there is a need for a comprehensive intervention program that would aim to improve the competencies of the kindergarten learners in terms of reading, writing, and numeracy using the online delivery, especially during the pandemic period. The said program could be focused on using the mother-tongue-based language using the Marungko Approach. Palm et al. (2019) recognized students' language development in both their mother tongue and national language, as well as their multilingual and multicultural identities, to be critical to MT's success. Also, due to the sudden change to online learning mode, early learners such as kindergartens were forced to adopt new and unchartered ways. The teacher, therefore, needs to consider the critical background of the learners. O'Doherty et al. (2018) outlined the key obstacles to developing an online learning environment with a substantial social presence and dedication to avoid social isolation, loss of interactivity and involvement, and delayed or insubstantial feedback. The advantages of utilizing new platforms, such as online classes, should also be maximized. Furthermore, Roberts et al. (2018) emphasized that the utilization of the Marungko approach benefits children from training that teaches both the letter names and the sounds associated with the letters due to the fact that they can utilize the names as triggers to remember corresponding sounds (Roberts et al., 2019).

ANCOVA results revealed a significant difference between the control and experimental groups in Cebu City Division for reading. However, no significant difference was found in writing and numeracy. The test showed a significant difference between the pretest and post-test results because of the application of the Marungko approach in reading. The primary competency aimed to be developed by the Marungko approach is the young learners' reading ability. This result supports the claims of Yayen (2018) that when specific patterns of letter sounds are previously taught, the phonemic manipulation of blending sound letters is offered to construct words, and learners are encouraged to produce words using the letters that are learned from the pattern of letters. The learners are then instructed to read the various words that are generated. The approach to teaching beginning reading can assist the teacher in navigating the teaching-learning process while also enhancing the teacher's pedagogical skills, resulting in an increase in the learners' performance consistent with Ramos (2021), in this case, the development of foundational reading competencies.

As to writing, results show no significant difference between the control and experimental groups, which is indicated by a *p*-value of 0.549, higher than the 0.05 standard alpha value at 95 percent confidence. This means that the experimental and control groups showed no statistical difference. Therefore, their effects are the same. The study, thus, failed to reject the null hypothesis. The results implied that the Marungko approach could have improved the learners' competencies from the Cebu City Division more effectively. In other words, if the teacher employs the Marungko approach in the online class, the competency level of the kindergarten learners would still be the same. This result could be attributed to the fact that the main competency the Marungko approach is trying to develop is the reading competency. Furthermore, it enhances reading skills as the Marungko approach to instruction starts from capitalizing the most common to the least common sounds in the learners' native language (Bañez & Urayan, 2019). Marungko's approach aided the students' ability to acknowledge words faster through sound deciphering and phonemic division. It helped them improve their reading, writing, and numeracy skills, as these three are interrelated.

For numeracy, results show no significant difference between the control and experimental groups, indicated by a *p*-value of 0.145, higher than the 0.05 standard alpha value at 95 percent confidence. This means that the experimental group and control group showed no statistical difference. Therefore, their effects are the same. This could mean that the numeracy competency of the kindergarten learners from the Cebu City Division would remain the same regardless of whether the teacher applies the Marungko approach in their online class. Talley (2017) pointed out that the Marungko approach was adopted as a Philippine program for phonics education that aimed to improve the comprehension skills of beginning readers by using appropriate resources. However, it depicts that the competencies in numeracy are not the primary focus. Besides, the result implied that the online classes that use the Marungko approach were more effective in teaching MTB-L reading competencies than the regular ones. This result supports the claims of Arnott and Yelland (2020) that online classes could effectively teach early learners if there is enough mediation and coordination between the teacher and the learners. The learning opportunity offered by the Marungko approach in online classes merges technology and the aspects of social, educational, and personal objects that occupy the contemporary child's world of life and can contribute to their learning ecosystem. Moreover, Roberts et al. (2020) stressed that using the Marungko approach, focusing children's attention on individual letters and sounds instead of incorporating alphabet training into narrative reading, offers several advantages. This could be why the experimental group from Lapulapu City Division showed a Partial Eta squared value of 0.883, interpreted as a substantial effect between the pre-test and the post-test results.

For writing, results showed a significant difference between the control and experimental groups. It was observed that the change in the control (0.87 to 1.47) is lesser compared to the change in the experimental group (1.87 to 4.80), which was indicated by a *p*-value of 0.000 which is lesser than the 0.01 alpha value, which is lesser than the 0.05 alpha at 95 percent confidence. The p-value 0.01 is at 99 percent confidence, which makes it a more reliable result. The result means that the experimental group showed statistically better results than the control. The Partial Eta squared value is 0.840, interpreted as an enormous effect.

A significant difference was also observed between the control and experimental groups in Lapulapu City Division for reading, writing, and numeracy. An implication could be drawn from the result that the Marungko approach played a significant role in increasing the competency level of the learners in writing since the post-test results showed a significant increase. The classes in the Lapu-Lapu City Division that used the Marungko approach also showed a higher index score than regular online classes. This result could be attributed to the effect that proficiency in reading could also affect writing skills since the Marungko approach has a primary function in developing the reading competency of the early childhood learner. This result supports the claims of Roberts et al., 2019 that using the Marungko approach is considered the most successful instruction as it simply emphasizes written letters combined with names or sounds. This aligns with Roberts et al. (2018), who claim that children benefit from training that teaches the letter names and the sounds associated with the letters. It was assumed that this crucial insight makes it easier to realize that phonemes were mixed with written letters.

For numeracy, results showed a significant difference between the control and experimental groups. It was observed that the change in the control (1.40 to 1.87) is lesser compared to the change in the experimental group (2.40 to 4.67), which was indicated by a p-value of 0.000, which is lesser than the 0.01 alpha value, which is lesser than the 0.05 alpha at 95 percent confidence. The *p*-value 0.01 is at 99 percent confidence, which makes it a more reliable result. The result means that the experimental group showed statistically better results than the control. The Partial Eta squared value is 0.840, which interprets as a very large effect.

The results implied that the Marungko approach was influential in developing the competency of the kindergarten learners in the Lapu-Lapu City Division in terms of numeracy. This result could be due to methods applied in the Marungko approach. Roberts et al. (2020) stated that teachers focusing children's attention on individual letters and sounds instead of incorporating alphabet training into narrative reading offers several advantages.

Overall, it turned out that the experimental group had the most significant effect on Lapu-Lapu given that it did better in all three (3) areas of performance of the kindergarten learners in the mother tongue–based language (reading, writing, and numeracy). An implication could be drawn from this result that the Marungko approach should be employed in online classes for kindergarten learners since it improves their reading, writing, and numeracy competencies.

In terms of challenges encountered by the kindergarten parents regarding the child's learning in the Mother Tongue–Based Language, interview results showed that the most pressing problem that they have involves limited time to assist the learning needs of the child, internet connectivity at home, and limited knowledge on techniques in teaching kindergarten.

Theme 1: Limited Time to Assist the Learning Needs of the Child

According to Informant C, who happened to be a call center agent, she would love to assist her daughter with her MTB – L learning needs, but her work schedule in a graveyard shift requires her to sleep during the daytime. Thus, when her daughter is awake and about to do her homework, she cannot assist even if she is physically at home. Informant D, a business owner, also supported the claims of Informant C in which she said that:

(I am having difficulty looking for ample time to tutor my daughter, not just in MTB but all subjects. My child is still in kindergarten ang needs more time to be guided. But I have no enough time to do that since I am mostly not at home since I am tending at our store).

The responses of Informants C and D help one conclude that one of the factors that hinders parents in assisting their children is the lack of spare time they could devote to providing for their learning needs. Despite the drastic changes that were brought about by the COVID–19 pandemic, parents have to find ways to assist their children in terms of learning needs for MTB-L since, according to Klu and Ansre (2018), the current practice rationalizes its use of native languages at the primary stages of schooling by emphasizing the benefits of mother tongue instruction. However, he also emphasizes that there is still room for improvement in using the mother tongue language.

On the other hand, Informant B also shared the challenges that she experienced in assisting her son, who is a kindergarten learner. She said:
(I have four school children, and I found it challenging to tutor all of them at once. So I let my other child, who is already in the second grade, be the youngest one since she can already do it. That is my remedy since I do not have enough time due to numerous household tasks).

The practices of Informant D in providing support to the learning needs of her son, even if her time is limited in doing so, could be considered a good one since it could help the older learner gain mastery in the subject matter that he/she taught. The younger learner could also be able to gain new competency skills. This practice could be considered peer learning in which the more advanced learner assists the younger ones. An implication could be made from the statements of Informant B that the parents could still find ways to assist their children's learning needs when they have no time to do it themselves. This result supports the claims of Sun et al. (2018) that due to differences in home language exposure, children entering primary school are prepared differently for the subject of MTL.

Theme 2: Internet Connectivity Issues

According to Informant A, they do not have any internet connection at home. She only connects to the Facebook Messenger application on her cellphone through free data from her mobile network provider. Although she could receive messages from the teachers, she could not open nor download any embedded files such as documents, PDFs, and audio and video files. This dilemma was also experienced by Informant E, who claimed that they needed a computer or gadgets at home that they could use to access online sources. She lamented that;
(We found difficulty with the online class mode since we have no internet connection. There is an internet café nearby, but it is closed due to COVID).

Informant E sounded disappointed as she narrated her experience in online classes. When asked about her remedy to the situation, she said that she has a relative who lives in the neighborhood who happened to be classmates with her kindergarten son, so she just asked for updates. An implication could be made from this result that it is the marginalized sector, especially those with limited resources, which are badly affected by the online classes due to the global pandemic on COVID–19. This result is coherent with the claims of O'Doherty et al. (2018) that it is the low-income families who are badly affected by the implementation of online classes due to the fact the internet bills alone would cost them additional expenses, let alone the procurement of gadgets that they need to connect to the internet. He also raised concerns about online learning reliability and outlined the critical obstacles to developing an online learning environment with a substantial social presence and dedication.

Informant B's experiences with problems with internet connection are noteworthy. According to Informant B, she owns an android–powered mobile phone, and she uses it to connect to the internet and download essential learning materials for her child. Although she has no internet connection at home, she can still download the necessary files. If she noticed that the teacher would send out softcopies of learning materials, she would buy a load with limited data to access the files. In a follow–up question, she stressed that she could not miss a file sent by the teacher since the other parents would talk about it on the group chat platform. She further said that buying a load for her cellphone does not seem to hurt her budget since the teacher sends it only once or twice weekly.

However, if Informant B looks at the brighter side, Informant A sounds disappointed with the system. She complained that the government should address their problem without an internet connection.
(It would have been better if each child would be given tablets individually. They could have studied better, mainly if they had been provided with something to connect to the internet.)
Although the claims of Informant B make perfect sense, it would be such an impossible feat for the government to provide every kindergarten learner with an expensive gadget. These results from the interview could help the researchers make an

implication that the school should also look for options other than online classes and that alternatives should fit the pre-existing background characteristics of the parents. Utilizing an alternative instructional design is preferred, as mentioned by Abad (2020), the module is the only learning delivery method that is feasible in options such as those struggling with electricity, technology, and internet access and is the most selected option for learners. This could also be considered for families with trouble connecting to the internet.

Theme 3: Limited Knowledge of Techniques in Teaching Kindergarten

According to Informant A, it is such a significant discomfort that she has to guide her child in her learning tasks since she found it challenging to teach a kindergarten learner. She said;

"Naglisud intawun ko Ma'am uy unsaun nako nga mapa sabot ang akong anak sa mga leksyon kay lahi raman gud nang mag tudlo ka ug bata kay sa dagko". (I found difficulty making my child understand her lesson since teaching a little child is different from teaching the big ones.)

In a separate phone interview, Informant C said she would love to teach her child. However, However, the method that she applied seemed to be less effective since introducing MTB-L was awkward on her part she said she is more comfortable in the English language instead of the local dialect due to her exposure in the call center industry and her upbringing was more on the English language. On the other hand, Informant E disclosed that she is having difficulty guiding her child with the lessons related to MTB-L since she is not a native Cebuano speaker. She said that she migrated from Samar 6 years ago, and she is unfamiliar with some terms in Cebuano.

The results generated from the interview with the informants help one interpret that the parent's background would significantly affect their capability to guide their children in their online classes in MTB-L. An implication could be made that the pre-existing background of the parents should be considered in essential undertakings such as designing a teaching-learning system using the online platform to get maximum cooperation from parents. Parent involvement has been recognized throughout the years. Parents want their children to succeed academically, especially when it comes to school and their children's welfare, regardless of their economic status. Despite the pandemic, teachers-parents collaboration in the learning of Kindergarten learners is crucial. Since it has been announced that the mode of teaching this School Year 2020-2021 is an online class, parents should guide their children in learning, and teachers should know about the technology.

In a separate phone interview, Informant E describes her experience guiding her son on his MTB-L learning activities as challenging. She complained that several Cebuano–Visayan words in the learning module are difficult to understand. She said that the current generation no longer uses some old words in regular conversations. She also added that she found it awkward and embarrassing that she only learned the Visayan term for the orange color and the triangle through his son's learning materials. In between laughter and chuckles, she said that she could not expect her son to be able to answer the learning activities in MTB since he could not read yet. Still, she also does not want to get embarrassed when there are terms in the learning materials that she does not understand. An implication could be drawn out of this result that the level of parents' understanding of the local language is such an important thing that needs to be considered for online MTB-L classes for kindergarten. At the very least, studies have indicated that a child's home literacy environment has a short-term effect on reading ability at the primary level (Puglisi et al., 2017). However, before we can expect a meaningful interaction, the parents must first understand the online materials provided.

5. Conclusion and Recommendation

Based on the findings of the study, a conclusion could be made that since there is an increase in the post-test results in reading under the control group or the ones that use a regular online class, there is a need to give more focus to the competencies of writing and numeracy under the regular online classes. Since the descriptive statistics showed an increase in post-test scores in reading, writing, and numeracy under the experimental group, using the Marungko approach in an online class is effective in helping the early learners learn MTB-L during the new average period. The significant difference between the control and experimental groups in Cebu City Division for reading but not in writing and numeracy is that the regular online class, with any pedagogical adjustments, would need to be more to teach the early learners in MTB-L subject holistically. Since there is a significant difference that was found between the control and experimental groups in Lapulapu City Division for the reading, writing, and numeracy, the Marungko approach, therefore, turned out to be a catalyzing factor for the increased performance during the post-test in proficiency in MTB-L subject. It is recommended that the said method be adapted in the delivery of online classes to improve early learners' competencies in reading, writing, and numeracy.

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