EFFECTIVENESS OF THE CONTEXTUALIZED AND LOCALIZED SINAMA INSTRUCTIONAL MATERIAL FOR GRADE 1

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ABSTRACT: This study purports to determine the effectiveness of the contextualized and localized instructional material in Sinama for grade Ipupils. One Hundred pupils (grade 1) participated in the study. The study made use of descriptive correlational research design. Findings of the study showed that the Mother Tongue-Based Multilingual Education Sinama alphabet primer can be designed in line with the learning competencies for grade 1, and the pupils' test performance has improved in terms of word recognition, alphabet knowledge, spelling knowledge, and handwriting. Based on the results, it can be concluded that the contextualized and localized instructional material in Sinama is an effective intervention for the improvement of the pupils' achievement. The study recommends that the developed alphabet primer book be made supplementary materials to teachers teaching in Mother Tongue-Based Multilingual Education Sinama, that other teaching guides and aids be designed to aid teaching and learning in the classrooms.

Keywords: contextualized, localized, word recognition, alphabet knowledge

INTRODUCTION

One of the many barriers encountered in the sustainability and successful Mother Tongue-Based Multilingual Education Program implementation is the lack of supply of culturally sensitive and quality learning materials. These materials are very crucially since they require to meet the intended learners' interests and needs and to their growing abilities. The development and production of these materials should be very relevant to the pupils' situation, cultural background, and responsive to their needs.

Meanwhile, the need for new instructional materials for Mother Tongue-Based-Multilingual Education instructions is supported by the Department of Education (DepEd) [1]. Moreover, instructional materials such as big or small books, including activity cards using letters and numbers, could be made and produced in the local language. It also includes basic words or grade-level words and picture dictionary and thematic picture chart for oral literacy [2].

The majority of the learning materials could be produced using the pupils' native language. These materials should have colorful illustrations that could entice the learners to read and learning [3].

The Sinama Alphabet Primer is developed for the improvement of the performance of grade 1 pupils in their local language or mother tongue. Furthermore, the utilization of this material will also show the awareness and appreciation of Sinama culture not only among the participants of this study but the community as well.

This study will look into the effectiveness of the developed localized and contextualized Sinema instructional material for grade 1 and determined how successful are the grade 1 pupil participants in improving their levels in terms of word recognition, alphabet knowledge, spelling, and handwriting skill

Literature Review

The United Nations Educational, Scientific, and Cultural Organization is one of the many agencies worldwide, which are a concern with the Mother Tongue-Based Education program. Krauss [4] emphasized that there is a sense of urgency in response to the preservation of endangered languages since about half of the world's current languages are in danger of extinction by 2100. These languages become "endangered" when speakers stop using them or use

them in a reduced number of areas and do not continuously pass them from one generation to the next as espoused [5] and [6]. Societies and nations around the world should be concerned about endangered languages.

Language is the primary tool for understanding, communicating, and creating the world. Language does not only possess semantics and syntax but as well as the way of life of the people. Moreover, languages are fundamentals to personal identity, self-determination, and cultural survival [7].

Furthermore, in every mother tongue-based multilingual education program, there should be an extensive corpus of learning and instructional materials that are of good quality. Materials are those which are appropriate to the intended learners, culturally and gender-sensitive, and locally produced. Different learning and instructional materials are essential in making the MTB-MLE program sustainable. One study gave insights into the struggles and barriers about bilingual education among the various ethnolinguistic minorities in the Philippines, which are rooted in the deficiency in the supply of reading and instructional materials in the language of focus [8].

It was likewise noted that these challenges exist in the majority of the classrooms in the Philippines, where the availability of reading and instructional materials is quite lacking since there are very few localized instructional materials that fit the curriculum. It is, therefore, necessary for teachers and other stakeholders to come together and develop and produce instructional materials that will meet the needs and interests of the pupils in their locality [9].

Schools must provide the Filipino learners with locally developed learning materials using native language/s as suggested to maintain pupils' interest in the curriculum [10]. Moreover, in the development and production of intended instructional materials to the considerations should be made, which includes but not limited to the enhancement of skills based on their needs and interests, and the materials should display cultural, linguistic, and contextual clues that the learners are familiar. In other words, cultural and linguistic values are, therefore, of prime consideration [11]. The authors also suggested that locals can write original stories or even stories. They also can create stories from their experiences and imagination.

The Lubuagan First Language Component project has

indicated that substantial community-based innovations are needed in the development and production of instructional materials through the use of local languages of the learners that can be successfully developed. Moreover, the presence and assistance of other stakeholders in the locality and also outsiders made the project very viable and fruitful [12].

Also, some of the probable advantages of mother tonguebased education such as the improvement of learning outcomes, the strengthening of the vernacular or native languages, and imparts a broader avenue for literacy and communication [13]. In like manner, reading and instructional materials are essential tools in the process of teaching and learning. Thus, teachers are encouraged to be creative and provide innovative ways to present visuals to enhance learning [14].

METHODOLOGY

This study utilized one group of pre-test-post-test design. It was used to test the effectiveness of the material among the participants. It used a single group of 100 Grade 1 pupil respondents, and they were given the same treatment and assessment. Two identified sections of grade 1 pupils were taken as respondents of the study.

The Philippine Informal Reading Inventory (Phil-IRI) served as a basis for interpreting individual skills. The levels of the different categories were classified as: independent level with 50-40 scores (100-80%) with good description; instruction-level with scores between 39-29 (59-79%) with fair description; and frustration level with scores below 29 (below 59%) with low description.

Items were taken from the Sinama Alphabet Primer since the introduction and usage of this book served as the intervention of the study.

Appropriate statistical tools were used in answering the objectives of the study, such as percentage score, frequencies, and t-test for matched groups since there were four subcategories under the pre and post-tests such as word recognition, alphabet knowledge, spelling, and handwriting.

RESULTS AND DISCUSSIONS

Pre-test and post-test for word recognition were conducted utilizing some of the Sinama Alphabet Primer Book exercises from the Sinama Alphabet Primer Book is presented in Table 1. As noted in Table 1, during the pre-test among the 100 Sama pupils, 66 of them were at the frustration level, whose scores were below 29 or 59%. Nineteen (19) of them were in the instrumental also called an instructional level, while only 15 of them were at the independent level with scores between 50-40 or 100-80%. However, during the post-test, there was an increase in the frequency for independent was noted for the independent level with "good" descriptive ratings from 15 to 80 with an increase of 65.

There was likewise an increase in the scores and frequencies regarding word recognition among the 100 Sama pupils. The results show that there was improvement through the use of the developed MTB MLE Alphabet Primer in Sinama.

Table 1: Word Recognition in Sinama

Level	Pre-Test		Post-test	
	f	%	f	%
Independent Learners	15	15	80	80
Instruction Learners	19	19	15	15
Frustration Learners	66	66	5	5
Total	100	100	100	100

The increase in the scores on word recognition shows that there was improvement through the use of the developed MTB-MLE Alphabet Primer in Sinama. International and local studies recommend the use of mother tongue-based education, especially in the early years of schooling. The use of the learner's first language as the medium of instruction in the primary years of education makes learners better thinkers and learners in both their first and second languages [15].

Furthermore, children who have the opportunity to learn through their mother language have the best chance of understanding what is being taught, making the needed connection between the spoken and written word, and participating in their learning [16]. No less than UNESCO recommended that to achieve the best education, the child first becomes literate in his mother tongue before attempting to acquire literacy in another language [17].

The results of the pre-test and post-test on alphabet knowledge using exercises from the Sinama Alphabet Primer Book is shown in Table 2.

The majority of the 100 respondents during the pre-test were at their frustration level, with scores below 29. However, during the post-test, the alphabet knowledge of the pupil respondents improved, as shown in the decline in the number of respondents in the frustration level from 65 during the pre-test to 10 in the post-test.

Table 2: Alphabet Knowledge

Level	Pre-	Test	Post-test	
	f	%	f	%
Independent Learners	20	20	75	75
Instruction Learners	15	15	15	15
Frustration Learners	65	65	10	10
Total	100	100	100	100

The changes in the answers of the participants during the post-test indicate an improvement in their alphabet knowledge. Phonological awareness is very vital across languages, but differences in the size of lexical representations vary, and this difference will affect the decoding strategies needed [18-20].

It further shows that the language spoken by the child is one of the essential elements in the progress of literacy. Also, before formal schooling, the child develops his ability to use it along with literacy [21].

Table 3 presents the spelling knowledge of the 100 pupils using the Sinama Alphabet primer. A look at Table 3 shows that during the pre-test majority of the pupil respondents had several errors and why they were on the frustration level. However, during the post-test, there was a shift in the frequency from 60 during the pretest to only 13 in the post-test. On the other hand, there was an increase in the independent level from 25 in the pre-test to 72 in the post-test.

Table 3: Spelling in Sinama

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Level	Pre-	Pre-Test		-test
	f	%	f	%
Independent Learners	25	25	72	72
Instruction Learners	15	15	15	15
Frustration Learners	60	60	13	13
Total	100	100	100	100

The teaching of literacy in the early years of school must be through the language the child knows and uses most often. Studies show that the learners' mother language is indeed the best medium of instruction in the early years. The Department of Education (DepEd) has established the mother-tongue education as an essential educational policy in formal education, including pre-school and in the Alternative Learning System (ALS).

Table 4 shows the results of the pre-test and post-test on handwriting using exercises from the Sinama Alphabet Primer Book.

As noted in table 4, fifty-eight (58) of the pupil respondents were in their frustration level during the pre-test; however, after a three-week use of the Alphabet primer, there was an increase in the frequency for independent level from 23 during the pre-test to 81 in the post-test. There was a decrease in the number of pupil respondents in the frustration level from 58 during the pre-test to only 4 in the post-test.

Table 4: Handwriting in Sinama

Level	Pre-	Pre-Test		-test
	f	%	f	%
Independent Learners	23	23	81	81
Instruction Learners	19	19	15	15
Frustration Learners	58	58	4	4
Total	100	100	100	100

The result of this study is supported by the Lingua Franca Project and Lubuagan First Language Component Programs, which show that learners learn to read more quickly using their mother tongue or first language. The study likewise revealed that other macro skills such as reading, speaking, and writing in a foreign language such as English are learned by the learners faster when their foundation is in the mother tongue [22].

Table 5 presents the correlation between the pre-and posttest results of the 100 grade 1 participants.

Results yield that all the four categories used in testing the effectiveness of the contextualized and localized Sinama instructional material for grade 1 are significant. There is strong evidence t(99)=-16.288, p<0.000 for word recognition, alphabet knowledge (t(99)=-13.176, p<0.000), spelling (t(99)=-11.208, p<0.000), and handwriting (t(99)=-14.401, p<0.000). Together this suggests that the teaching intervention improved the marks of the participants.

Table 5: Correlation between Pre and Post-Tests of the Four Categories

Comparison	Mean	t value	p-value
Pre-Test & Post-Test Word Recognition	-1.2600	-16.288	.000
Pre-Test & Post-Test Alphabet Knowledge	-1.100	-13.176	.000
Pre-Test & Post-Test Spelling	9400	-11.208	.000
Pre-Test & Post-Test Handwriting	-1.1400	-14.401	.000

In this data set, it improved marks by looking at the mean difference. It confirms that, although the difference in scores is statistically significant, even though it is relatively small. It shows that the intervention using the contextualized and localized Sinama Alphabet Primer is useful towards the improvement of the learners in terms of word recognition, alphabet knowledge, spelling, and handwriting. These dimensions are a very critical foundation for the achievement of the learner in school. They likewise geared towards the accomplishment of the goals of K12, specifically the MTB-MLE program of the Department of Education, and that is to develop every appropriate learner reasoning and cognitive skills using their first language or mother tongue with instructional materials that are linguistically, culturally and gender-sensitive.

CONCLUSIONS AND RECOMMENDATIONS

After an in-depth analysis of the data gathered from the participants, the researcher was able to draw the following conclusions and recommendations that the contextualized and localized Sinama Alphabet Primer for grade 1 can be designed and can improve the performance of grade 1 pupils in word recognition, alphabet, spelling, and handwriting. The utilization of the learner's native language shows their love for their local language and culture. The acquisition of the learner's first language takes place naturally at home and within their immediate surroundings. This experience changes when the child starts going to school and starts learning another language, not his mother tongue. Educators should encourage and motivate learners to have a very positive attitude towards their language. It can be concluded that the developed instructional material in Sinama can improve the grade I pupils' reading comprehension through word recognition, alphabet, spelling, and handwriting.

Moreover, DepEd started the contextualization of books for basic education but is limited only to the languages which are part of the MTB-MLE program. Hence, the researcher recommends that teachers should write and develop more local instructional materials for use in the classroom. There should be the contextualization of more books and other reading materials to different languages in the country to maximize their utilization. There should be another study in other divisions using a bigger group of participants. Furthermore, there must be continuous training and workshop for teachers in the implementation of MTB-MLE. The Department of Education should meet all the classroom needs of pupils and educators for any educational reform to be effective. Other stakeholders in the community are encouraged to be involved in the implementation of the mother tongue-based multilingual education. Moreover, there should also be the tracing of the background of the teachers not only regarding their readiness for MTB-MLE implementation but as well as their first language/s.

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