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MARUNGKO APPROACH THROUGH MULTIMEDIA-AIDED TEACHING AND READING PROFICIENCY OF GRADE 1 LEARNERS

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Abstract :Research on reading has been highly productive in enhancing in understanding the development of reading proficiency of young learners in their early years of schooling. This research is aimed to find out the effectiveness of multimedia-aided teaching (MAT) to Marungko Approach in enhancing the reading skills to Grade 1 learners of San Pedro Elementary School of Initao South District in lnitao, Misamis Oriental during the School Year 2023-2024. Specifically, the study sought to describe the pretest scores of the participants before the implementation of Marungko approach using the multimedia-aided teaching, disclose the level of effectiveness of the Marungko Approach through multimedia-aided teaching (MAT) as measured in the learners' performance in the Early Grade Reading Assessment (EGRA) posttest results and reveal the significant effect of the use of Marungko Approach through multimedia-aided teaching towards the learners' reading proficiency based on the posttest scores of Early Grade Reading Assessments (EGRA).

The research design employed was the one group pretest-posttest design. Purposive sampling was conducted and t-test was computed to find the significant difference between the pre-test and posttest scores. The pre-test results have shown that participants did not acquire appropriate level of reading proficiency. There was improvement of reading proficiency after the implementation of multimedia teaching, as indicated by the posttest results. The results also have shown that there was a significant increase of the respondents' reading performance relative to their pretest and posttest scores with the application of multimedia-aided teaching. Thus, the null is rejected. In conclusion, the application of Marungko approach and supplemented by multimedia tools at the initial reading stage helps in acquiring reading proficiency. It is recommended that school administrators should design intervention programs specifically to those non-readers who struggled in letter-sound knowledge by applying Marungko approach using multimedia aided tools as teaching strategy.

IndexTerms **– Marungko approach, Multimedia-Aided Teaching, Reading Proficiency**

I. INTRODUCTION

Basic literacy serves as the fundamental basis required by children to achieve success across various educational domains. Initially, children must acquire the skill of reading to engage in the process of reading for further knowledge acquisition. The Department of Education (DepEd) included the Mother Tongue-Based Multilingual Education (MTB-MLE) as a feature of the Enhanced Basic Education Program. The MTB-MLE framework necessitates the utilization of the language with which schoolchildren are already acquainted, or their native language, as the primary medium of instruction, thereby facilitating their comprehension of fundamental concepts with greater efficacy. Mother-tongue education, as a subject, emphasizes enhancing oral, written, and literacy skills in the native language during the initial three grades of schooling with the exception of instruction in Filipino and English subjects.

In spite of governmental initiatives aimed at enhancing literacy rates within the Philippines, contemporary research has indicated that numerous students encounter challenges with reading comprehension, vocabulary acquisition, and critical analytical capabilities. The poor reading skills can be attributed to several factors, including lack of resources and socioeconomic factors (Idulog et al., 2023). According to Maffea (2020), the lack of resources in classrooms can cause learners to be unable to learn to their fullest potential because they are not being given the proper resources. They are acquiring fragments of subjects and educational content; however, they are not receiving the comprehensive understanding that is warranted. This deficiency in educational resources within institutions significantly undermines both the learning experience of the students and the pedagogical effectiveness of the instructors. Consequently, the low reading proficiency among Filipino students, as evidenced by their ranking last in reading proficiency in the PISA 2018, can be linked to variables such as home-related resources, learning motivation, classroom reading experiences, and social experiences in the school environment (Bernardo et al., 2021).

These challenges, as indicated in many studies, are observed in many elementary schools, including the Grade I learners of

San Pedro Elementary School. Their lack of appropriate intervention approaches could have failed to identify their unique strengths and weaknesses in reading during their early-grade schooling. Idulog et al. (2023) reported that many learners have not been taught scientifically-based reading instruction with a comprehensive and systematic phonics component. According to the results of these investigations, learners who struggle with reading exhibit difficulties in recognizing, differentiating, and isolating phonemes—essential competencies requisite for proficient reading.

Indeed, technology is persistently altering the landscape of academia. The advancements in technology have brought about significant changes by introducing a diverse array of tools, ranging from computer-based platforms to multimedia-supported instructional approaches. Multimedia-aided teaching assists learners are able to engage effectively with cognitive representations through the integration of various media elements that encourage information processing. The Information, which is made up of content and sometimes learning activities, is presented with the use of the combination of text, image, video and audio by digital learning resources (Abdulrahman et al., 2020). Through multimedia, lessons can increase for better understanding because oral instructions can be supplemented by the application of either static or dynamic images in the form of visualization technology**.**

Moreover, in response to the earlier mentioned challenges in teaching reading, multimedia-aided teaching can enhance numerous reading approaches. Among the teaching reading approaches is the Marungko. This reading approach supports culture-based language acquisition since it begins instruction by capitalizing on the most frequent to the least occurring sounds in the learners' native language (Bañez & Urayan, 2019).

Despite the existence of extensive literature on the traditional approach of teaching the Marungko, there is less empirical research on the utilization of multimedia as a teaching tool. Based on the aforementioned explanations and the challenges associated with teaching the Mother Tongue through multimedia, there is a keen interest from the researcher to undertake this investigation. This interest lies in uncovering the educational benefits of multimedia as a supplement to implementing the Marungko approach during the formative years of schooling.

1.1 Theoretical Framework

The study was anchored on the Dual Coding Theory of Allan Paivio (1971) and the Multimedia Theory of Learning (MTL) of Mayer (2019). The Dual-Coding Theory (DCT) represents a comprehensive cognitive framework that has been explicitly applied to the domains of literacy and language acquisition. This theoretical construct posits that individuals can understand new information through either verbal associations or visual imagery; however, the combination of both modalities produces superior learning outcomes. The brain integrates both visual and verbal stimuli, and this theory articulates three principal assumptions concerning learning with multimedia: the dual-channel assumption, the limited-capacity assumption, and the active-processing assumption. The dual-channel assumption asserts that humans possess distinct channels dedicated to the processing of visual and auditory information. Specifically, the visual–pictorial channel is responsible for processing images perceived through the visual sense, including textual information presented on a display. Conversely, the auditory–verbal channel is tasked with processing spoken language, whereby information is represented through two separate cognitive pathways, each generating unique representations for the information processed.

The verbal and visual codes, which correspond to verbal and non-verbal representations, respectively, are utilized to systematically organize incoming information that can be manipulated, stored, and retrieved for future application. Consequently, when language learners establish associations between new lexical items and corresponding sounds or images concurrently across both modalities, they are predisposed to achieve enhanced retention and comprehension of the vocabulary compared to reliance on a singular mode of representation. The effectiveness of the dual association of verbal and visual modes might stem from the fact that when one memory trace is lost, the other remains and is accessible" probably because pictures are more likely to activate the image-to-word referential connections (Lin, cited on Kanellopoulou, Kermanidis & Giannakoulopoulos, 2019).

On the other hand, the Multimedia Theory of Learning of Clark and Mayer (2016) looks into how people learn from multimedia presentations. This theory explains three foundational assumptions regarding the learning process facilitated by multimedia: the dual-channel assumption, the limited-capacity assumption, and the active-processing assumption. The dual-channel assumption stipulates that humans maintain independent channels for the processing of visual and auditory stimuli. This comprises the visual–pictorial channel, which processes visual inputs, including text displayed on screens, while the auditory–verbal channel is dedicated to the processing of auditory inputs, specifically spoken words.

Further, the limited-capacity assumption posits that individuals encounter a definitive constraint on the volume of information that can be processed at any singular moment. Each visual-pictorial channel is characterized by a constrained capacity. The active-processing assumption contends that individuals do not engage in learning merely by passively receiving information. The Multimedia Learning Theory (MTL) proposed by Clark and Mayer articulates that the cognitive apparatus does not interpret multimedia presentations of textual, visual, and auditory content in an isolated manner; rather, these components necessitate active engagement, encompassing the identification and selection of pertinent material, the organization of this material into visual and/or verbal frameworks, and the integration of these newly constructed models with pre-existing knowledge. Mayer posits that the average individual can sustain approximately five to seven discrete "chunks" of information within working memory at any given time.

The active-processing hypothesis posits that individuals do not acquire knowledge merely by passively assimilating information. The Multimedia Theory of Learning (MTL), as articulated by Clark and Mayer, clarifies that the human brain does not process a multimedia presentation comprising verbal, pictorial, and auditory information in a discrete manner; instead, these components must be actively engaged through a deliberate process, specifically involving the identification and selection of pertinent material, the organization of such material into visual and/or verbal frameworks, and the integration of these newly constructed frameworks with existing cognitive schemas.

Furthermore, the theory is expanding into exciting new areas that will allow it to continue to evolve. Its learner-centered and cognitive-constructivist orientation makes it very relevant in current educational applications. Aliakbari (n.d) has made known the importance of the theory that it focuses on finding effective instructional methods rather than a specific technology, making it a

dynamic theory that will allow it to expand well beyond the life cycle of any technology.

The theoretical frameworks of Dual Coding Theory (DCT) and the Multimedia Theory of Learning distinctly demonstrate that the facilitation of learning within a multimedia context is most effective when novel information is conveyed via both verbal and visual representational modalities, as opposed to relying solely on one mode. Accordingly, to enhance educational outcomes, it is imperative to mitigate the cognitive overload experienced by learners by presenting both verbal and visual materials concurrently rather than sequentially.

1.2 Conceptual Framework

The conceptual framework illustrates a preview of how the various variables interact with each other so as to create a systematic process to achieve the aims of the study. Figure 1 shows the schematic presentation of the interplay of the variables of the study. The schematic presentation is patterned from the pretest-posttest research of quasi-experimental design. An advantage of a pretest and post-test study design is that there is a directionality of the research, meaning there is testing of a dependent variable (knowledge) before and after intervention (Stratton, 2019).

The schematic presentation is presented in three phases, namely, pretest (EGRA) phase, intervention phase and posttest phase. The pretest phase established what the participants needed to learn or to improve. By establishing a baseline through a pretest, educators can more effectively monitor and assess the growth of participants with respect to each subtask of the Early Grade Reading Assessment (EGRA). The pretest further explained each participant's existing knowledge and proficiency in the identified subtasks (Hornbuckle, 2022). These subtasks included letter recognition, letter sound identification, initial sound identification, familiar word reading, and oral passage reading.

The intervention phase involved the application of the Marungko Approach through Multimedia-aided Teaching. The subtasks were presented through digital platforms (audio and digital). Powerpoint presentation was employed to show the letters of the Marungko, familiar words and oral passage. To recognize the letters, the name of every picture displayed started with the letter being presented. The letters were viewed both in uppercase and lowercase style. Video clips were shown to hear the correct sound and pronunciation of the letters of the Marungko alphabet and how to identify the sound of each letter.

The posttest phase revealed what the participants had learned or whether they had gained the required knowledge. Hornbuckle (2022) emphasized that posttests can help teachers see where changes need to be made to improve participants' ability to attain knowledge. It should be noted that the same dependent variables were evaluated in a singular clutch of participants prior to (pretest) and after (posttest) the administration of the treatment.

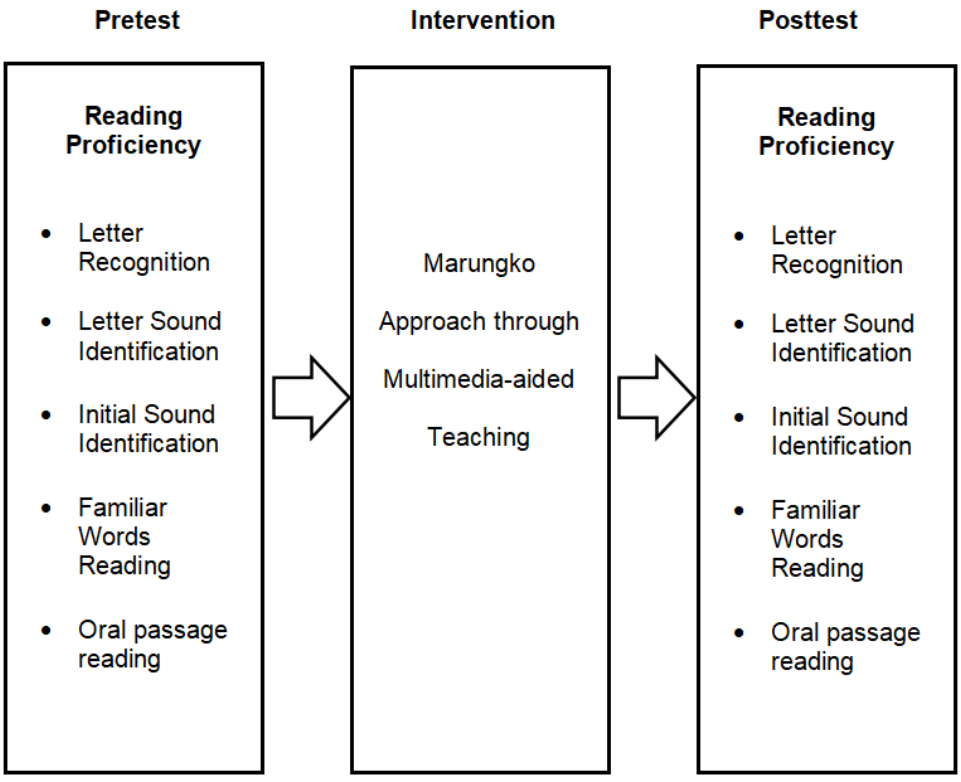

Figure 1. Schematic Presentation of the Interplay of the Variables of the Study

1.3 Statement of the Problem

This study basically aimed to find out the effectiveness of Multimedia-Aided Teaching (MAT) to Marungko Approach in enhancing the reading proficiency level among Grade 1 learners of San Pedro Public Elementary School of Initao South District in lnitao, Misamis Oriental during the School Year 2023-2024. Specifically, the study sought answers to the following questions:

1. What is the learners' level of reading proficiency based on the pretest results of the Early Grade Reading Assessment (EGRA) before the teacher used Marungko Approach through multimedia-aided teaching in terms of letter recognition, letter sound identification, initial sound identification, familiar words reading and oral passage reading?

2. What is the learners' level of reading proficiency based on the pretest results of the Early Grade Reading Assessment (EGRA) after the teacher used Marungko Approach through multimedia-aided teaching in terms of letter recognition, letter sound identification, initial sound identification, familiar words reading and oral passage reading?

3. Is there a significant effect of the use of the Marungko Approach through multimedia-aided teaching towards the learners' reading proficiency level based on the posttest scores of Early Grade Reading Assessments (EGRA)?

Hypothesis

Problems 1 and 2 were hypotheses-free. Problem 3 was formulated as a null hypothesis and was tested at a 0.05 level of significance:

H_o: There is no significant effect of the use of the Marungko Approach through multimedia-aided teaching towards the learners' reading proficiency level based on the posttest scores of Early Grade Reading Assessment (EGRA).

2. METHODOLOGY

This section presents the research methodology used in the study. It also discusses the research design, research setting, respondents of the study, sampling techniques, research instrument, system of scoring, data gathering procedures, statistical treatment of data and ethical considerations

2.1 Research Design

This study applied the one-group pre-test-post-test research design. It is a quasi-experimental research design that falls under the umbrella of pretest-posttest designs. The pretest-posttest design can be used with or without control groups. In a one-group pretest-posttest research design, the same dependent variable is assessed within a single group of participants prior to (pre-test) and after (post-test) the implementation of the intervention. The treatment does not vary. Everyone gets the same treatment because there is just one group. Then, compare the difference between the pre-test and post-test scores (SAGE Publications Inc., 2019).

In this way, it is possible to determine what changes, if any, have taken place and thereby judge the effect or value of the treatment. If the average score on the post-test exceeds that of the pretest, it is reasonable to infer that the treatment may have contributed to the observed improvement. The increase in knowledge is manifested to enhanced scoring on the post-test in comparison to the pre-test. This suggests an increase in knowledge correlated with the intervention implemented following the pre-test. However, due to the quasi-experimental nature of the research, causal relationships cannot be established. Instead, associations or relationships between the treatment and effects are made (Stratton, 2019). The basic premise behind the one-group pretest posttest design involves a single case observed at two time points.

Hence, the one-group pretest posttest research design is appropriate to the study because of the following characteristics: The group of participants who receive the intervention is selected in a non-random way — which makes it a quasi-experimental design. The absence of a control group against which the outcome can be compared and the effect of the intervention is measured by comparing the pre and post-intervention measurements (the null hypothesis is that the intervention has no effect). Additionally, the advantages of the one-group pre-test-post-test research design are that it does not require a large sample size, and the outcome is measured after the intervention, so it is certain that it occurred after it, which is essential for inferring relationships between the variables (Choueiry, 2024).

2.2 Study Setting

This study was conducted in Initao, Misamis Oriental, during the School Year 2023-2024**.** Initao, officially recognized as the Municipality of Initao, is a third-class municipality within the province of Misamis Oriental in the Philippines. Misamis Oriental is situated in the Northern Mindanao region. Its administrative center, largest urban area, and provincial capital is Cagayan de Oro, a highly urbanized city operating independently of provincial governance. Misamis Oriental comprises twenty-three (23) municipalities and two component cities, which are organized into two legislative districts and further subdivided into four hundred twenty-four (424) barangays.

The province encompasses a diverse array of industries including agriculture, forestry, steel production, metallurgy, chemical processing, mineral extraction, rubber production, and food processing. It is home to the PHIVIDEC Industrial Estate and the Mindanao International Container Port, both located in Tagoloan. Additionally, Del Monte Philippines, which specializes in exporting pineapples throughout the Asia-Pacific region, operates a processing facility in Cagayan de Oro. Cebuano serves as the predominant language spoken in Misamis Oriental, with the overwhelming majority of residents identifying it as their Mother Tongue.

Further, Initao belongs to the second legislative district of Misamis Oriental. The District II comprises the western segment of the province. As per the 2020 census data, Initao is inhabited by a population of 33,902 individuals. It is geographically positioned approximately 39 kilometers (24 miles) to the west of the provincial capital, Cagayan de Oro, 29 kilometers (18 miles) to the east of Iligan City, and roughly 767 kilometers (477 miles) to the south-southeast of the national capital of the Philippines, Manila. The closest primary thoroughfare is the Butuan–Cagayan de Oro–Iligan Road. The nearest air transport facility is Laguindingan International

Airport, located approximately 39 minutes from Cagayan de Oro. The economic activities prevalent in the region predominantly rely on sectors such as fishing, agriculture, retail, and tourism. Cebuano is the main language of the municipality. San Pedro Elementary School, where the researcher teaches, is located along the national highway at Barangay San Pedro.

2.3 Research Respondents

The participants of the study were the Grade 1 pupils of San Pedro Elementary School during the School Year 2023-2024. There were thirty (30) participants in this experimental study. They were under the researcher's advisory. The participants selected for this research were the learners, given that the Early Grade Reading Assessment (EGRA) is purposely designed to evaluate orally the fundamental skills necessary for literacy acquisition during the early primary education stages, specifically in Grades 1 through 3.

2.4 Sampling Techniques

Purposive sampling was used in determining the respondents of the study. Nikolopoulou (2023) described purposive sampling to a group of non-probability sampling techniques in which units are selected because they have characteristics that are needed in the sample. In other words, the units are intentionally selected "on purpose" to yield the most pertinent information necessary for achieving the objectives of the study. This method, also referred to as judgmental sampling, is contingent upon the researcher's discernment in identifying and selecting individuals, cases, or events that can provide the most valuable insights to fulfill the study's aims. It proves to be particularly advantageous when seeking information-rich cases or enhancing limited resources alongside relatively small sample sizes.

The main aim of purposive sampling is to distinguish the cases, individuals, or communities that are best-equipped to address the research inquiries. Consequently, purposive sampling is most effective when there exists a substantial amount of background information regarding the research topic. The accumulation of information relates positively with the quality of the sample. Although it is impractical to extend statistical inferences from the sample to the general population, purposive sampling techniques can furnish researchers with data that facilitates alternative forms of generalization from the sample under investigation. In the context of the present study, the purposive sampling approach was employed as the study sought to evaluate the effectiveness of the intervention, specifically the Marungko Approach through Multimedia-Aided Teaching (MAT) on the participants reading proficiency level.

2.5 Research Instrument

Assessment data from early-grade literacy has indicated that a significant number of students are struggling to attain proficiency in fundamental reading skills. These essential skills, which have not traditionally been included in widespread international assessments, presuppose a certain level of literacy in children. By evaluating students' proficiency in basic reading skills, various stakeholders stand to gain a heightened awareness of the deficiencies in literacy acquisition. In the context of this emerging emphasis on the assessment of fundamental literacy competencies, the Early Grade Reading Assessment (EGRA) was created with the aim of offering a set of evaluations to gauge basic reading abilities in developing individuals. It concentrates on the singular child and follows a one-on-one evaluation approach (IIEP-UNESCO Learning Portal, 2018).

EGRA has been formulated with the purpose of evaluating the essential reading abilities that are fundamental for all children, regardless of any specific educational program. It is worth noting that this assessment tool has the flexibility to be adjusted in accordance with either national or regional educational guidelines, particularly in cases where EGRA is employed for the tracking of individual student advancements.

Since that time, the reading assessment framework has been adapted for implementation in over 60 countries across 100 languages. This assessment tool is generally tailored for application within a specific national context and linguistic framework. The instrument comprises ten standardized subtasks. Nations are afforded the discretion to choose the subtasks that align with their assessment program's linguistic requirements.

The Early Grade Reading Assessment targets students of Grades 1 to 3. In instances where EGRA is employed for classroom assessment purposes, it may be administered by classroom educators. In addition, EGRA can serve as a singular assessment; however, it becomes imperative to conduct both baseline (pre-treatment) and end-line (post-treatment) evaluations when the objective is to assess the impact of reading interventions. Within the Philippine context, the Department of Education (DepEd) adapted EGRA in accordance with international standards and guidelines as outlined in DepEd DO No. 57 s. 2015. This instrument has been incorporated into the current study. In this investigation, the subtasks employed included letter recognition, letter sound identification, initial sound identification, familiar word reading, and oral passage reading.

2.6 Data Gathering Procedure

Through the approved letter of recommendation from the Dean of the School of Graduate and Professional Studies, the researcher requested permission to conduct the study from the Schools Division Superintendent of Misamis Oriental. Once permission was given, the researcher informed the principal of SanPedro Elementary that a study was administered to the researcher's Grade I pupils. Prior to the study, a parental consent letter was delivered to the parents of the participants through their children.

The Early Grade Reading Assessment was utilized as the pretest. After the pretest, all the teaching sessions were focused on the Marungko Approach, where the letters of the Filipino alphabet were presented according to letter sounds using multimedia devices. This technique conformed to Mayer's (2019) Cognitive Theory of Multimedia Learning. The effectiveness of simultaneous cognitive letter-sound teaching was delivered through interrelated verbal and visual systems. This made the learners listen and hear the text with audio and visual tools of text with pictures, video, or animation.

The Early Grade Reading Assessment used subtasks to measure a pupil's reading proficiency. Subtasks were administered orally, with the teacher telling the instructions while the student engaged in reading and responding. Assessment was conducted for the students individually by the teacher. Subtasks commence with the most basic task that evaluates foundational skills and progress to subtasks that assess reading comprehension.

Moreover, in measuring the subtask concerning letter recognition or letter names, the teacher presented a list of letters in a randomized sequence. The child was asked to read aloud as much as possible, as quickly and carefully as possible. When the child started to read the first letter, the stopwatch or timer started. The use of a stopwatch to measure the duration of assessments ensure consistency in the time allocated for testing while also implying that the speed of reading was the critical benchmark of good reading.

Any incorrect letters were clearly marked with a slash (/). Self-corrections were counted as correct. The teacher remained silent, except when providing answers as follows: If the child exhibited hesitation for three seconds, the teacher provided the name of the letter, then pointing to the next letter and stating, "Palihog padayon." If the child articulated the letter sound instead of the name, the letter name was supplied with the instruction: "Please tell the name of the letter." This prompt was rendered only once during the exercise.

After sixty (60) seconds, the teacher said, "Stop*".* Then, mark the final letter with a bracket ([ ]). The early stop rule stated that if the child did not give a single correct response on the first line, say *"Thank you,"* the exercise was stopped, checked the box at the bottom and proceeded to the next exercise.

The procedure for measuring letter recognition was the same procedure used in measuring letter sounds. However, when the child provided the letter name rather than the sound, the letter sound was then conveyed, and the educator stated: "Please tell me the sound of the letter."

Furthermore, the initial sound identification was not a timed exercise. The teacher reads aloud each word twice and has the child make the sounds. If the child did not respond after three seconds, mark the word as "No Response" and the next initial sound of the word was given. When the child responded incorrectly or did not respond to the first five words, the teacher said "Thank you*",* the exercise was stopped, checked the box at the bottom and continued to the next exercise.

The familiar word reading and oral word reading was conducted similar to letter recognition and sound identification. In familiar word reading, the child was given a sheet of familiar words to read. When the child gave all incorrect answers on the first line, the teacher said "Thank you*"* and discontinued the exercise, checked the box at the bottom and continued to the next exercise. Equally, in oral word reading, when the child gave no correct answer on the first five lines, the teacher said, *"Thank you"* and ended the exercise, checked the box at the bottom and continued to the next exercise.

Every video of the subtask followed the applicable design principles for multimedia learning of Mayer. The videos included cues, such as vocal emphasis and pointer words, that were directed and attracted students' attention to the most important parts of the lessons. Verbal and visual systems were interrelated to allow the learners to obtain additional benefits if they received the target words through the auditory modalities of text accompanied by audio, as well as the visual modalities of text complemented by images, video, or animation.

After the presentation of all the lessons, a posttest was administered. The posttest was similar to the pretest. This assessment was needed to measure any changes in reading proficiency using the Marungko Approach through multimedia-aided teaching.

2.7 Statistical Treatment of Data

Descriptive statistics were employed to describe the distribution of respondents' test scores in both the pretest and posttest. The descriptive statistics involve are frequency distribution, percentage, mean and standard deviation. To find out the significant differences of the results of the pretest and posttest, inferential statistics such as the t-test were performed. The t-values were related to p-values to analyze the significance or non-significance between the pretest and posttest results at the threshold 0.05 significant level.

3. RESULTS AND DISCUSSION

This section presents the results of the statistical analysis of the data gathered from the students. The data are shown in tabular form, followed by the implications of the results and the researcher's insights. The presentation follows the order of the research questions mentioned in the Introduction.

3.1 Results

Problem 1. What is the learners' level of reading proficiency based on the pretest results of the Early Grade Reading Assessment (EGRA) before the teachers used Marungko Approach through multimedia-aided teaching in terms of letter recognition, letter sound identification, initial sound identification, familiar words reading and oral passage reading?

Table 1
Distribution of the Learners' Reading Proficiency Level based on the EGRA Pretest Results in terms of Letter Recognition

Reading Proficiency Level	Frequency	Percent	Description
Proficient Readers	3	10.00	Pupils read more than 50 words per minute and answered 91% of the questions correctly.
Progressing Readers	1	3,33	Pupils read 21-50 words per minute and answered 82% of the questions correctly
Beginning Readers	1	3.33	Pupils read 1-20 words per minute and answered 46% of the questions correctly
Non-Readers	25	83.34	Pupils could not read a single word in the passage and were stopped after the first line.
Total	**30**	**100.00**	

Mean: 38 SD: 11.72 Description: Non-Readers

Table 1 presents the distribution of the learners' reading proficiency level based on the EGRA pretest results of letter recognition with an overall mean of 38 (SD=11.72), described as Non-Readers. This means that most of the learners lack the basic reading skills. It is understood that these learners have just entered Grade 1, so their exposure is generally only to the socialization process. These pupils may have finished kindergarten, but most of them can hardly read since the focus of their curriculum is the development of basic social life skills. Although they are taught basic literacy and numeracy skills in kindergarten, most of the learners are found to be non-readers. This implies that teachers of Grade 1 have to find strategies to help the learners develop their basic reading skills.

In particular, the data disclosed that the highest frequency of 25 (83.34 %) was obtained by pupils who could not read a single word in the passage and were stopped after the first line. This indicates that the majority of the learners who participated in the study were non-readers. The pretest results show a challenging illustration that learners did not acquire an appropriate level of reading competency. Reasonably, these learners may not have developed the pre-reading elements during their Kindergarten years. Children generally initiate the process of learning letter recognition during preschool and continue to cultivate this skill throughout their formative educational years. From a developmental perspective, the development of these children may not fully master the alphabet because in Kindergarten education, play-based learning is employed. Through play-based learning, children will explore and learn in a natural and enjoyable way to develop creativity and social skills.

Meanwhile, the lowest frequency of 1 (3.33%) was achieved by pupils who read 21-50 words per minute and answered 82% of the questions were answered correctly by the pupils who read between 1-20 words per minute and responded to 46% of the questions accurately. This indicates that out of the 30, one is a beginning reader and the other is a progressing reader. The result implies that very few learners acquired their reading skills before they entered Grade 1. This means that most of the learners entering Grade 1 are not yet readers. The learners lack the ability to distinguish the shape of the letter that is associated with the letter name. It is probable that they encountered challenges differentiating symbols with similar features, like m and n, as opposed to those with unique characteristics, such as b and y. This outcome implies that learners have applied feature detection in letter recognition, highlighting the significance of perceptual processes in recognizing a letter. Learners who demonstrate inadequate visual recognition will encounter difficulties in accurately distinguishing letters. The tendency to misinterpret letters could result in potential reading difficulties that hinder the development of literacy skills.

Texas Education Agency (2024) asserts that a learner's knowledge of letter names and shapes is a strong predictor of their success in learning to read. The knowledge of letter names is significantly correlated with learners' capacity to retain the forms of written words and their ability to interpret words as sequences of letters.

Research shows that letter identification is one of the most important precursors to reading (Mark, 2019). Children whose alphabetic knowledge is inadequately developed upon commencing school require systematically organized instruction that will assist them in identifying, naming, and writing letters. The results are parallel to the findings of Bagiohanon et al. (2023) when they investigated learners who struggled to accurately identify and differentiate letters. In an intervention using boom cards to improve letter recognition, the findings generated significant insights regarding the effectiveness of Boom Cards as a resource for enhancing letter recognition. This bears substantial implications for teachers and experts seeking effective methodologies to assist children in improving their letter recognition abilities.

In addition, Azuddin et al. (2020) focused their study on learners who cannot recognize the shape of the letters and letter names. Qualitative research employing a case study design coupled with purposive sampling was implemented in this investigation. The researchers utilized Haptic-Visual-Audio-Metaphonological (HVAM) Flashcards to aid the pupils in mastering the letters along with their corresponding sounds. The approach predominantly emphasizes the integration of visual, auditory, and kinesthetic-tactile components that facilitate the association of symbols (letters) with their sounds. As a result, HVAM flashcards are very helpful in solving the reading problems of the learners.

Table 2
Distribution of the Learners' Reading Proficiency Level based on the EGRA Pretest Results in terms of Letter Sound Identification

Reading Proficiency Level	Frequency	Percent	Description
Proficient Readers	2	6.67	Pupils read more than 50 words per minute and answered 91% of the questions correctly.
Progressing Readers	4	13.33	Pupils read 21-50 words per minute and answered 82% of the questions correctly
Beginning Readers	1	3.33	Pupils read 1-20 words per minute and answered 46% of the questions correctly
Non-Readers	23	76.67	Pupils could not read a single word in the passage and were stopped after the first line.
Total	**30**	**100.00**	
Mean: 35 SD: 10.42 Description: Non-Readers			

Table 2 presents the frequency and percentage distribution of the learners' reading proficiency level based on the pretest result of letter sound identification with an overall mean rating of 35 (SD=10.42) described as Non-Readers. The learners have difficulties identifying the sounds of the letters in the alphabet. Development of this skill requires a lot of drill and practice.

The data disclosed that the highest frequency of 23 (76.67%) was obtained by the pupils who could not read a single word in the passage and were stopped after the first line. This result shows that the majority of the 30 learners who participated in the study are non-readers on this subtask, letter sound identification. This scenario is comprehensible given that letter sounds, in contrast to letter names, are typically unlikely to be introduced in the home environment prior to the commencement of early educational stages.

Additionally, the learners could have linked sounds and symbols carelessly. Although some learners can understand the relationships between the letter with sounds, they cannot match the letter with its specific sound. This shortcoming refers to their weak sound-symbol decoding. Furthermore, learners who had normal hearing limits may encounter difficulties in accurately pronouncing the letter sounds in their speech. This can lead to frustration as they cannot hear the errors in their speech, which potentially leads to misunderstandings by listeners.

Rajowski (2019) observed that learners have encountered difficulty in letter sound identification. Letter-sound knowledge is necessary for learners to begin reading. Otherwise, those students who possess knowledge of only a limited number of letter sounds are at risk for experiencing difficulties in reading later on. The comprehension of letter sounds is fundamental for acquiring reading skills as it enables learners to independently teach themselves new vocabulary.

Meanwhile, the lowest frequency of 1 (3.33%) was achieved by pupils who read between 1-20 words per minute and accurately responded to 46% of the questions. The result indicates that very few are beginning readers on this subtask, letter sound identification. In addition, 4 (13.33%) are progressing readers and 2 (6.67%) are proficient readers. This suggests that some learners have the ability to make the connection between the sound and the letter symbol of that sound. This is due to the fact that some letter sounds produced greater difficulties in the process of acquisition when compared to other letter sounds. Thus, some children, due to their different literacy backgrounds and levels of knowledge, demonstrated different approaches in learning letter sounds.

Table 3
Distribution of the Learners' Reading Proficiency Level based on the EGRA Pretest Results in terms of Initial Sound Identification

Reading Proficiency Level	Frequency	Percent	Description
Proficient Readers	1	3.33	Pupils read more than 50 words per minute and answered 91% of the questions correctly.
Progressing Readers	1	3,33	Pupils read 21-50 words per minute and answered 82% of the questions correctly
Beginning Readers	4	14.00	Pupils read 1-20 words per minute and answered 46% of the questions correctly
Non-Readers	24	80.00	Pupils could not read a single word in the passage and were stopped after the first line.
Total	**30**	**100.00**	
Mean: 36 SD: 10.91 Description: Non-Readers			

Table 3 presents the frequency and percentage distribution of the learners' reading proficiency level based on the pretest result of Initial sound identification with an overall mean rating of 36 (SD=10.91) described as Non-Readers. This means that the learners have difficulties identifying the sounds of the letters in the alphabet. Development of this skill requires a lot of drill and practice.

Further, the data disclosed that the highest frequency of 24 (80%) was obtained by pupils who could not read a single word in the passage and were stopped after the first line. This indicates that the majority of the thirty (30) learners who participated in the study are non-readers on this subtask, initial sound identification. Identifying and isolating individual sounds in words can be difficult for beginning readers. Learning how to isolate initial sounds is phonemic awareness, the individual sounds within each word. Underdeveloped phonemic awareness skills represent the foundational cause of reading difficulties in children. It is essential for learners to first develop an awareness that words decompose into individual phonetic units. Only after achieving this understanding can children connect those phonetic units to the corresponding letters of the alphabet and subsequently acquire reading skills.

Meanwhile, the lowest frequency of 1 (3%) was attained by pupils who read more than 50 words per minute and answered 91% of the questions correctly and pupils who read 21-50 words per minute and answered 82% of the questions correctly. These results indicate that very few are progressing and proficient readers on this subtask. These few progressing and proficient readers could have possessed phonemic awareness because it is an auditory skill. They disassembled or segmented the word to identify the first sound of the spoken word. The letters that appeared first in a word made the initial sounds. This ability to learn the initial sounds helped them link their oral language skills to written language. Therefore, mastering the skill of segmenting initial sounds is significant when learning how to read.

Research has shown that underdeveloped phonemic awareness abilities constitute the primary factor contributing to reading challenges observed in children. It is imperative that children first develop an awareness of the segmentation of words into distinct phonemes. This awareness can children relate these phonemes with the corresponding letters of the alphabet. Thereby facilitating the process of reading acquisition. Initially, children perceive words as a singular whole then accurately decode the words for verbal communication. They need someone to guide them into recognizing that words come apart and can be manipulated (Learning Differentiated, 2024).

Table 4
Distribution of the Learners' Reading Proficiency Level based on the EGRA Pretest Results in terms of Familiar Word Reading

Reading Proficiency Level	Frequency	Percent	Description
Proficient Readers	2	6.67	Pupils read more than 50 words per minute and answered 91% of the questions correctly.
Progressing Readers	2	6.67	Pupils read 21-50 words per minute and answered 82% of the questions correctly

Beginning Readers	3	10.00	Pupils read 1-20 words per minute and answered 46% of the questions correctly
Non-Readers	23	76.66	Pupils could not read a single word in the passage and were stopped after the first line.
Total	**30**	**100.00**	
Mean: 38 SD: 11.72 Description: Non-Readers			

Table 4 shows the frequency and percentage distribution of the learners' level of reading skills based on the pretest result of familiar words reading with an overall mean rating of 38 (SD=11.72), described as Non-Readers. This means that the learners have difficulties in reading familiar words. Development of this skill requires a lot of drill and practice.

The data revealed that the highest frequency of 23 (76.66%) was obtained by pupils who could not read a single word in the passage and were stopped after the first line. This indicates that the majority of the learners who participated in the study are non-readers on this subtask, familiar words reading. When a reader encounters a word while reading, he processes the word depending on several linguistic factors such as word frequency, length, contextual constraints and familiarity (Dolgunsöz, 2018). The recognition of familiar words represents a readiness skill that signifies the concluding phase of the alphabetic principle. This readiness skill enables learners to read a sentence easily. However, familiar word reading will happen after the learner can identify a letter sound, letter name, and letter shape progressively (Ning, Li & Yang, 2018).

Meanwhile the lowest frequency of 2 (6.67%) was achieved by pupils who read more than 50 words per minute and answered 91% of the questions correctly and pupils who read 21-50 words per minute and answered 82% of the questions correctly. These results suggest that very few are progressing and proficient readers in this area. This implies that learners who are not fluent in reading struggle to read by making inappropriate meanings of words and are slow to recognize words. Generally, people more easily remember things that are familiar or are relevant to prior knowledge (Ning, Li & Yang, 2018).

. A prior knowledge or schema is used by readers whenever possible to process and recall the word. Poor readers, as well as good readers, seem to use prior knowledge when reading a word which is not too difficult. Nevertheless, readers tend to use more familiar texts because they are already acquainted with the language and textual schemata. However, when readers are faced with less familiar texts or unknown vocabulary, they may not use them effectively.

Ning, Li and Yang (2018) examined the recognition task of the participants after they learned familiar words from familiar categories and unfamiliar categories after they learned familiar words from familiar categories and unfamiliar categories. The findings indicated that familiar words were retained more effectively than those from unfamiliar categories. The facilitative influence of familiarity is dependent upon the recollection process and exhibits stability over time.

Table 5
Distribution of the Learners' Reading Proficiency Level based on the EGRA Pretest Results in terms of Oral Passage Reading

Reading Proficiency Level	Frequency	Percent	Description
Proficient Readers	1	3.33	Pupils read more than 50 words per minute and answered 91% of the questions correctly.
Progressing Readers	3	10.00	Pupils read 21-50 words per minute and answered 82% of the questions correctly
Beginning Readers	4	13.34	Pupils read 1-20 words per minute and answered 46% of the questions correctly
Non-Readers	22	73.33	Pupils could not read a single word in the passage and were stopped after the first line.
Total	**30**	**100.00**	
Mean: 32 SD: 9.56 Description: Non-Readers			

Table 5 presents the frequency and percentage distribution of the learners' reading proficiency level based on the pretest result of oral passage reading with an overall mean rating of 32 (SD= 9.58), described as Non-Readers. The learners have difficulties in oral passage reading. Development of this skill requires a lot of drill and practice.

The data revealed that the highest frequency of 22 (73.33%) was attained by pupils who could not read a single word in the passage and were stopped after the first line. This indicates that the majority of the 30 learners who participated in the study are non-readers on this subtask, oral passage reading. Difficulties in oral passage reading of the learners could have originated from various

factors. Among these factors are lack of interest, inadequate family support, including limited parental involvement and distractions due to work commitments at home. Inadequate reading skills can produce negative effects which may decrease their learning achievement.

Meanwhile the lowest frequency of 1 (3.33%) was acquired by pupils who read more than 50 words per minute and answered 91% of the questions correctly. The result indicates that there is a single proficient reader in this area. This implies that the proficient reader can recognize the letters of the word, associate sounds with the letter, blend the sounds together and say the word (Endo, 2021). Accordingly, the proficient reader demonstrated appropriate speed and proper expression because he could understand the meaning of the text.

Yi (2021) cautioned that making spurious changes in the number of words students read correctly depends on what passage is administered. This occurrence is widely documented and strongly suggests that this assumption was not tenable. The challenges associated with oral passage reading will differ both within and across grade levels, and these passages will not demonstrate uniform discrimination between students possessing high and low word reading proficiency.

At this juncture of the reading process, the reader is required to execute two intricate tasks almost simultaneously, namely decoding and comprehension. Fluent readers are characterized by their ability to decode and comprehend simultaneously, while non-fluent readers allocate nearly all their cognitive resources to decoding, which consequently limits their mental capacity for effective text comprehension. Thus, it is reasonable to assert that oral reading practices should be emphasized for struggling readers in particular, as this will enable them to read with precision and ultimately assist in understanding of the text.

Table 6
Summary of the Learners' EGRA Pretest Results Before Teachers used Marungko Approach Through Multi-Media Aided Teaching

Reading Proficiency Level	Letter Recognition		Letter Sound Identification		Initial Sound Identification		Familiar Words Reading		Oral Passage Reading	
	f	%	f	%	f	%	f	%	f	%
Proficient Readers	3	10.00	2	6.67	1	3.33	2	6.67	1	3.33
Progressing Readers	1	3.33	4	13.33	1	3.33	2	6.67	3	10.00
Beginning Readers	1	3.33	1	3.33	4	13.34	3	10.00	4	13.34
Non-Readers	25	83.34	23	76.67	24	80.00	23	76.66	22	73.33
Total	**30**	**100**	**30**	**100**	**30**	**100**	**30**	**100**	**30**	**100**
Mean Rating:	**38**		**35**		**36**		**35**		**32**	
Standard Deviation:	**11.72**		**10.42**		**10.91**		**10.55**		**9.58**	
Description:	NR		NR		NR		NR		NR	

Table 6 shows the summary distribution of the learners' EGRA pretest results before teachers taught them reading using Marungko Approach through Multimedia Aided Teaching. The overall means of all the components of EGRA disclosed that the learners are Non-Readers. It ranges from 32 to 38 with a standard deviation that ranges from 9.58 to 11.72. The resulting standard deviation reflects that the mean ratings of the learners are not widely spread. It implies that they have almost similar proficiency levels among the specific reading skills.

In particular, it can be noted that the highest mean obtained is in the learners' pretest results in letter recognition. It is understood that this skill is the most basic and simplest learning process. On the other hand, the oral passage reading skill got the lowest mean. It is clear that the learners are still beginning to learn the basic reading skills and so the data speak of the challenges they encounter as well as the reality in the learning process of the Grade 1 learners.

The data shows that the majority of the participants are non-readers, as reflected in the frequency and percentage distribution. The result indicates that the majority of the 30 respondents were non-readers in all subtasks of reading before they entered Grade 1. The pretest results reveal a challenging situation where participants did not acquire an appropriate level of reading competency. Reasonably, these learners could have been given less learning of the pre-reading elements during their kindergarten years.

In letter recognition, the highest frequency of 25 (83.34%) of the participants are classified as non-readers. The result implies that most of the participants have not learned the basic reading skills. It is a fact that these participants have taken Kindergarten, which focuses not only on reading but also on numeracy. Children generally commence the acquisition of letter recognition skills during preschool and continue to enhance this ability throughout their formative educational years. One participant (3.33%) is a beginning reader and the other participant is a progressing reader.

Similarly, in letter sound identification, 23 (76.67%) of the participants are non-readers, while 3.33% or one participant is a beginning reader. The result indicates that the majority of the participants encountered difficulty identifying particular letter sounds. In contrast, one beginning reader can make the connection between sound and the letter symbol of that sound. Twenty-four (80.00%) of the participants are non-readers in initial sound identification, while one participant (3.33%) is identified as either progressing reader, and the other participant (3.33%) is a proficient reader. The underdeveloped phonemic awareness of the participants made it difficult to connect letter sounds to the letter of the alphabet and learn to read.

Furthermore, there are 23 (77.66%) participants who are non-readers in familiar word reading, while 2 (6.67%) participants are recognized as progressing readers and the other 2 (6.67%) participants are proficient readers. Familiar word reading, or readiness skill is attained after learning to identify letter names, letter sounds and letter shapes. Likewise, in oral passage reading, 22 (73.33%) participants are non-readers and 1 (3.33%) participant is a proficient reader. Majority of the participants can identify words while engaging in the reading however, their reading proficiency is compromised due to the complexity of the text. This result is an overwhelming burden on their cognitive working memory at the word level leading to a diminished ability of their working memories to effectively understand the text.

Problem 2. What is the learners' level of reading proficiency based on the post test result of the Early Grade Reading Assessment (EGRA) after the teachers used the Marungko Approach through multimedia-aided teaching in terms of letter recognition, letter sound identification, initial sound identification, familiar words reading and oral passage reading?

Table 7
Distribution of the Learners' Reading Proficiency Level based on the EGRA Posttest Results in terms of Letter Recognition

Reading Proficiency Level	Frequency	Percent	Description
Proficient Readers	29	96.67	Pupils read more than 50 words per minute and answered 91% of the questions correctly.
Progressing Readers	1	3,33	Pupils read 21-50 words per minute and answered 82% of the questions correctly.
Beginning Readers	0	0.00	Pupils read 1-20 words per minute and answered 46% of the questions correctly
Non-Readers	0	0.00	Pupils could not read a single word in the passage and were stopped after the first line.
Total	**30**	**100.00**	
Mean: 97 SD: 14.16 Description: Proficient Readers			

Table 7 presents the frequency and percentage distribution of the learners' reading proficiency level based on the EGRA post test results of letter recognition with an overall mean of 97 (SD=14.61) described as Proficient readers. The overall mean shows a remarkable reading proficiency level of the learner. That is, they are proficient readers, which indicates that there is a tremendous increase in their overall rating as compared to the pretest result. It can be gleaned in Table 1 that the learners are found to be non-readers. The result shows that the use of the Marungko Approach through multimedia-aided teaching is effective.

Further, the data revealed that the highest frequency of 29 (96.67%) was obtained by pupils who read more than 50 words per minute and answered 91% of the questions correctly. This shows that the majority of the learners who participated in the study are proficient readers in this area. The transformation of the learners from non-readers in letter identification to proficient readers could be attributed to the application of the Marungko approach supplemented by multimedia-aided teaching.

Learners accurately say letter names and sounds in isolation and within the context of words. Learners who are exposed to print-rich environments from an early age are proving to have a big advantage when it comes to pre-reading skill sets. According to Van Uittert et al. (2022), good letter recognition develops linearly as the child's visual perception develops. It is possible to consider that, alongside the development of linear visual perception, children are capable of integrating letter recognition competencies within reading activities.

Meanwhile, the lowest frequency of 1 (3.33%) was garnered by a pupil who read 21-50 words per minute and answered 82% of the questions correctly. The result indicates one progressing reader in this area. This progressing reader could have poor visual perception. Children see and interpret different alphabet letters through shape and case type. Most remarkably, there are no more non-readers or beginning readers after they have been taught reading through the Marungko Approach aided by multi-media.

Learners who struggle with letter recognition may have missed the process of learning letters and sounds—termed phonics— requires that these skills are taught in conjunction with one another. There is visual discrimination in the alphabet by sorting letters based on shape, straight lines versus curved, tall letters versus short, etc. (Punkoney, 2023). As a result, some learners experience discrimination confusion, which causes errors such as letter reversals and rotations (Carroll et al., 2022).

Table 8

Distribution of the Learners' Reading Proficiency Level based on the EGRA Posttest Results in terms of Letter Sound Identification

Reading Proficiency Level	Frequency	Percent	Description
Proficient Readers	28	93.33	Pupils read more than 50 words per minute and answered 91% of the questions correctly.
Progressing Readers	2	6.67	Pupils read 21-50 words per minute and answered 82% of the questions correctly.
Beginning Readers	0	0.00	Pupils read 1-20 words per minute and answered 46% of the questions correctly
Non-Readers	0	0.00	Pupils could not read a single word in the passage and were stopped after the first line.
Total	**30**	**100.00**	
Mean: 89 SD: 13.49 Description: Proficient Readers			

Table 8 presents the frequency and percentage distribution of the learners' reading proficiency level based on the post test results in terms of letter sound identification after they were taught reading using the Marungko Approach through Multimedia Aided Teaching. The result indicated an overall mean rating of 89 (SD= 13.49), described as Proficient Readers. This means that the teachers' use of the Marungko Approach through multimedia-aided teaching is effective. The learners performed very well in their post test result on letter sound identification.

Further, the data revealed that the highest frequency of 28 (93.33%) was attained by pupils who read more than 50 words per minute and answered 91% of the questions correctly. This indicates that the majority of the learners are proficient readers in this area. Children acquire reading skills through the process of linking sounds with written symbols and then combining these symbols to form words. Learners with a well-developed phonemic consciousness demonstrate a higher probability of mastering this skill. Studying the phonetic attributes of alphabetic characters holds significance in the process of deciphering written language and constitutes a fundamental element within phonics pedagogy. Certain phonemic representations pose less difficulty for young learners compared to others.

Through multimedia tools, separating visually similar letters from each other in the instructional sequence could prove beneficial. Hence, while prioritizing the instruction of commonly used letters over less frequent ones is logical, the visual attributes of the letters should not be overlooked. Additionally, the potential benefits of utilizing the letters present in the names of children for teaching letter-sound associations (Jones, 2018). For instance, a student might exhibit increased interest in learning about a specific letter if a teacher highlights its presence in a peer's name.

On the other hand, the lowest frequency of 2 (6.67%) was obtained by pupils who read 21-50 words per minute and answered 82% of the questions correctly. This means that very few are progressing readers in this area. However, there are no more learners who are found to be non-readers and beginning readers. Children who lack phonemic awareness encounter difficulties in linking—the comprehension that words consist of sound segments referred to as phonemes. Difficulties in developing phoneme awareness can have genetic and neurobiological origins or can be attributable to a lack of exposure to language patterns and usage during infancy and the preschool years (Lyon, 2023).

Table 9

Distribution of the Learners' Reading Proficiency Level based on the EGRA Posttest Results in terms of Initial Sound Identification

Reading Proficiency Level	Frequency	Percent	Description
Proficient Readers	27	90.00	Pupils read more than 50 words per minute and answered 91% of the questions correctly.
Progressing Readers	2	6.67	Pupils read 21-50 words per minute and answered 82% of the questions correctly
Beginning Readers	1	3.33	Pupils read 1-20 words per minute and answered 46% of the questions correctly
Non-Readers	0	0.00	Pupils could not read a single word in the passage and were stopped after the first line.
Total	**30**	**100.00**	
Mean: 85 SD: 12.73 Description: Proficient Readers			

Table 9 presents the frequency and percentage distribution of the learners' reading proficiency level based on the EGRA post test results of initial sound identification with an overall mean of 85 (SD=12.73) described as Proficient Readers.

The data revealed that the highest frequency of 27 (90%) was acquired by pupils who read more than 50 words per minute and answered 91% of the questions correctly. This suggests that the majority of the 30 learners are proficient-readers. Due to the instinctive nature of speaking words, children initially perceive words as a singular, unified concept. Then, they recognized the first letter of the word and isolated individual sounds.

While the connection between speaking and listening and the process of learning to read may not be immediately apparent, it is crucial to recognize the significance of phonological awareness in reading acquisition. In the application of multimedia tools, the words are broken apart orally and use sounds to learn to read making learners easily learn the initial sound of the word. Being able to recognize the initial sound in words is the most important skill for learning to read that is related to sound awareness (Regional Educational Laboratory Program, 2024).

Meanwhile, the lowest frequency of 1 (3.33%) was earned by a pupil who read 1-20 words per minute and answered 46% of the questions correctly. The result shows that one learner is a progressing reader in this area. Cross-cultural differences can impede initial sound identification. Marungko's approach is Filipino-based alphabet learning. Cultural differences manifesting in communication pertain to the variations observed among individuals engaged in dialogue, stemming from divergences in their values, beliefs, norms, and behaviors. Consequently, these cultural disparities may influence communication styles in various aspects, including phrases, vocabulary, gestures, and the languages employed. Culture can also affect the manner in which individuals convey information and their attitudes toward conflict.

Table 10
Distribution of the Learners' Reading Proficiency Level based on the EGRA Posttest Results in terms of Familiar Words Reading

Reading Proficiency Level	Frequency	Percent	Description
Proficient Readers	28	93.33	Pupils read more than 50 words per minute and answered 91% of the questions correctly.
Progressing Readers	2	6.67	Pupils read 21-50 words per minute and answered 82% of the questions correctly
Beginning Readers	0	0.00	Pupils read 1-20 words per minute and answered 46% of the questions correctly
Non-Readers	0	0.00	Pupils could not read a single word in the passage and were stopped after the first line.
Total	**30**	**100.00**	
Mean: 89 SD: 13.67 Description: Proficient Readers			

Table 10 presents the frequency and percentage distribution of the learners' reading proficiency level based on the EGRA post test results of familiar words reading with an overall mean of 89 (SD=13.67) described as Proficient Readers.

The data further revealed that the highest frequency of 28 (93.33%) was obtained by pupils who read more than 50 words per minute and answered 91% of the questions correctly. This indicates that the majority of the 30 learners are proficient readers in this area. Learners displayed no signs of difficulty when reading words and no repeated misidentification of familiar words are expressed. Learners effortlessly read familiar words through multimedia tools due to the presentation of text and audio, which made them very interested to hear the familiar words and read it. Thus, they become proficient readers through the application of multimedia.

Meanwhile, the lowest frequency of 2 (6.67%) was acquired by pupils who read 21-50 words per minute and answered 82% of the questions correctly. The result indicates that very few are progressing readers in this area. Moreover, it must be noted that there are no more learners who are found to be non-readers. Although reading is a complex skill, the learners read words accurately and fluently. The concept of words is the most basic principle of reading and a strong predictor of a child's reading skills and success (Starke, 2021)

Dolgunsöz (2018) observed that readers spent more cognitive effort to process unfamiliar or novel words when compared to familiar ones even when length and frequency effects were held constant. The reading time may vary from the reading speed of single words, as a result of varying levels of interpreting the words. Thus, the influence of familiarity levels can significantly impact the time taken for reading single words. Likewise, Novita, Hamied, and Sukyadi (2023) revealed that readers who engage with texts that are culturally familiar have been shown to surpass those who read culturally unfamiliar texts in their reading performance. However, low-proficiency readers can experience significant improvement through the utilization of culturally familiar texts in their reading practices. Notably, the students exhibited heightened engagement following exposure to texts that included elements of their familiar culture.

Table 11
Distribution of the Learners' Reading Proficiency Level based on the EGRA Posttest Results in terms of Oral Passage Reading

Reading Proficiency Level	Frequency	Percent	Description
Proficient Readers	27	90.00	Pupils read more than 50 words per minute and answered 91% of the questions correctly.
Progressing Readers	2	6.67	Pupils read 21-50 words per minute and answered 82% of the questions correctly
Beginning Readers	1	3.33	Pupils read 1-20 words per minute and answered 46% of the questions correctly
Non-Readers	0	0.00	Pupils could not read a single word in the passage and were stopped after the first line.
Total	**30**	**100.00**	
Mean: 88 SD: 13.29	Description: Proficient Readers		

Table 11 presents the frequency and percentage distribution of the learners' reading proficiency level based on the EGRA post test results of oral passage reading with an overall mean of 88 (SD=13.29) described as Proficient Readers. Moreover, the data disclosed that the highest frequency of 27 ((90%) was attained by pupils who read more than 50 words per minute and answered 91% of the questions correctly. This shows that the majority of the learners who participated in the study are proficient readers in this area. The significant increase in proficient readers could be attributed to the application of multimedia tools. Through these multimedia gadgets, repeated oral reading can be performed until appropriate word recognition and fluency is achieved,

Further, oral reading has many benefits for learners. They can enhance their vocal delivery and intonation, as well as their ability to recognize and comprehend words. While reading words, they realize their mistakes. These mistakes can be rectified through the help of multimedia tools. In order to achieve the ultimate goal, struggling readers need to make repetitious reading using multimedia tools to reach their appropriate fluent reading level. Repeated oral reading is proven to be effective. As readers engage with the text repeatedly, the more fluency increases and comprehension improves There is a notable enhancement in both fluency and comprehension.

Meanwhile, the lowest frequency of 1 (3.33%) was earned by a pupil who read 1-20 words per minute and answered 46% of the questions correctly. The result suggests that only one is found to be a beginning reader in this area. However, it must be noted that there are 2 (6.67%) learners who are found to be progressing readers. More importantly, there is no one who is a non-reader. Good reading requires adequate working memory. Beginning and progressing learners could not remember what they had read in a few sentences prior, so they could not make connections in the text. Also, they lack attention or maintain focus to the oral passage reading, which results in difficulty in connecting ideas as a necessity for good reading.

Lyon (2023) found that young children who have limited exposure to both oral language and print before they enter school are at-risk for reading failure. Conversely, there are also some children who can read words accurately and quickly yet do have difficulties comprehending, but they constitute a very small portion of those with reading problems.

Table 12
Summary of the Learners' EGRA Post test Results After Teachers used Marungko Approach Through Multimedia Aided Teaching

	Letter Recognition		Letter Sound Identification		Initial Sound Identification		Familiar Words Reading		Oral Passage Reading	
Reading Proficiency Level	F	%	f	%	f	%	f	%	f	%
Proficient Readers	29	96.67	28	93.33	27	90.00	28	93.33	27	90.00
Progressing Readers	1	3.33	2	6.67	2	6.67	2	6.67	2	6.67
Beginning Readers	0	0.00	0	0.00	1	3.33	0	0.00	1	3.33
Non- Readers	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Total	**30**	**100**	**30**	**100**	**30**	**100**	**30**	**100**	**30**	**100**
Description:	Proficient Readers		Proficient Readers		Proficient Readers		Proficient Readers		Proficient Readers	

Table 12 shows the summary distribution of the learners' reading proficiency level based on the post test result of EGRA. The data disclosed that the majority of the participants are Proficient Readers across all the subtasks of EGRA. Twenty-nine (29) (96.67%) participants in letter recognition, 28 (93.33%) in letter sound identification, 27 (90.00%) in initial sound identification, 28 (93.33%) in familiar word reading, and 27 (90.00%) in oral passage reading. No participant is a non-reader. The improvement in the

reading performance of the learners, as gleaned in Table 12, could be attributed to the implementation of multimedia-aided teaching.

These findings strengthen the Multimedia Theory of Learning of Mayer (2019) which states that students learn better from images and words than just words alone. Simply speaking, images and words work better together than either one on their own. The underlying justification why numerous students encounter significant challenges in understanding information exclusively from textual sources, as they find it difficult to comprehend the material in the absence of visual aids. Basically, the combination of the images, text, audio and video provided good results for the learners and reading the text was the most desirable activity in multimedia-aided learning.

However, students possess a limited capacity for processing information, and they endeavor to comprehend the material by constructing mental representations derived from various informational sources. This necessitates an active learning process that involves filtering, selecting, organizing, and integrating information in alignment with pre-existing knowledge. Consequently, as students engage in the active processing of incoming information, they simultaneously employ their prior knowledge to aid this cognitive process.

Several studies have shown that this is relevant to the results of the current study. The reading skills of Grade I learners significantly improved after employing the enhanced graphic-based reading materials (Ebisa, 2021), and the use of video lessons through the Marungko approach also received positive perceptions from teachers and parents (Jimena et al., 2022). Similarly, Dimacial and Lumapenet (2023) reported that the Marungko Approach influenced the pupils' reading development and was found to be significantly related to the pupils' reading skills, specifically in phonics, word recognition, and comprehension.

Given that the Marungko Approach is used in video-based keywords, the results have shown that it is an effective tool for honing learners' oral reading and comprehension skills, as well as empowering them to participate equally in the learning tasks provided by teachers across the K-12 curriculum (Santos & De Vera, 2020).

Problem 3. Is there a significant effect of the use of Marungko Approach through multimedia-aided teaching towards the learners' reading proficiency level based on the posttest results of Early Grade Reading Assessments (EGRA)?

Table 13

Significant Effect of Marungko Approach Through Multimedia Aided Teaching on the Learners' Reading Proficiency Level based on the EGRA Pretest and Post test Results

Reading Skills	Pretest-Post test		
	t-value	*p-value*	*Interpretation*
Letter Recognition	-21.138	0.00	Significant
Letter Sound Identification	-19.062	0.00	Significant
Initial Sound Identification	-24.420	0.00	Significant
Familiar Words Reading	-22.305	0.00	Significant
Oral Passage Reading	-20.643	0.00	Significant
Overall	**-21.514**	**0.00**	**Significant**

Table 13 presents the significant effect of the teachers' use of the Marungko Approach through Multimedia Aided Teaching on the learners' reading proficiency level. After computing, a substantial effect has been observed between the pretest and posttest outcomes concerning the reading abilities of learners, which suggests that the implemented intervention has a noticeable impact on the reading proficiency levels of the participants. The negative t-value shows a reversal in the directionality. It has no impact on the significance of the effect between groups of data because t-tests are used to compare the means of the assessments (Gillespie, 2018).

The negative t-values observed, along with p-values of 0.000, signify a considerable enhancement in these subtasks of EGRA, resulting in the rejection of the null hypothesis. Likewise, the subtasks "letter recognition," "letter sound identification," "initial sound identification," "familiar words reading," and oral passage reading" displayed notable progressions with t-values of -21.138, -19.062, -24.420, -22.305, and -20.643, correspondingly. These negative t-values with corresponding p-values strongly support the rejection of the null hypothesis, suggesting a significant positive influence of the Marungko method on these subtasks. Accordingly, the identical rejection of the null hypothesis across all subtasks emphasizes the effectiveness of the Marungko approach in improving the different reading proficiency issues of young learners.

Expressly, the t-value of initial sound identification of -24.420 indicated an elevated significant effect between the pretest and post test of the participants. In contrast, the t-value pertaining to letter sound identification was recorded at -19.062, indicating a statistically significant yet modest difference between the pretest and posttest results of the participants. The reason for the large or small values between the initial sound identification and letter sound identification can be traced from the participants' mother tongue.

Evidently, the overall t-value of -21.514 with a p-value of 0.00 signified a significant increase in the participants' reading proficiency relative to their pretest and post test scores with the application of multimedia-aided teaching. Thus, the null hypothesis that stated there was a significant effect of the use of the Marungko Approach through multimedia-aided teaching towards the learners' reading skills based on the posttest scores of Early Grade Reading Assessment is rejected.

Conclusions

Based on the results of the study, the following conclusions are obtained: Despite finishing Kindergarten, most of the respondents displayed low prior knowledge about the pre-reading skills elements. This was disclosed by the results of their pretest scores. However, their poor reading ability was transformed to better performance through the Marungko approach using the multimedia-aided teaching. The improvement of their reading proficiency was not only revealed by the results of the posttest but also tested through the rejection of the null hypothesis of no significant effect. Thus, the application of the Marungko approach in teaching and supplemented by multimedia tools at the initial reading stage, helps in acquiring the necessary reading competencies.

Equally, the study supported the Dual Coding theory of Paivio and the Multimedia Theory of Learning of Mayer (2019). The prevailing concepts essential in both theoretical frameworks underscore the significance of conveying novel information via multiple modalities of verbal and visual representation, as opposed to relying solely on a singular modality. Viewed as a whole, the integration of multimedia-assisted educational tools, particularly focusing on reading skills, has the potential to enhance students' skills. As this study has accomplished, the Marungko approach through multimedia-aided teaching delivered greater benefits in teaching the basic reading concepts at the early stage of learning.

Recommendations

Considering the conclusions of the study, the following recommendations are given:

1. Grade I teachers of early-grade learners may integrate multimedia-aided tools into Marungko as an intervention to enhance and elevate the reading proficiency of non-readers who struggle with letter-sound knowledge.

2. Grade I teachers may plan and schedule home visits to parents whose children encounter difficulty in reading. This initiative of teachers not only prevents the growing gap between home and school but also makes the learners realize they are cared for and are expected to learn.

3. It is necessary that parents are informed about the Marungko approach, which serves as a foundational reading instruction and intervention strategy for learners in Grade I. Through parental involvement, parents can teach their young children the essential features of reading at home. The education of a child is a collaborative responsibility shared equally between teachers and parents.

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