

early childhood education and literacy development

Utilization of Project Kind-Er (Engagement in Reading) to Strengthen the Foundation of Learning in Kindergarten

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ABSTRACT

Article History

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Keywords— Kindergarten Curriculum, sound-recognizewrite checklist, assessment, 5-day activity plan, reading, Early Childhood Education The Kindergarten Curriculum in the Philippines (2016) recommends introducing alphabet names, sounds, and symbols during the 11th week, coinciding with the second quarter of the academic year. The curriculum initially presents two letters each week and another two in the subsequent weeks, which may challenge fiveyear-old pupils in comprehending the abstract nature of the alphabet. This study aimed to determine the effects of introducing one letter per week and another in the subsequent weeks,

thereby creating a more engaging learning environment without overwhelming the pupils with two letters at once. The implementation began in the third week of the first quarter. A Sound-Recognize-Write assessment checklist was used in this study, involving thirty-five kindergarten pupils from a single section. The results revealed that 30 out of 35 mastered the sound, name, and symbol of all twenty-eight (28) letters in the Filipino alphabet. In this study, researchers also



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found out the most difficult letters to master and the easiest letters to recognize. It was then recommended that additional time be provided to explore the letters, especially those letters that are difficult to master. A 5-day activity plan was proposed to help the struggling learners to improve their literacy skills.

INTRODUCTION

Early childhood education is a critical stage of learning as it lays the foundation for cognitive, emotional, and physical growth. Early life experiences have a big influence on how well children learn and grow later in life. Children learn best at this age when they are actively involved in hands-on activities that foster their imagination, curiosity, and discovery (Kim, 2020). Piaget's stages of development indicate that infants in the preoperational stage (ages 2-7) acquire knowledge most effectively via active interaction with their surroundings, particularly through hands-on activities that promote creativity, curiosity, and exploration. Vygotsky's social constructivist theory similarly underscores the significance of social interactions and the scaffolding offered by adults and peers in the development of fundamental abilities, such as reading. These ideas emphasize the need of a nurturing and engaging learning environment in early infancy (Berk, 2021).

However, their experiences were limited to technology and home-based because of the pandemic. Jalango (2021) confirmed in his study that the COVID-19 pandemic has disrupted traditional learning environments throughout the world, causing schools to adopt online or hybrid learning methods. Thus, young learners had increased exposure to gadgets and multimedia. The consequences of these disruptions are still being felt in many educational institutions, especially in early childhood education.

In Ethiopia, Kim et al. (2021) studied the implications of the pandemic, and they discussed that children missed fundamental abilities brought by a supportive learning environment, including reading, social skills, and attention span. In a similar study, research conducted in other areas revealed that developmental delays were made worse by parents' inability to offer organized instruction at home. This shift in the school system has raised concerns about parental duties and their learners' academic performance (Caasi & Pentang, 2022). These difficulties brought attention to a growing educational divide on a worldwide scale and prompted creative approaches to early childhood education inequalities.

When schools transitioned from restricted to full face-to-face (f2f) in-person classes, kindergarten preparedness in San Ramon Elementary School, where the researchers taught, was hampered by a lack of exposure to organized and

supported learning environments. Ashby et al. (2022) claimed that phonological awareness can begin as early as age 3. They also added that by the beginning of kindergarten, most children can rhyme words and identify words that have the same first sound. But the school showed different results. Despite efforts to provide reading experiences, pupils were struggling to learn and recall the sounds, highlighting the critical need for more effective teaching methodologies.

Piaget's theory, which highlights that children are not yet able to think abstractly and benefit from repeated, concrete experiences, helps to clarify the difficulties seen. Vygotsky's theory of the zone of proximal development (ZPD), which holds that educators are essential in filling up gaps through scaffolding, further underscores the necessity for guided teaching catered to each child's present developmental stage. Despite the theoretical insights, the suggested activities and approaches in the Kindergarten Curriculum Framework (2016) overwhelm young learners as they are expected to master two (2) letters each week. This only rushed the pupils to grasp the abstract nature of the assigned letters. The fast-paced curriculum fails to account for the need for repetition and reinforcement at this critical developmental stage.

The gap between the intended outcomes of early childhood education and the actual developmental progress of children is evident. The present educational system often disregards Piaget and Vygotsky's explicit recommendations about how children learn, prioritizing speed and coverage above mastery and reinforcement. The gap was further extended by pandemic-related interruptions, which left many kids unprepared for formal education and highlighted the need of focused interventions to improve fundamental learning abilities.

A literacy intervention that adheres to developmental principles, Project Kind-ER (Engagement in Reading), was put into place by the researchers to address these issues. In the third week of the first quarter, the project began introducing one letter per week and included exercises and routines to reinforce sounds that had already been taught. Before moving on to first grade, this method gave kids plenty of chances to learn letter-sound correlations by embracing repetition, scaffolding, and patience. With a focus on progressive mastering and stimulating activities, Project Kind-ER sought to meet the special requirements of kindergarten students in the post-pandemic setting by establishing a nurturing atmosphere that adheres to both Piaget's and Vygotsky's theories.

According to the project's first findings, using interactive exercises and repetition may help foster literacy development. Ashby et al. (2022) and Jalango (2021) have shown that organized, developmentally appropriate treatments are beneficial in early childhood education. To close the gaps caused by the pandemic, Project Kind-ER offers a paradigm that prioritizes mastery over speed,

guaranteeing that young students acquire the fundamental skills required for lifetime learning.

FRAMEWORK

This study is grounded in the theoretical concepts of active learning and phonological awareness in early childhood education.

Active learning. Active learning emphasizes the importance of engaging learners through hands-on activities that stimulate critical thinking and foster deeper understanding. According to Munna and Kalam (2021), blended and experiential learning approaches are recommended for improving the learning experience and reducing disruptive issues. These methods encourage active participation, which is significant in maintaining focus and interest among young learners.

Despite the legislative framework provided by RA 8980, otherwise known as the Early Childhood Care Development (ECCD) Act, which aims to enhance holistic development among young learners, including physical, socio-emotional, and intellectual domains, the post-pandemic environment presented significant challenges. Restrictions and disruptions of their natural growth outside their homes hindered children from fully exploring their environment, exercising curiosity, and engaging in interactive, inquiry-based learning. This limitation resulted in shorter attention spans among learners observed during the face-toface classes. Teachers face increased difficulty in addressing the diverse needs of learners, many of whom quickly lose interest due to excessive exposure to gadgets and multimedia before interacting in the school setting.

Attention Span. According to Brown (2021), a 4- or 5-year-old child should be able to focus on a task for two to five minutes times the year of their age. Young children (ages 4-5) usually concentrate for between 5 and 20 minutes, depending on the task—less time with novel and challenging tasks and more time with intrinsically enjoyable activities. Fiedacan et al. (2018) confirmed that the factors affecting the attention span of kindergarten pupils are a lack of interest in activity, poor health, and overexposure to electronic gadgets.

Spaced Repetition. Spaced repetition was coined by Ebbinghaus, as mentioned by Wollstein and Jabbour (2022). Spaced repetition is a pedagogical method that entails increasing intervals of review over time. This strategy is based on the forgetting curve concept, which posits that knowledge retention is enhanced when reviewed at strategic intervals. This study employs spaced repetition by concentrating on one letter each week, enabling young learners

to constantly review and reinforce their knowledge. Regularly studying the target letter enhances pupils' memory retention and augments their phonemic awareness. This method aids in averting knowledge retention loss that may arise from unreinforced learning, hence enhancing long-term retention and proficiency in fundamental reading abilities. Furthermore, spaced repetition facilitates the incremental accumulation of knowledge, allowing pupils to associate new information with prior learning, thereby improving overall learning efficacy and engagement.

Multisensory Learning. Kindergarten is in the phase called pre-operational learning, as stated by Jean Piaget in his theory of child cognitive development. At this stage, the young learners start to engage in a concrete learning process using all five senses that enhance their metacognitive skills (Laksana et al., 2021). Teachers can improve both the tactile and auditory by using multimodal techniques. In this study, learners draw letters on sandpaper or a sand table while reading the letters out loud. This not only helps pupils remember things better but also helps them make connections between abstract ideas and things that happen to them in real life. This makes the foundation of learning stronger and more stable.

Constructivist Learning Theory. In constructivist learning, pupils take responsibility for their learning, make choices about the process, and possess the ability to self-regulate. Saracho (2023) mentioned that many psychologists had confirmed that specific experiences view interpretations in their learning. Piaget, Bruner, Ausubel, Dewey, and Vygotsky provided a comprehensive understanding of how learning occurs, each contributing to the unique roles of the learner, environment, and social context in shaping cognitive development. Piaget suggests that learning occurs through active interaction with the environment where children process information using mental skills that they already know. Bruner emphasizes the internal process, focusing on intrinsic motivation to solve problems. Ausubel highlights the connection of prior knowledge to facilitate understanding the existing new knowledge. Dewey stresses learning by doing, encouraging hands-on activities, problem-solving, and practical interaction with the environment. Vygotsky focuses on the roles of significant others to support learning through social interaction and cultural context. Arık and Yılmaz (2020) suggested that constructivist learning and active learning should be frequently used in classes because they greatly affect environmental education.

Phonological Awareness under the ASEAN Framework. Khasawneh and Alkhawaldeh (2020) said Stanovich delineated phonological awareness abilities in 1982. He defines phonological awareness as the ability to identify the places of articulation of linguistic sounds, the mechanisms of sound generation, and the ways in which these sounds amalgamate to form words, sentences, and

expressions. It is a cognitive skill to modify the phonemic composition of words. This essential talent is crucial to early childhood reading, allowing youngsters to comprehend and formulate language proficiently.

The ASEAN nations have acknowledged the significance of phonological awareness, and several countries have adopted strategies that emphasize this competency. In Singapore, organized phonics programs prioritize soundletter correspondences and syllable mixing, so providing learners with strong phonological abilities from the outset of their schooling (Mullis et al., 2017). Malaysia incorporates phonics and multisensory techniques into its National Preschool Curriculum to actively engage young learners, enhancing phonemic awareness and memory retention (Hashim & Yunus, 2018).

Progressive Familiarization with Alphabetic Nomenclature, Phonetics, and Glyphs. This research advocates for an educational approach that progressively introduces letters, facilitating children's comprehension of the abstract principles of the alphabet. The weekly emphasis on an individual letter, enhanced by interactive activities like mosaics, auditory games, and kinesthetic exercises, reflects effective strategies in Indonesia, where syllable-oriented approaches facilitate gradual acquisition of phonological frameworks (Sulistiyo et al., 2021). These methods guarantee that infants have sufficient time to assimilate the sound, name, and symbol of each letter before advancing, hence resolving issues such as the sound exchange noted in the research.

Synthesis of Frameworks to Develop Daily Activities

Day 1: Consolidate previously acquired letters with focused activities, thereafter, present the new letter via a mosaic activity. This reinforcement mechanism, derived from spaced repetition, corresponds with Malaysia's multisensory approach that integrates tactile and visual inputs to enhance letter recognition. It illustrates multimodal learning by activating other senses—such as tactile, visual, and auditory—to augment the learning process and promote retention.

Day 2: Emphasize the phonetic sound of the letter by providing words that start with the respective sound. This method promotes phonological awareness and adheres to constructivist learning concepts, as seen in Singapore's phonics-centered curriculum.

Day 3: Conduct interactive activities in which children recognize words that start with the specified letter of the week. Inspired by the constructivist method, active learning concepts, and Thai cultural traditions, activities such as "find-and-pick-up" integrate fun components to engage and capture learners actively.

Day 4: Kinesthetic learning exercises, in which learners shape letters

with their bodies and trace them in the air, exemplify Indonesia's emphasis on movement-oriented instructional methodologies. For the young who have difficulties in letter writing, practicing on sand tables offers a customized and helpful educational experience. This methodology is inspired by active learning concepts, constructivist ideas, and multisensory instructional strategies.

Day 5: Engage in a rotation of several activity stations, including letter puzzles, fishing games, and uppercase-lowercase matching exercises. This approach corresponds with collaborative teaching practices in ASEAN nations, where instructor cooperation improves student results.

The study explored the use of active learning and phonological awareness principles to address early literacy challenges in post-pandemic contexts. It emphasizes the importance of engaging learners through hands-on activities and phonological awareness, a crucial skill for early reading. Project Kind-ER incorporates these principles through spaced repetition, multisensory learning, progressive familiarization, and culturally relevant activities. This model provides a replicable model for addressing early literacy challenges across ASEAN countries, fostering a strong foundation for future learning.

OBJECTIVES OF THE STUDY

The researchers would like to determine the performance of the respondents in terms of sounding, recognizing and writing the symbols of the alphabet. Furthermore, it sought to determine the significant differences between the performance before and after the implementation of the project. Lastly, the researchers planned to propose daily activities that improve the literacy level of the learners with the least exposure to early childhood experiences.

METHODOLOGY

Research Design

The descriptive research method was utilized due to its capacity for thorough and systematic examination of existing circumstances and practices, which corresponds with the study's objective of assessing the efficacy of Project Kind-ER in improving kindergarten students' basic reading abilities. This approach is especially apt for examining the predominant issues in early childhood education, including literacy deficits and the effects of restricted pre-school exposure resulting from the pandemic. It enables the collection of comprehensive data on learners' performance before to and during intervention, allowing researchers to discern trends, patterns, and areas requiring improvement. Moreover, descriptive research facilitates data interpretation without the need of experimental controls, making it suitable for educational environments where ethical and practical limitations may restrict experimental methodologies.

Research Site

The study was conducted in San Ramon Elementary School, Canlubang, Calamba, Laguna.

Participants

The study participants were thirty-five (35) identified struggling kindergarten classified as having difficulty acquiring the sounds, names, and symbols of the alphabet. The selection procedure used pre-assessment instruments, including the sound-recognize-write checklist, utilized by teachers to examine each learner's reading competencies. Learners who got recognized, sound and write 5 letters below were included in the selection. Moreover, learners with little experience to organized early childhood education before enrollment were given precedence.

Data Collection

The researchers used the sound-recognize-write assessment results of kindergarten to determine their performance in sounding the alphabet, recognizing the letter names, and writing the respective symbols. Prior to initiating the research, authorization was obtained from the school principal and administration to verify compliance with institutional rules. Additionally, parental approval was obtained through a formal consent form that outlined the study's aims, processes, and possible advantages for the participants. This guaranteed openness and the voluntary involvement of both the children and their parents in the study process.

Then, the researchers conducted Parent orientations for possible follow-ups during and after the assessment. Afterward, the researchers updated the localized intervention materials to be used during the implementation. After the postassessment of sound-recognize-write, the researchers applied statistical treatment to determine the significant difference in the performance of kindergarten in terms of sounding the alphabet, recognizing the letter names, and writing the corresponding symbols. The observed difficulties were consolidated, and proper analyses were given carefully. All the above-cited outputs and the summary of findings, conclusions, and recommendations were presented to the Parents, Kindergarten Teachers and submitted to the school principal. After the data was interpreted, a research forum was conducted to share the study result with the participating students, parents, Kindergarten teachers, and the principal. Still, the names of the students were mentioned in the discussion of the result.

Statistical Techniques

The data were processed and analyzed for a systematic presentation in the form of tables. Compute the total score for each participant by summing up their scores across all assessment items – sound, recognize, write. For each assessment item, compute the correlation between the item score and the overall score, removing the score for that item to prevent repetition. Utilize SPSS tool to do the computation.

Statistical tools were used in the interpretation of data. Mean was used to determine the performance of the kindergarten learners, while paired t-tests were used to know if there was a significant difference between the pretest and posttest assessment. The level of significance (α) was set to 0.05 level of confidence.

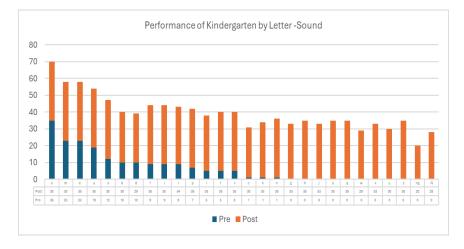
Research Ethics Protocol

An ethics procedure is crucial for safeguarding privacy, confidentiality, and ethical adherence in research involving children. The researchers acquired parental agreement Furthermore, child agreement was also asked, either vocally or non-verbally, to validate his/her voluntary involvement. To ensure privacy, confidentiality mechanisms was implemented including the anonymization of participant data using codes. Finally, authorization from the school administration was obtained and executed ethically.

RESULTS AND DISCUSSION

This section presents and interprets the findings of the study. Data are summarized and discussion follows the sequence of problems presented.

- 1. What is the performance of kindergarten before and after the utilization of Project Kind-ER in terms of:
- **a.** sounds of the alphabet,



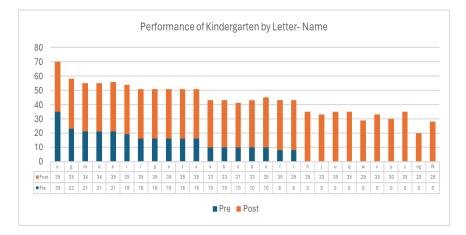
Graph 1 Sounds of the Alphabet (Pre and Post)

Graph 1 shows kindergarteners' performance in sounding the letters of the alphabet during pre- and post-assessment using a sound-recognize-write tool. All respondents can sound /o/, 65.71% can sound /m/ along with /e/, and 54.29% can sound /a/. Evans et al. (2006) confirmed that knowledge of letters in vowels was better than consonants.

Meanwhile, none of them can sound /g/, /h/, /j/, /u/, /q/, /w/, /x/, /y/, /z/, / ng/, and /n/ during the pre- assessment. This is almost similar to the findings of Treiman and Kessler (2004), who conclude that letters L, R, Q, W, X, Y, and Z ranked bottom during the letter-sound correspondence of preschoolers.

At the end of the implementation of the project, there are still 5 or 14.29% of the respondents still had difficulty in sounding /b/ and /d/, /w/ and /y/, /ng/ and /n/. They tend to interchange the sounds.

b. recognition of letter-name,



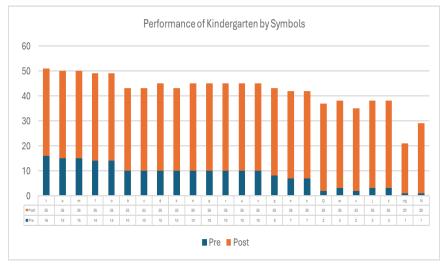
Graph 2 *Letters of the Alphabet (Pre and Post)*

Graph 2 revealed that the letter O is the most recognized letter in the alphabet by the respondents of this study. The letter has a simple, circular shape, which is easy for children to recognize. Its visual simplicity can aid in letter recognition. As a result, even the most struggling learners can identify the letter.

Meanwhile, the letters h, j, u, q, w, x, y, z, ng, and ñ are the most difficult to recognize by the respondents. Most of these letters are seldom used in the Filipino language, which makes them harder to recognize.

c. writing the symbols of the letters?

Graph 3



Symbols of each letter (Pre and Post)

Graph 3 shows the results of the 35 respondents when asked to write the symbol of each letter, both uppercase and lowercase. It is easier for them to write letters t, a, m, f, and o. The stroke of these letters is similar in scribbling which is the first stage of writing.

2. Is there a significant difference between the performance of kindergarten before and after the implementation of Project Kind-ER in terms of:

Significant Result

a. recognition of letter-name

Table 1

Significant Difference between pre and posttest in recognizing the name of each letter

Paired Differences

		Mean	SD	SE Mean	95% Confidence Interval of the Difference				
					Lower	Upper	t	df	Sig. (2-t)
Pair 1	A - V3	-10.603	12.896	1.625	-13.851	-7.355	-6.526	62	.000
Pair 2	B - V5	657	.539	.091	842	472	-7.210	34	.000
Pair 3	C - V7	600	.604	.102	807	393	-5.878	34	.000
Pair 4	D - V9	657	.539	.091	842	472	-7.210	34	.000
Pair 5	E - V11	400	.497	.084	571	229	-4.761	34	.000
Pair 6	F - V13	771	.426	.072	918	625	-10.712	34	.000
Pair 7	G - V15	343	.482	.081	508	177	-4.212	34	.000
Pair 9	I - V19	543	.505	.085	716	369	-6.354	34	.000
Pair 11	K - V23	657	.539	.091	842	472	-7.210	34	.000
Pair 12	L - V25	771	.426	.072	918	625	-10.712	34	.000
Pair 13	M - V27	400	.497	.084	571	229	-4.761	34	.000
Pair 14	N - V29	714	.458	.077	872	557	-9.220	34	.000
Pair 16	P - V33	543	.505	.085	716	369	-6.354	34	.000
Pair 17	Q - V35	943	.236	.040	-1.024	862	-23.685	34	.000
Pair 18	R - V37	457	.505	.085	631	284	-5.351	34	.000
Pair 19	S - V39	543	.505	.085	716	369	-6.354	34	.000
Pair 20	T - V41	543	.505	.085	716	369	-6.354	34	.000
Pair 22	V - V45	543	.505	.085	716	369	-6.354	34	.000
Pair 24	X - V49	943	.236	.040	-1.024	862	-23.685	34	.000
Pair 27	NG - V55	5686	.471	.080	848	524	-8.613	34	.000
Pair 28	Ñ - V57	800	.406	.069	939	661	-11.662	34	.000

The results reveal that is a significant difference between the results of pre and

posttest during the recognition of letter names from A-Z, including Ng and Ń. Following the intervention, a significant enhancement in letter name recognition was seen, as indicated by paired t-tests (p < 0.05). The simple, circular form of the letter O facilitated its identification among all participants. Nevertheless, letters such as h, j, q, w, x, z, ng, and ñ continued to provide recognition challenges, perhaps attributable to their limited occurrence in the Filipino language. The intricacy of these letters and their restricted presence in everyday discourse and written communication may explain the difficulties encountered by learners (Evans et al., 2006; Treiman & Kessler, 2004). This highlights the significance of cultural and linguistic elements in letter familiarity and recognition.

The intervention included spaced repetition to review previously acquired letters, with multisensory activities such as drawing letters in sand and constructing letters using bodily motions. These strategies correspond with Vygotsky's Zone of Proximal Development (ZPD) and Piaget's theory of concrete learning, both of which emphasize experiential and scaffolded learning to improve mastery.

Non- Significant Results

b. sounds of the alphabet,

Table 2

Significant Difference	between	pre and	posttest in	sounding the	letters
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Paired Difference

	Faired Differences										
		Mean	SD	SE Mean	95% Confider of the Dif						
					Lower	Upper	t	df	Sig. (2-t)		
Pair 1	A - V3	889	2.638	.440	-1.781	.004	-2.022	35	.051		
Pair 2	B - V5	-1.111	3.293	.549	-2.225	.003	-2.024	35	.051		
Pair 3	C - V7	-1.611	4.710	.785	-3.205	017	-2.052	35	.048		
Pair 4	D - V9	-1.056	3.125	.521	-2.113	.002	-2.026	35	.050		
Pair 5	E - V11	667	2.000	.333	-1.343	.010	-2.000	35	.053		
Pair 6	F - V13	-1.444	4.232	.705	-2.876	012	-2.048	35	.048		
Pair 7	G - V15	-1.833	5.348	.891	-3.643	024	-2.057	35	.047		
Pair 8	H - V17	-1.944	5.667	.944	-3.862	027	-2.059	35	.047		
Pair 9	I - V19	-1.556	4.551	.758	-3.095	016	-2.051	35	.048		
Pair 10	J - V21	-1.833	5.348	.891	-3.643	024	-2.057	35	.047		

Pair 11 K - V23	-1.778	5.189	.865	-3.533	022	-2.056	35	.047
Pair 12 L - V25	-1.444	4.232	.705	-2.876	012	-2.048	35	.048
Pair 13 M - V2	7667	2.000	.333	-1.343	.010	-2.000	35	.053
Pair 14 N - V29	-1.889	5.507	.918	-3.752	025	-2.058	35	.047
Pair 16 P - V33	-1.556	4.551	.758	-3.095	016	-2.051	35	.048
Pair 17 Q - V3	5 -1.833	5.348	.891	-3.643	024	-2.057	35	.047
Pair 18 R - V37	-1.389	4.080	.680	-2.769	008	-2.043	35	.049
Pair 19 S - V39	-1.278	3.754	.626	-2.548	008	-2.042	35	.049
Pair 20 T - V41	-1.667	4.870	.812	-3.314	019	-2.054	35	.048
Pair 21 U - V43	3 -1.944	5.667	.944	-3.862	027	-2.059	35	.047
Pair 22 V - V45	-1.556	4.551	.758	-3.095	016	-2.051	35	.048
Pair 23 W - V4	7 -1.611	4.710	.785	-3.205	017	-2.052	35	.048
Pair 24 X - V49	-1.833	5.348	.891	-3.643	024	-2.057	35	.047
Pair 25 Y - V51	-1.667	4.870	.812	-3.314	019	-2.054	35	.048
Pair 26 Z - V53	-1.944	5.667	.944	-3.862	027	-2.059	35	.047
Pair 27 NG - V55	-1.111	3.276	.546	-2.219	003	-2.035	35	.049
Pair 28 Ň - V57	-1.556	4.551	.758	-3.095	016	-2.051	35	.048

Although considerable advancement was seen (e.g., 65.71% achieved mastery of the sounds /m/ and /e/, and 54.29% mastered /a/), there was no statistically significant improvement overall. Five learners (14.29%) persisted in experiencing difficulties with interchangeable phonemes such as /b/ and /d/, as well as complicated phonemes like /ng/ and /ñ/. This challenge might be attributed to the phonetic subtleties of the Filipino language, whereby particular letters are less stressed or spoken differently based on regional dialects.

The difficulties associated with certain letters, such as ng and ñ, are fundamentally entrenched in language and cultural settings. Although these letters exist in the Filipino alphabet, they are hardly used in speech, especially in urban settings, hence diminishing learners' exposure and familiarity. These results coincide with the study conducted by Treiman and Kessler (2004), which demonstrates that the frequency of letter exposure directly influences recognition and phonetic association.

c. writing the symbols of the letters

Table 3

			1	Paired Differ	ences				
		Mean	SD	SE Mean		ence Interval ifference	t	df	Sig. (2-t)
					Lower	Upper			
Pair 1	A - V3	-1.111	3.276	.546	-2.219	003	-2.035	35	.049
Pair 2	B - V5	-1.278	3.762	.627	-2.551	005	-2.038	35	.049
Pair 3	C - V7	-1.278	3.762	.627	-2.551	005	-2.038	35	.049
Pair 4	D - V9	-1.389	4.073	.679	-2.767	011	-2.046	35	.048
Pair 5	E - V11	-1.556	4.551	.758	-3.095	016	-2.051	35	.048
Pair 6	F - V13	-1.167	3.435	.573	-2.329	004	-2.038	35	.049
Pair 7	G - V15	-1.500	4.392	.732	-2.986	014	-2.049	35	.048
Pair 8	H - V17	-1.000	2.957	.493	-2.000	.000	-2.029	35	.050
Pair 9	I - V19	-1.000	2.957	.493	-2.000	.000	-2.029	35	.050
Pair 10	J - V21	-1.833	5.348	.891	-3.643	024	-2.057	35	.047
Pair 11	K - V23	-1.278	3.762	.627	-2.551	005	-2.038	35	.049
Pair 12	L - V25	-1.000	2.957	.493	-2.000	.000	-2.029	35	.050
Pair 13	M - V27	-1.111	3.276	.546	-2.219	003	-2.035	35	.049
Pair 14	N - V29	-1.389	4.073	.679	-2.767	011	-2.046	35	.048
Pair 15	O - V31	-1.167	3.435	.573	-2.329	004	-2.038	35	.049
Pair 16	P - V33	-1.389	4.073	.679	-2.767	011	-2.046	35	.048
Pair 17	Q - V35	-1.722	5.029	.838	-3.424	021	-2.055	35	.047
Pair 18	R - V37	-1.389	4.073	.679	-2.767	011	-2.046	35	.048
Pair 19	S - V39	-1.556	4.551	.758	-3.095	016	-2.051	35	.048
Pair 20	T - V41	-1.056	3.116	.519	-2.110	001	-2.032	35	.050
Pair 21	U - V43	-1.389	4.073	.679	-2.767	011	-2.046	35	.048
Pair 22	V - V45	-1.389	4.073	.679	-2.767	011	-2.046	35	.048
Pair 23	W - V47	-1.778	5.189	.865	-3.533	022	-2.056	35	.047
Pair 24	X - V49	-1.722	5.029	.838	-3.424	021	-2.055	35	.047
Pair 25	Y - V51	-1.722	5.029	.838	-3.424	021	-2.055	35	.047
Pair 26	Z - V53	-1.778	5.189	.865	-3.533	022	-2.056	35	.047
Pair 27	NG - V55	-1.444	4.232	.705	-2.876	012	-2.048	35	.048
Pair 28	Ń - V57	-1.556	4.551	.758	-3.095	016	-2.051	35	.048

Significant Difference between pre and posttest in writing the symbol of each letter

No significant difference was seen in writing skill, as learners shown a preference for composing simpler, straight-stroked letters such as t, a, m, and o, which mirror the scribbling patterns typical of early childhood writing development. Nevertheless, letters with complex shapes (e.g., q, x, z) presented difficulties, indicating the learners' developmental preparedness for fine motor skills.

3. What activity plan could be proposed?

Based on the findings, below is the activity plan proposed by the researchers to better provide meaningful experience to the kindergarten learners.

- Include Alphabasa Routine in the Flag Ceremony every day.
- Review the letters from the previous week and include them in the letter to the Board
- 1st day: Utilization of Letter Mosaic in introducing the sounds of the alphabet
- 2nd day: Sound the letter of the week
- 3rd day: Identify the words that begin with the letter of the week. Look around the classroom and at home
- 4th day: Name objects that begin with the letter of the week. Provide objects that were found from the previous activity
- 5th day: Write the letters in sandpaper or on a pad paper
- Encourage parents or learning partners to join their children in looking for the objects that begin with the letter of each week.
- Conduct sound-write-identify assessment.
- Appreciate parents' and learners' efforts and contributions to implementing the program through Recognition or Reward Day.

This study aimed to determine the effect of Project Kind-ER on 35 struggling kindergarten learners in San Ramon Elementary School, Schools Division of Calamba City, Laguna. Specifically, it sought to determine (1) the performance of kindergarten before and after the utilization of Project Kind-ER in terms of sounds of the alphabet, recognition of letter names, and writing the symbols of the letters, (2) Is there a significant difference between the performance of kindergarten before and after the implementation of Project Kind-ER in terms of sounds of the alphabet, recognition of letter-name, and writing the symbols of the letters, and (3) what activity plan could be proposed to improve the mastery of alphabet sounds?

CONCLUSIONS

The research revealed that Project Kind-ER significantly enhanced lettername recognition in kindergarten, especially for often encountered letters such as O. The intervention included spaced repetition and multisensory exercises to successfully enhance letter familiarity which is also in accordance with Vygotsky's and Piaget's theories of scaffolded and experienced learning. Nevertheless, little advancement was seen with infrequent letters such as ng and ń, underscoring the impact of linguistic and cultural elements in the Filipino language.

Notwithstanding the intervention, no substantial progress was seen in the acquisition of alphabetic sounds. Kindergarten learners persisted in encountering difficulties with certain consonants (e.g., /b/ and /d/) and intricate phonemes (e.g., /ng/, /n/). The results indicate that more focused phonetic teaching and exposure to these sounds in practical situations are essential to successfully correct these deficiencies.

Although learners demonstrated competence in writing basic letters such as t, a, and o, there was no notable enhancement in overall writing skill. This result indicates developmental constraints in fine motor skills and implies that more time and resources, including fine motor skill exercises, are necessary to enhance learners' handwriting proficiency.

The challenge in identifying and articulating certain letters, especially those seldom used in the Filipino language, highlights the impact of cultural and linguistic elements on literacy advancement. Incorporating culturally relevant information and increasing exposure to these letters in practical and interesting circumstances may alleviate these issues.

The research underscores the need of customizing educational interventions to align with learners' developmental phases and cultural settings. Although Project Kind-ER targeted certain deficiencies, more enhancements—such as increased concentration on difficult letters, phonetics-oriented exercises, and motor-skill activities—are essential for attaining more holistic reading results.

RECOMMENDATIONS

With the completion of this study, it is recommended that:

- 1. Provide additional time in exploring letters that are most forgotten, such as /g/, /h/, /j/, /u/, /q/, /w/, /x/, /y/, /z/, /ng/, and /ñ/
- 2. Teachers may use activity plans proposed for better mastery of the

alphabet.

3. More Instructional materials must be made widely available to kindergarten learners.

TRANSLATIONAL RESEARCH

The findings of this study may be best translated through benchmarking and implementing innovative strategies from other kindergarten classes around the Philippines. The conceptual framework for the kindergarten curriculum can also be evaluated by the stakeholders for acceptability and impact.

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