

**Hands-on Parental Involvement to Enhance Student's language and Communicative Ability of the Pre-nursery students at Hummingbird International Kindergarten, Thailand**

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**Abstract**

The objectives of this research were to develop a set of Hands-on learning activities for parents to do with students at home, and to evaluate the effectiveness of a set of Hands-on learning activities for parents to do with students at home. The research design was pre-experimental pre-test and post-test design. The participants were composed of the 9 pre-nursery students and their parents in the 2nd semester of the academic year 2023-2024 of Hummingbird International Kindergarten, Thailand. The research instruments were the 4 Lesson plans, the student's language and communicative ability pre-test and post-test, and the parents' satisfaction questionnaire. The used statistic was mean, standard deviation, and Wilcoxon signed ranks test statistics.

The results were as follows: (1) A set of Hands-on learning activities for parents to do with students at home was composed of 4 Lesson plans on 4 topics as Colours, Fruits, Animals, and Vehicles. (2) The post-test score on Language and communicative ability of the pre-nursery students after implementing a set of Hands-on learning activities for parents to do at home was significantly higher than that of the pre-test score at the level of .05. and (3) The average level of satisfaction of parents with a set of Hands-on learning activities for parents to do with students at home was at a high level (Mean=4.32).

**Keywords:** Hands-on parental involvement, Pre-nursery students, Language and communicative ability, Parents' satisfaction towards Hands-on parent involvement.

## 1. Introduction

Hands-on learning is a type of learning that a student carries out physical activities relating to subject material rather than being told about knowledge by teachers, parents, or nannies. Students learn by doing such as engaging with the subject material to solve a problem or create something. Hands-on learning allows students to learn through experience and lets them immerse themselves in a learning environment. Hands-on learning also allows students to put their newly acquired skill to use. (Miriam, 2021)

Hands-on learning brings so many benefits to students, including: (1) Hands-on learning is another way to learn, (2) Hands-on learning gives students practice, (3) Hands-on learning gives students something “real”, and (4) Hands-on learning lets students be creative. When children are young and at home, parents have more control over how their children learn. At this stage of a child’s life, it is important for parents to encourage Hands-on activities that will challenge their child to learn through doing. As a parent, there are various steps parents can take to facilitate these themselves. Parents might, for example, encourage children to create a diorama illustrating a critical scene from their summer reading assignments. If children are aspiring coders, there are many resources parents can turn to online to let them practice their skills. The possibilities really are endless. (Martin, 2020)

Parental involvement in child education has been accepted as a crucial element of early childhood education. Studies concerning parental involvement not only proved its positive effect on child development but also presented specific links between the structure of the involvement and children’s academic achievement and social-emotional outcomes (Gadsden, 2013; Aksoy, 2002; Fan and Chen, 2001). It can be stated that parental involvement is becoming a strongly pronounced prediction for academic achievements at all levels from kindergarten to secondary school. Patrikakou and Evangelia (2016) put it that strong collaboration between parents and teachers in the classroom and outside brings both short-term and long-term benefits to children. The conducted surveys of the mentioned authors demonstrate that there are some positive academic results achieved in relation to parental participation in school activities. (Kravcenkaite and Kazlauskienė, 2019)

The researcher is a teacher in the pre-nursery Level at Hummingbird International Kindergarten, Thailand. The researcher found that some children were reaching school with poor English language skills because there were two years of lockdowns associated with COVID-19, where children were not consistently exposed to English language-rich environments like early childhood education centers. After the pandemic, decreased language and communication development, vocabulary insufficiency, inability to pronounce words exactly, having problems of using short sentences and single words, speech disorder, speech difficulty, using facial expressions and body language instead of speaking, problems in expressing oneself, voice disorders, inability to make some sounds, changing the places of sounds, difficulty in perceiving and forgetting words often occurred in the classroom. Due to children spend most of their time with their parents and parent-child interaction plays a key role in language development, Hands-on parental involvement to enhance students’ Language and communicative ability may improve children Language and communicative ability and establish a better language-learning environment at home. Hands-on learning at home is a place where students can learn the skills for developing a strong and positive mind and body characterized by confidence, responsibility, and resilience. Parents play a crucial role in

accelerating their child's language and communicative development. This study aimed to prove the effectiveness of Hands-on parental involvement to develop students to enhance in Language and communicative ability.

## **2. Research Objectives**

2.1 To develop a set of Hands-on learning activities for parents to do with students at home to enhance students' Language and communicative ability in the pre-nursery level at Hummingbird International Kindergarten, Thailand.

2.2 To compare the Language and communicative ability before and after implementing the set of Hands-on learning activities for parents to do with students at home to enhance students' language and communicative ability in the pre-nursery level at Hummingbird International Kindergarten, Thailand.

2.3 To study the level of satisfaction of parents toward implementing the set of Hands-on learning activities for parents to do with students at home to enhance students' Language and communicative ability in the pre-nursery level at Hummingbird International Kindergarten, Thailand.

### **Research questions:**

The researcher had formulated some questions to better understand the implementation of Hands-on learning activities for parents to do with students at home to enhance students' Language and communicative ability at the pre-nursery level as follows:

- (1) What were the components of a set of Hands-on learning activities for parents to do at home to enhance language and communicative ability of the pre-nursery students at Hummingbird International Kindergarten, Thailand?
- (2) Was the post-test mean score significantly higher than the pre-test mean score of Language and communicative ability after implementing the set of Hands-on learning activities for parents to do with students at home to enhance students' Language and communicative ability of the pre-nursery level at Hummingbird International Kindergarten, Thailand?
- (3) What was the satisfaction level of parents after implementing the set of Hands-on learning activities for parents to do with students at home to enhance the Language and communicative ability of the pre-nursery students at Hummingbird International Kindergarten, Thailand?

### **Hypothesis:**

The post-test mean score on Language and communicative ability of the pre-nursery students of Hummingbird International Kindergarten, Thailand after implementing the set of Hands-on learning activities for parents to do with students at home was significantly higher than that the pre-test mean score at the level of .05.

### Scope and Limitation

This research might be too short to determine whether students improve language and communication over time. Class and parent sizes might not be large enough to determine the outcome's reliability in varied settings. This research might include Parents of pre-nursery students who had different English levels; thus, their language and communication abilities might vary. This research measured progress by using pre- and post-test observation ratings. Parents got a vocabulary list and guidelines for home activities with their children. Despite scoring and observation being convenience, they had drawbacks. Guessing and construct-irrelevant methods that overestimate scores were major difficulties. Picture card examinations were one of the few ways to assess children's language and communication skills due to limited research time.

### Importance of the study:

By creating Hands-on learning activities composed a language-rich environment, and engaging in responsive communication, parents could greatly influence their child's linguistic journey. These early efforts not only helped children express themselves effectively but also fostered their ability to understand and navigate the world.

## 3. Review Literature

### 3.1 Hands-on learning

Hands-on learning is a form of education in which children learn by doing. Hands-on learning brings so many benefits to students, including: (1) Hands-on Learning is another way to learn, (2) Hands-on Learning gives students practice, (3) Hands-on Learning gives students something "real", and (4) Hands-on Learning lets students be creative. (Martin, 2020)

Hands-on learning is particularly important for young children, as this is how they are programmed to learn. Children learn from observing, copying, and play continues to be the most important way of learning new skills until they reach school age and beyond. (The Apple Tree International Kindergarten, 2023)

El Nekhely (2021) found that Hands-on Minds-on learning can reduce foreign language learning anxiety among kindergarteners and that much more research attention should be given to foreign language learning anxiety and to the use of Hands-on Minds-on learning in classes of teaching English as a foreign language in kindergarten.

Daniels (2006) found that hands-on activities had a significant effect on elementary students at Cooper Elementary School in reading.

### 3.2 Parental Involvement

Parental involvement in child development has a positive impact on children's attitude towards school, attendance of lessons, learning attainments, and mood at school. Parental involvement in child development activities positively influences not only achievements in child development but also the prospects, social relationships, and mental condition. (Romsaitong and Brown, 2020)

Naite (2020) found that students with highly involved parents had better academic performance and higher test scores in all the subjects compared to students whose parents were not involved in their education.

### **3.3 Components of Language and Communicative Ability**

The Language and Communicative Ability domain includes three components describing how young children learn: (Texas Pediatric Society cooperated with the University of Texas, 2021)

**(1) Listening and Understanding:** Important skills that children are developing in this area: (1.1) Listens with interest to the language of others, (1.2) Responds to nonverbal and verbal communication of others, and (1.3) Begins to understand the rules of conversation

**(2) Communication and speaking with others:** Important skills that children are developing in this area: (2.1) Uses consistent sounds, gestures, or words to communicate for a variety of purposes, 2.2 Imitates sounds, gestures, signs, or words, and 2.3 Uses language to engage in simple conversations

**(3) Emergent Literacy:** Important skills that children are developing in this area: (3.1) Shows interest in songs, rhymes, and stories, (3.2) Develops interest in and involvement with books and other print materials, (3.3) Begins to recognize and understand symbols, and (3.4) Begins to develop interests and skills related to emergent writing

### **3.4 Developmental Milestones of Language and communicative ability**

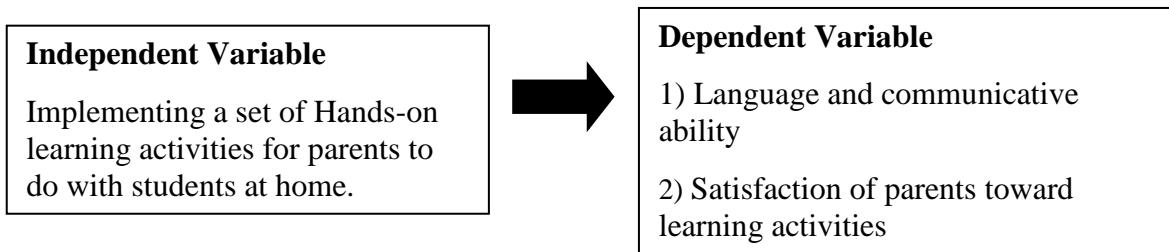
These milestones help teachers and parents to determine when a child may need extra help to learn to speak or to use language. Developmental milestones of Language and communicative ability for 2 – 3 years are Receptive language and Expressive language. (Brisbane South PHN in collaboration with The University of Queensland (2023)

### **3.5 Satisfaction of parents towards children' development**

Shao M., He W., Zhao L. and Su Y.-S. (2022) found that rich parents are not satisfied with providing online support to their children, whereas poor parents have more time to support their children in their online education. Also, parents with lower background education were proven to be less helpful towards their children's online learning whereas parents with higher education should try to be more supportive towards their children's education.

Ramasamy et al. (2023) found that parental involvement in the teaching method used in preschools, and parents' involvement in a certain degree of school-based activities at the preschool are all very important to ensure better learning efficiency of the Children.

## **4. Conceptual Framework:**



## 5. Research Methodology

### 5.1 Research Design

A one-group pretest-posttest design was used in this study.

#### **The procedures were as follows:**

(1) The researcher tested the students by using Language and communicative ability pre-test before the Experiment.

(2) The Parents did the Experiment by implementing the set of Hand-on learning activities for parents to do with students at home for 4 weeks.

(3) The researcher tested the students by using Language and communicative ability post-test after the Experiment and asked the parents to do the Satisfaction of parents toward learning activities questionnaires.

### 5.2 Target groups

There were 2 participant groups:

**(1) Students:** The students of this research included 9 pre-nursery students in the classroom in the 2nd semester of the academic year 2023-2024 of Hummingbird International Kindergarten, Thailand. The research selected 9 pre-nursery students in a classroom by using Purposive sampling because the researcher works as a lead teacher in this school, understands the school environment clearly, contacts the parents directly, and investigates other data that are useful for this research.

**(2) Parents:** The parents of this research included 9 pre-nursery students' parents in the classroom during the 2nd semester of the academic year 2023-2024 of Hummingbird International Kindergarten, Thailand. The research selected 9 pre-nursery students' parents who were the parents of the chosen students.

### 5.3 Research Instruments

**(1) Instructional Instruments: A set of Hands-on learning activities for parents to do with students at home.** The researcher created a set of Hands-on learning activities for parents to do with students at home as follows: Studied textbooks, documents, research papers, and research articles about Hands-on learning for language and communication development for preschool students.

(1.1) Identified the learning outcomes and objectives that the students must achieve for language and communication development by the end of the experiment.

(1.2) Listed down the vocabularies that need to be covered based on the learning objectives.

(1.3) Divided the weeks, contents, and learning objectives.

(1.4) Wrote the complete the set of Hands-on learning activities for parents to do with students at home and asked for suggestions from the thesis Advisor.

(1.5) Examined the set of Hands-on learning activities for parents to do with students' Validity. Three specialists in the field validated all research instruments determined the appropriateness of the set of Hands-on learning activities for parents to do with students at home by using the Evaluation Form with the Five-point Likert scale. The validity was at the

good level (Mean = 4.43). The researcher improved the set of learning activities for parents to do with students according to the opinions of the three specialists.

(1.6) Prepared the perfect set of learning activities for parents to do with student at home for the Experiment.

**(2) Data collection instruments:** There were 2 data collection instruments: (2.1) Language and communicative ability pre-test and post-test and (2.2) Parents satisfaction questionnaires.

**(2.1) Language and communicative ability pre-test and post-test creating**

The researcher created the Language and communicative ability pre-test and post-test as follows:

(2.1.1) Learnt and analyzed how tests were made from existing books, previous tests conducted.

(2.1.2) Followed the set of learning activities for parents to do with students at home's objectives when making the test questions and format.

(2.1.3) Created a table of specifications to be submitted to the advisor for the set of questions and tests to measure Language and communicative ability.

(2.1.4) Examined the pre-test and post-test validity: it was validated by the three specialists in the field to determine the appropriateness of the Language and communicative ability pre-test and post-test by using the Evaluation Form with the Five-point Likert scale. The validity was at a Very good level (Mean=4.72)

(2.1.5) Examined the pre-test and post-test reliability, the researcher tried out the pre-test and post-test with the students in other groups who were nearly 3 years old the most. The reliability of the Language and communicative ability pre-test and post-test were assessed using Cronbach's Alpha Coefficient. It was found that the reliability of Language and communicative ability pre-test and post-test was 0.83 which was higher than 0.70. which means the Language and communicative ability pre-test and post-test were strong enough to be employed in this study.

(2.1.6) After that the researcher took the analyzed test, modified it, and used it as the Language and communicative ability pre-test and post-test of the study.

**(2.2) Parents satisfaction questionnaires:** Steps of the Parent's satisfaction questionnaire creating were as follows:

(2.2.1) Learnt how to create a Parents satisfaction questionnaire from texts, books, and documents about designing the satisfaction questionnaire.

(2.2.2) The parent's satisfaction questionnaire consisted of two parts: the first consisted of ten items designed as a five-point Likert Scale, and the second part was an open-ended section where parents could express their ideas about using a set of Hands-on learning activities for parents to do with children at home.

(2.2.3) Examined the Parent's satisfaction questionnaire validity, it was validated by the three specialists in the field to determine the appropriateness. The validity of the Parents satisfaction questionnaire was at a Very good level (Mean=4.70).

(2.2.4) Examined the Parent's satisfaction questionnaire reliability, the researcher tried out the satisfaction with the parents of students in other groups who were nearly 3 years old the most. The reliability of the satisfaction questionnaire was assessed using

Cronbach's alpha Coefficient and the reliability value was 0.88 which was higher than 0.70. which means the Parent's satisfaction questionnaire were strong enough to be employed in this study.

#### 5.4 Data analysis

##### (1) Pre-test and post-test analysis

Wilcoxon signed ranks test statistics were used to analyze the difference of the Language and communicative ability pre-test and post-test by using SPSS program.

##### (2) Analysis of questionnaire

The mean and standard deviation of the questionnaire were analyzed by using SPSS program.

### 6. Research Findings

The researcher presented the research results as follows:

**Table 1:** Components of a set of Hands-on learning activities for parents to do with students at home to enhance students' Language and communicative ability at the pre-nursery level in Hummingbird International Kindergarten, Thailand.

Week	Lesson plan	Topic/vocabularies/sentences	Days
1	1	Colours: Blue, Red, Pink, Yellow, Green, and Black Which one is .....colour? What colour do you have?	5
2	2	Fruits: Mango, Apple, Grapes, Banana, Dragon Fruit and Papaya: Which one is.....? What fruit do you eat?	5
3	3	Animals: Kangaroo, Dolphin, Bear, Snail, Frog, Penguin: Which one is .....? What animal do you see?	5
4	4	Vehicles: airplane, train, car, bus, boat, submarine Which one is.....? What is this?	5
		<b>Total</b>	20

Regarding Table 1: The set of Hands-on learning activities for parents to do with students at home to enhance students' Language and communicative ability at the pre-nursery level in Hummingbird International Kindergarten, Thailand were composed with 4 Lesson plans on 4 topics such as Colours, Fruits, Animals, and Vehicles. The parents did these learning activities with students at home to enhance students' Language and communicative ability for 20 days.

**Table 2:** Effective level of the set of Hands-on learning activities for parents to do with students at home to enhance students' Language and communicative ability at the pre-nursery level in Hummingbird International Kindergarten, Thailand by the three experts' opinions (n=3)

Lesson plan	The 1 <sup>st</sup> Expert	The 2 <sup>nd</sup> Expert	The 3 <sup>rd</sup> Expert	Average	Level
Lesson plan 1	4.55	4.11	4.66	4.44	Good
Lesson plan 2	4.22	4.00	4.55	4.25	Good
Lesson plan 3	4.44	4.44	4.55	4.47	Good
Lesson plan 4	5.00	4.33	4.33	4.55	Very good
<b>Average</b>	<b>4.55</b>	<b>4.22</b>	<b>4.52</b>	<b>4.43</b>	<b>Good</b>

Regarding Table 2: The mean average evaluated by the three experts of the set of Hands-on learning activities for parents to do with students at home to enhance students' Language and communicative ability in the pre-nursery level at Hummingbird International Kindergarten, Thailand was at the Good level (Mean=4.43).

**Table 3:** Comparison between the Post-test score on Language and communicative ability of the pre-nursery students in Hummingbird International Kindergarten, Thailand after participation in Hands-on learning activities at home and the Pre-test score before participation in Hands-on learning activities at home using Wilcoxon signed ranks test statistics. (n=9)

Assessment	n	Mean	S.D.	Mean Rank	Sum of Ranks	z	Sig.
<b>Full score (20)</b>							
Pre-test	9	11.00	1.66				
				5.00	45.00	-2.70*	.007
Post-test	9	18.67	1.94				

p <0.05\*

Regarding Table 3: Analyzed by using the Wilcoxon Signed Ranks Test showed that there were statistically significant differences between the Pre-test and Post-test at the level of .05 (z = -2.70, p-value = .007). The post-test mean score on Language and communicative ability of the pre-nursery students in Hummingbird International Kindergarten, Thailand after implementing the set of Hands-on learning activities at home was significantly higher than that the pre-test mean score at the level of .05. The hypothesis was accepted.

**Table 4:** The mean, standard deviation, and level of parents' satisfaction with Hands-on learning activities for parents to do with students at home.

No	Items	n	Mean	SD	Level
1	Satisfaction with learning activities for parents to do with students at home on Lesson plan 1: Colours	9	4.56	0.53	Very high
2	Satisfaction with learning activities for parents to do with students at home on Lesson plan 2: Fruits	9	4.33	0.71	High
3	Satisfaction with learning activities for parents to do with students at home on Lesson plan 3: Animals	9	4.56	0.73	Very high
4	Satisfaction with learning activities for parents to do with students at home on Lesson plan 4: Vehicles	9	4.33	0.71	High
5	Satisfaction with learning activities for parents to do with students at home on All Lesson plans.	9	4.44	0.53	High
6	Satisfaction with the school's preparation.	9	4.44	0.53	High
7	Satisfaction with the Parent's experience	9	4.00	0.71	High
8	Satisfaction with the Child's enjoyment.	9	3.89	0.60	High
9	Satisfaction with the period.	9	4.22	0.67	High
10	Satisfaction with the scores of the child.	9	4.44	0.73	High
<b>Average</b>		<b>9</b>	<b>4.32</b>	<b>0.45</b>	<b>High</b>

Regarding Table 4: the average level of the satisfaction of parents with Hands-on learning activities for parents to do with students at home was at the high level (Mean=4.32).

## 7. Conclusions

They were concluded as follows:

7.1 The set of Hands-on learning activities for parents to do with students at home to enhance students' Language and communicative ability at the pre-nursery level in Hummingbird International Kindergarten, Thailand was composed of 4 Lesson plans on 4 topics such as Colours, Fruits, Animals, and Vehicles with the validity at the Good level (Mean=4.43).

7.2 The post-test mean score on Language and communicative ability of the pre-nursery students in Hummingbird International Kindergarten, Thailand after implementing the set of Hands-on learning activities at home was significantly higher than the pre-test mean score at the level of .05. The hypothesis was accepted.

7.3 The average level of satisfaction of parents with Hands-on learning activities for parents to do with students at home was at a high level (Mean=4.32).

## 8. Discussion

The findings of this research were discussed as follows:

8.1 According to the set of Hands-on learning activities for parents to do with students at home to enhance students' Language and communicative ability at the pre-nursery level in Hummingbird International Kindergarten, Thailand composed with 4 Lesson plans on 4 topics

such as Colours, Fruits, Animals, and Vehicles with the validity at the Good level (Mean=4.43). It might be that the researcher chose the four-week learning activities centered around the themes of colors, fruits, animals, and vehicles, which were deliberate and strategic. It is beneficial to focus on subjects that are simple to comprehend and have a connection to everyday life. The surroundings of a youngster are filled with a wide variety of things, including colors, fruits, animals, and vehicles. Young children are usually interested in and curious about these topics. Colors are naturally attractive because they come in a wide range of shades. They see colors everywhere around them, so they are naturally drawn to them. Fruits have different taste, smell, and texture; therefore, fruits help students learn in many ways. Students are interested in animals because they come in many shapes, sounds, and behaviors. Vehicles, which stand for movement and usefulness, are interesting and easy to understand. Through engaging children with the topics they were interested in, parents were able to assist youngsters in delving deeply into topics that they were enthusiastic about activities (Keren's Nursery, 2023). Parents and students were naturally interested in these topics during the experiment. This study supported the importance of hands-on learning tasks with parents in early childhood education and gave the school useful information for future educational study.

8.2 It was found that the post-test mean score on Language and Communicative Ability of the pre-nursery students at Hummingbird International Kindergarten, Thailand after implementing the set of Hands-on learning activities for parents to do at home was significantly higher than the pre-test mean score at the level of .05. It might be that Hands-on learning is the process of learning by doing and experiencing something, rather than just being told about it. In this Hands-on learning, students were given the chance to interact with real-world materials for example: the red pen, the yellow book, the white bowl, etc. that they always saw in their daily life. Twinkl (2023) stated that Hands-on learning is very effective when focusing on encouraging children to be physically engaged while they are learning. When children are physically engaged as well as mentally engaged, they are activating different parts of the brain. Therefore, they are strengthening two development processes at once, which leads to a stronger learning foundation. These research findings were in line with Adawiyah (2016) who found that the post-test results in the experimental group were significantly higher than the control group and it could be proven that Hands-on activities using Team Pair Solo were effective to be used in teaching writing of descriptive text.

8.3 It was found that the average level of the Parents satisfaction with the set of Hands-on learning activities for parents to do with students at home was at a high level (Mean=4.32). It might be that parental satisfaction was influenced by the set of Hands-on learning activities for parents to do at home supported by Hummingbird International Kindergarten in the form of connectivity support, instructional, and technical assistance. The Pennsylvania State University (2017) stated that engaging parents as key partners in children's development during the preschool years is particularly important because of the positive impact that parenting practices have on child school readiness, reducing child behavior problems, enhancing child social skills, and promoting academic success. These research findings were in line with Hoang et al (2022) found that most participants expressed satisfaction with the quality of preschool education and showed their willingness to pay.

**9. Recommendations for schools and educators:**

9.1 Schools may include home-taught courses or hands-on activities into their curriculum. Students' critical thinking and retention will increase. Also, some academic programs should include hands-on learning and training for parents as part of the teaching style, as all the children are different.

9.2 Future research may build on the findings of this study such as creating other learning activities on other contents and studying practical and convenience factors or a measure of average classroom learning gains that may have an impact on the satisfaction of parents.

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