PREFERRED APPROACHES BY PARENTS IN ASSISTING KINDERGARTEN NUMERACY IN MODULAR DISTANCE LEARNING

Banan, Mary Grace F.

Completed 2020

Preferred Approaches By Parents in Assisting Kindergarten Numeracy in Modular Distance Learning

Mary Grace F. Banan

Dimanpudso Elementary School

Schools Division of Aurora

Table of Content

Abstract

This descriptive study intended to determine the parents' preferred approaches in assisting kindergarten numeracy in modular distance learning of Dimanpudso Elementary School and Florida Elementary School, District of Maria Aurora East with seventy (70) parents selected thru purposive random sampling. Data obtained from the three-part researcher-made questionnaire were analyzed thru frequency and percentage to gain enlightenment on the profile of the respondents while weighted mean was utilized for the parents' most preferred approaches and challenges met in assisting kindergarten numeracy in modular distance learning. Results showed that of the seventy (70) respondents, majority are within 26-45 age bracket, are females, married, have reached high school level, with domestic occupation, with 3-5 number of children and with 1-2 schooling children. The average weighted mean of 3.34 implied that the parents considered that they most preferred the approaches in assisting kindergarten numeracy. The 2.48 average mean also prove that there are evident challenges met as they assisted their children in numeracy during modular distance learning and that assisting them to "follow directions and story completion by replacing using pictures with real numbers" were the most challenging indicators. One of the recommendations is to give parents orientations and demonstrations on how to use creative ways in order to assist learners while learning numeracy, and to enlighten them on the different stages of child development to help them understand more the hurdles of kindergarten learners maintaining attention on things they do especially when studying.

Key Words: *modular distance learning, stages of child development, kindergarten numeracy*

Introduction

The corona virus disease (COVID) 19 pandemic has undoubtedly affected every aspect of our lives. One thing is for sure, it is necessary for schools to look at different scenarios and solutions as this would undoubtedly help them continue with learning delivery and help educators guide their learners through this difficult time. As Obana (2020) stated, the disruption caused by COVID 19 has forced the adoption of alternative learning modalities such as modular distance learning (MDL) in schools.

Because of this situation, one of the most challenging grade level to handle is that of kindergartners. According to Sharma (2017) , teaching kindergarten is the kind of hard work that demands great fitness, patience, resilience, skills and emotional stability. While dealing with the toddlers many don't find any option but to give up. They can be super demanding, obstinate to the core, irritably fidgety or full of tantrums.

In this regard, the researcher found it timely to look into the perception of parents in modular distance learning, specifically the preferred approaches in assisting Kindergarten numeracy. This study aims to look for ways to improve numeracy teaching in Kindergarten to assist parents and guardians as they guide their children at home.

Several studies have shown that parental involvement in pre schooling activities has positive effect on children's early developmental process. Research has advanced from a search for specific "parent involvement" activities that will produce better child outcome to a recognition that often subtle relationship variables between parents and children and between parents and teachers strongly influence both parents decisions to become involved (Green, Walker, Hoover-Dempsey & Sandler, 2007) and the family involvement practices as they affect young children's literacy and math learning and social-emotional skills outcomes achieved

through family-school engagement (Van Voorhis, et.al., 2013). There is emerging evidence that the quality of the parent- teacher relationship influences parents' efforts to engage their children in discussions of academic success, which in turn produces improved academic achievement (Hughes & Kwok, 2007). They can observe children, support the teacher, and take part in school's decision – making process (Carlisle, Stanley, and Kemple, 2005).

As Minicozz (2016) has stated, having to surrender to prescribed curricular mandates and uniform standards may inevitably lead them (the parents) to compromise not only their beliefs, but also the potential of their students. Kindergarten age children deserve learning experiences that build their self-confidence and success.

According to Stearns (2020), teaching early numeracy does not require to lecture the young children or to give them reams of worksheets. Rather, the teacher works with some basic teaching strategies that aid students in their explorations and help them move along toward a more sophisticated mathematical understanding.

Sophian (2009), posited that research on young children's numerical knowledge provides an important foundation for the formulation of standards for early childhood education and for the design of early childhood mathematics curricula. Further, the mathematics knowledge that children acquire before they begin formal schooling has important ramifications for school performance and future career options.

In the article "How to Teach Kindergarten and Preschool Math Teaching", (2020), it was stated that kindergarten and preschool math concepts require much more than handing children math workbooks or worksheets. Children begin to understand symbols and abstract concepts only after experiencing the ideas on a concrete level. Small groups of ten children work well for

kindergarten math structured activities. The other children can be doing unstructured free exploration with other math equipment at this time.

From the findings of Rahman, Chowdhury and Obaydullah (2019), it was revealed that there were mixed views in relation to the term of early childhood development as well as parent's involvement in children learning activities in preschool. Most of parents assumed that parents' involvement in children learning activities is significant for children's overall development, that there is a positive benefit of parent's involvement and that that their involvement encourages and make children interested to learn.

There are studies that claim positive impact of parents in their children's schooling. Parental involvement in schooling' phenomena and its relation to child development, systematic literatures have been reviewed. According to Mc Wayne, Hampton, Fantuzzo, Cohen and SekinoY, 2004). Parent participation practices can include attending parent –teacher conferences, participating in extended class visits and helping class activities. The frequency of parent-teacher contact in these activities affects the child's preschool performance. Parents who maintain direct and regular contact with the early educational setting and experience fewer barriers to involvement have children who demonstrate positive engagement with peers, adults and learning. The quality of parent-teacher relationship also appears to be a factor in the success of interventions designed to develop pro-social behaviors among young children with behavior problems (Sheridan, Bovaird, Glover, Garbacz,Witte & Kwon, 2012).

The quality of early education is associated with parental involvement. Study shows that the community and parents have important roles in ensuring the quality of education in schools and such involvement makes a difference (Alam, 2015). For example, family members can serve

as volunteers, participate in school decisions, set learning goals with their children, and participates in other curriculum related activities (Van Roekel, 2008).

The most challenging grade level were Kindergarten learners in this modular distance learning. Many parents do not understand and know how to assist their child in kindergarten in this new normal. It is important that teachers demonstrate the importance of the kindergarten curriculum, and explain how everything the class works on prepares their child for kindergarten and beyond. Preschool is an important time in a child's life not just because it is a great opportunity to socialize, but also because it gives them the foundation to become a well-rounded student and person the rest of their lives. Preschool teaching strategies should introduce the subjects of language, science, and math at the experience level of three- and four-year-olds. Creativity is important for young children learning mathematics as Shen, Grey , Edwards & Pope (2017) stated.

According to Llego (2020), Modular Distance Learning involves individualized instruction that allows learners to use self-learning modules (SLMs) in print or digital format/electronic copy, whichever is applicable in the context of the learner, and other learning resources like Learner's Materials, textbooks, activity sheets, study guides and other study materials. Learners access electronic copies of learning materials on a computer, tablet PC, or smartphone. CDs, DVDs, USB storage and computer-based applications can all be used to deliver e-learning materials, including offline E-books. The teacher takes the responsibility of monitoring the progress of the learners. The learners may ask assistance from the teacher via e-mail, telephone, text message/instant messaging, etc. Where possible, the teacher shall do home visits to learners needing remediation or assistance. Any member of the family or other stakeholder in the community needs to serve as para-teachers.

In view of the COVID 19 pandemic, Modular Distance Learning is the appropriate learning delivery modality being implemented to two (2) schools namely Dimanpudso Elementary School and Florida Elementary School in the District of Maria Aurora East, Schools Division of Aurora, for School Year 2020-2021. Through this mode, interaction takes place between the teacher and the learners who are geographically remote from each other during instruction. This means lessons will be delivered outside the traditional face-to-face setup. This change entail several adjustments that the researcher hoped to look into the strategies the participants would utilize in order to make the new normal situation cater the learning requirements. This will be studied along with the preferred approaches employed by parents in assisting numeracy in Kindergarten who are currently enrolled in the said two schools.

Conceptual Framework

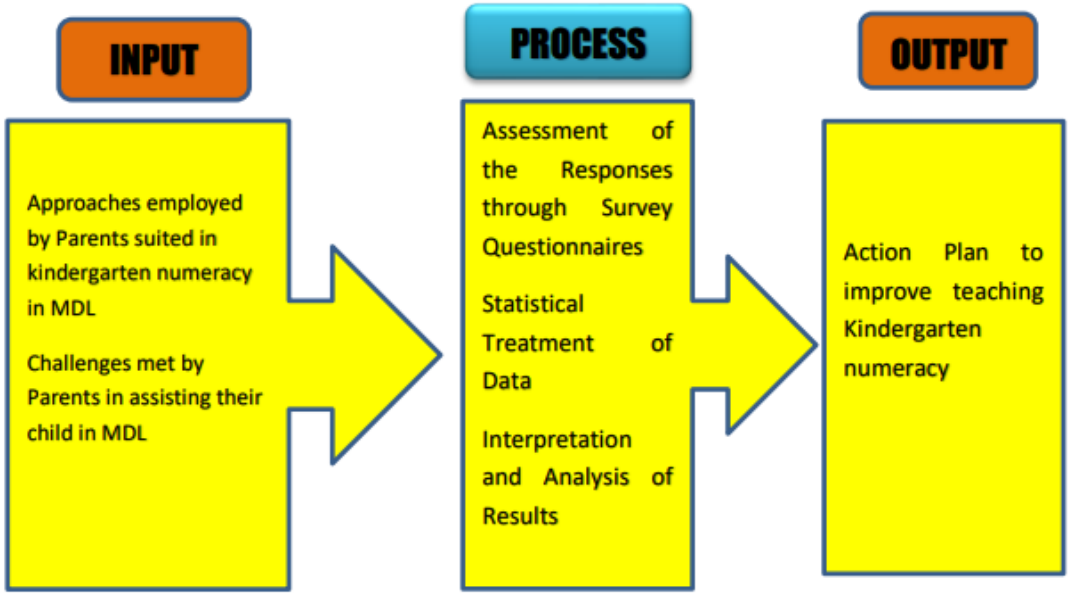

Figure 1. The conceptual framework of the study using the input-process-output design.

Based on the above framework, this study focused on the input where the researcher looked at the profile of kindergarten parents in terms of age, sex, civil status, occupation, educational attainment and number of children. This also included the approaches employed by parents suited in kindergarten numeracy and challenges they met in assisting their child in modular distance learning. The input variables were assessed using statistical approaches and came up with the action plan to improve teaching of numeracy to kindergarten. In connection to the above literature, the researcher used the following questions to guide the study.

Research Questions

The purpose of this study is to determine the parents' preferred approaches in assisting kindergarten numeracy in modular distance learning in Dimanpudso Elementary School and Florida Elementary School, District of Maria Aurora East in the Schools Division of Aurora. Specifically, it aimed to answer the following questions:

1. What are the approaches employed by parents in assisting the kindergarten suited in numeracy in modular distance learning?
2. What are the challenges they met in assisting their child/children in kindergarten numeracy through modular distance learning?
3. What plan of action may be presented to improve assisting numeracy in Kindergarten?

Significance of the Study

This study is significant to the following:

Learners. They will be able to understand their strengths in numeracy as they undergo modular distance learning.

Parents. The parents will discover more techniques that may help them in assisting their children in learning numeracy.

Teachers. Collaboration with parents and immersion in the modular learning of their pupils will open doors for further discoveries that could help improve education delivery.

Curriculum Makers. The results of this study may be used as reference in adjusting kindergarten curriculum implementation.

Researchers. The researchers may extend or expand the data gained in this study using higher level learners as participants.

School Administrators. The result of this study may be helpful in the crafting of new policies for the improvement of kindergarten numeracy.

To the Department of Education. It is further expected that this study would help educators to develop and validate the strategies relevant to the needs of learners in response to the pandemic.

Future Researchers. The information from this study may enrich related existing studies on kindergarten numeracy enhancement.

Scope and Delimitations

This study was conducted on school year 2020-2021 at Dimanpudso and Florida Elementary Schools, both being managed by the researcher. The respondents are parents of those enrolled in Kindergarten in the school year 20202-2021.

Methods

Type of Research

This study used the descriptive type of research using survey method. This research design is claimed to be appropriate if the objective is to identify identify characteristics, frequencies, trends, and categories (Mc Combes, 2019). As McNabb (2008) stated, "descriptive

method is used to obtain information concerning the current status of the phenomena and to describe "what exists" with respect to variables or conditions in a situation".

Respondents and Sampling

The respondents of this study were the parents of kindergarten pupils enrolled for school year 2020-2021 in the two (2) schools namely: Dimanpudso Elementary School with fifty (50) parents, and in Florida Elementary School with twenty (20) parents, in the District of Maria Aurora East, Schools Division of Aurora. There is a very small population for both schools, thus, total enumeration was preferred.

Instruments

Research instrument is a tool used to collect, measure, and analyze data related to the chosen subject. According to Annum (2019), research instruments are the fact finding strategies and the tools for data collection.

The researcher's main instrument was the survey questionnaire. It consisted of a series of questions and other prompts for the purpose of gathering information from respondents. Part I contain indicators that describe approaches in assisting kindergarten learning of numeracy. The indicators were rated by the respondents using a 4-Likert scale: 4 –Most Preferred, 3- Preferred, 2-Sometimes Preferred, and 1- Not Preferred

In Part II, the respondents rated the indicators as the challenges met by them in assisting their child in MDL as to the frequency of usage in four classifications: 4 –Most Evident, 3-Evident, 2- Sometimes Evident, and 1- Not Evident.

Data Collection Procedure

Bhandari (2020) posited that data collection "is a systematic process of gathering observations or measurements. Whether one is performing research for business, governmental

or academic purposes, data collection allows a researcher to gain first-hand knowledge and original insights into his/her research problem."

The researcher first submitted the research proposal to the SDO Research Team. The approval of the team was used as basis for the continuation of the procedures. Permission from parents were obtained and the materials were administered after having the hard copies disinfected. The answered copies were also disinfected before listing down responses. When answers seemed not clear, the researcher contacted the concerned for further online interviews to enrich the data gathered. Review of information on the Learner Enrolment Survey Form (LESF) was also done to clarify further the data gathered from the survey.

Ethical Considerations

All of the required permissions, from parents and from DepEd offices, were secured before data collection was implemented. The study was conducted during the COVID -19 pandemic so the researcher made it sure to remember and follow the health standards. The collection of data was done mainly thru collaboration with parents or guardians. The questionnaires were sent through online methods to those who have access in internet. For those who have no access online, meeting them with minimum number (by batches) was practiced. The researcher also maintained the confidentiality of the responses to protect the integrity of the respondents.

Data Analysis

Data analysis is the most complex and mysterious of all phases of a qualitative project, and the one that receives the least thoughtful discussion in the literature (Thorne, 2000). Data analysis is defined as a process of cleaning, transforming, and modeling data to discover useful

information for business decision-making. The purpose of data analysis is to extract useful information and formulate decisions based upon the analysis (Guru99, 2020).

The profile variables were analyzed using frequency and percentage. In interpreting the data for preferred approaches and challenges met, mean percentage was applied

Results and Discussion

In this section, the results of the study were presented, analyzed and interpreted according to the order of the problems stated in the first part of the study.

1. Approaches Employed by Parents in Assisting the Kindergarten Suited in Numeracy

Table 1 shows the approaches employed by parents in assisting kindergarten numeracy. The table showed that all the indicators are verbally interpreted as most preferred (within the3.2-4 mean range) except that of 'Use collage making to emphasize math lesson' and 'Do attendance check with him/her to apply addition and multiplication' which were interpreted as 'preferred'.

It is noteworthy to consider item number 15, 'Integrate values in teaching numeracy' and item number 10, 'Do attendance check with him/her to apply addition and multiplication.' got the highest (3.53) and lowest (3.03) mean scores respectively.

The above results imply that the parents devote ample time in assisting their children in their studies. The indicator "Do attendance check with him/her to apply addition and multiplication" may be improved with the help of the teacher. This approach may have been practiced by the parents but were not aware of it, for instance, singing with the child the song "Mga Araw sa Isang Linggo" is part of attendance check which emphasizes awareness of numeracy concepts.

Table 1
Approaches Employed by Parents in Assisting Kindergarten Numeracy

Item No.	Indicators	Mean Score	Verbal Interpretation
1.	Read stories to begin numeracy lessons. *(Magbabasa ng mga kuwentong nagsisimula sa mga aralin ng pagbibilang)*	3.43	Most Preferred
2.	Show the calendar to familiarize him/her with the dates and numbers. *(Ipinapakita ang kalendaryo upang maging pamilyar sa kanya ang mga petsa at mga bilang)*	3.24	Most Preferred
3.	Sing songs with him/her that contain number names. (*Kumakanta ng mga awiting naglalaman ng mga pangalan ng bilang)*	3.33	Most Preferred
4.	Play video tapes that teach numeracy. *(Nanonood ng video na nagtuturo tungkol sa pagbibilang)*	3.43	Most Preferred
5.	Provide real objects to teach counting. *(Mabigyan ng mga totoong bagay sa pagtuturo ng pagbibilang.)*	3.44	Most Preferred
6.	Use collage making to emphasize math lesson. *(Magamit ang paggawa ng collage upang bigyang diin ang aralin sa matematika)*	3.07	Preferred
7.	Do rote counting with him/her everyday. *(Isinasagawa ang paulit-ulit na pagbibilang araw-araw)*	3.43	Most Preferred
8.	Provide tracing activities to let him/her know the numerals. *(Magbigay ng mga gawaing babakatin para malaman ang bilang)*	3.47	Most Preferred
9.	Use pictures to represent numbers and sets. *(Gamitin ang mga larawan para kumatawan sa mga bilang at set)*	3.27	Most Preferred
10.	Do attendance check with him/her to apply addition and multiplication. *(Isinasagawa ang attendance checking upang maipaliwanag ang pagdadagdag at pagpapadami)*	3.03	Preferred
11.	Provide star awards to encourage him/her to do well. *(Magbigay ng mga gantimpala na bituin upang mahimok na paghusayan pa niyang mabuti)*	3.51	Most Preferred
12.	Let him/her tour around the house /yard to let him/her see real objects and count them. *(Hinahayaan na maglibot sa kabahayan/bakuran upang makita ang mga konkretong mga bagay at mabilang ang mga ito)*	3.33	Most Preferred
13.	Do dance and action songs to reinforce numeracy learning. *(Nakakasayaw at naisasakilos ang mga awit upang mahasa ang kaalaman sa pagbibilang).*	3.27	Most Preferred
14.	Show house parts/community areas parts to learn different shapes and lines. *(Maipakita ang mga bahagi ng bahay/ komunidad upang matutuhan ang mga hugis at linya)*	3.31	Most Preferred
15.	Integrate values in teaching numeracy. *(Maisama ang pagpapahalaga sa pagtuturo ang pagbibilang)*	3.53	Most Preferred
	Overall Mean	3.34	Most Preferred

1-1.79 (not preferred) 1.80-2.6 (sometimes preferred) 2.61- 3.19 (preferred) 3.2-4 (most preferred)

2. Challenges they Met in Assisting their Child/Children in Kindergarten Numeracy through Modular Distance Learning

Table 2 shows the challenges met by parents in assisting their child shows that all of the indicators were verbally interpreted as "sometimes evident" except for two items namely: item no.1 'Difficulty in following directions' and item no. 4 'Make her/his own story completion tasks where he/she can replace pictures with real numbers' which were interpreted as evident.

Considering the age of the kindergarten learners, behavioral hang-ups may be connected to the short attention span they naturally possess. This is supported by the study of Fiedacan, Fetizanan, Jumantoc, Mabituin, Yanson and Francisco (2018) stating that " the lower the age of a child, the shorter his/her attention span will be". At this point, an orientation for parents on facilitating learning sessions with children at such ages may be helpful.

Table 2
Challenges Met in Assisting their Children

Item No.	Indicators	Mean Score	Verbal Interpretation
1	Difficulty in following directions. *(Nahihirapan sa pagsunod ng panuto.)*	2.67	evident
2	Difficulty in working independently. *(Nahihirapan na gumawa ng nag-iisa.)*	2.44	Sometimes evident
3	Had tantrums when he did not want to do the activities/tasks. *(Nagkaroon ng sumpong/tantrums kung ayaw niyang gawin ang mga aktibidad/Gawain*	2.23	Sometimes evident
4	Make her/his own story completion tasks where he/she can replace pictures with real numbers. *(Gumawa ng sariling kwento ng kumpletong gawain na maaari niyang malagyan ang larawan ng tunay na bilang)*	2.63	evident
5	Many activities in the module/activity sheets. *(Maraming gawain sa modyul/activity sheets.)*	2.49	Sometimes evident
6	Difficulty in naming the numbers in Tagalog/Filipino. *(Nahihirapan na pangalanan ang mga pamilang sa Tagalog/Filipino.)*	2.41	Sometimes evident
7	The child does not believe to the mother as his/her not the real teacher. *(Hindi naniniwala ang anak sa nanay dahil hindi tunay na guro.)*	2.47	Sometimes evident
	Mean	2.48	Sometimes evident

1-1.79 (not evident) 1.80-2.6 (sometimes evident) 2.61- 3.19 (evident) 3.2-4 (very evident)

3. Plan of Action to Improve Methods in Assisting Kindergarten Numeracy

Table 3 shows the plan of action to improve methods in assisting kindergarten numeracy that the main objective is to enhance the parents' capacities in applying creative ways to assist the kindergarten numeracy learning. To attain this, some projects, programs and activities wiil be conducted and implemented like orientation on stages of child development during the Parent Learning Action Cell (PLAC) and demonstration on different skills, concepts, stories, songs, dances about numeracy to enrich the learning in mathematics. They can use mathematics concepts to make sense of their world and connect these concepts with their environment and everyday activities. Through the support of the school head, the teachers as the resource persons during the implementation and the cooperation of parents the plan will be implemented successfully on target date. It is expected that the parents will be oriented on stages of child development and demonstrated kindergarten activities, strategies and skills in mathematical concepts like collage making, songs and dances, story completion.

Table 3
Plan of Action to Improve Methods in Assisting Kindergarten Numeracy

OBJECTIVES	PROJECTS/PROGRAMS/ACTIVITIES	RESOURCES	TIME FRAME	EXPECTED OUTPUT
Enhance parents' capacities in applying creative ways to assist in kindergarten numeracy learning	1.Orientation on stages of child development through PLAC 2. Orientation cum demonstration on using songs and dances to emphasize concepts of addition and multiplication. 3. Demonstration on making collage and replacing pictures with real numbers to complete stories to enrich mathematics learning.	Video lessons Songs and dances Kinder teachers School Head Parents	September 27-30, 2021	The parents were given at least one orientation/ demonstration on: 1. Stages of child development 2. Collage making for kindergarten 3. Songs and dances to enrich mathematical concepts 4. Story completion thru mathematical strategies

Conclusion

Based on the data and information gathered, as subjected to analyses and interpretation, the following conclusions are presented:

1. The approaches employed by parents in assisting the kindergarten learners' numeracy lessons in modular distance learning were "most preferred" as shown by the 3.34 overall mean score. This means that the parents are fairly capable of assisting their children in numeracy lessons. However, there are two indicators, namely: 'Use collage making to emphasize math lesson' and 'Do attendance check with him/her to apply addition and multiplication' which were interpreted as "preferred", implying that at some point, parents need further orientation on the said aspects to help them make numeracy learning more interesting.

2. The respondents claimed that challenges were "sometimes evident" as they go through assisting their children in kindergarten numeracy through modular distance learning as shown by 2.48 overall mean score. The most evident challenge that they encountered were in the areas of helping the children into following directions and making story completion tasks by replacing pictures with real numbers.

3. To improve the methods in assisting kindergarten numeracy is to enhance the parents' capacities in applying creative ways to assist their children. They can use mathematics concepts to make sense of their world and connect these concepts with their environment and everyday activities. Through the help and support of the school head, the teachers and educators will conducting the Parent Learning Action Cell (PLAC). Parents cooperation and application their learnings will strengthen and enhance the numeracy learning of these young children.

Recommendations

Based on the conclusions the researcher proposes the following recommendations:

1. Parents be given an orientation and demonstration through Parent Learning Action Cell (PLAC) on how to go about creative ways to assist kindergarten learners while learning numeracy. Showing the parents how to sing and dance with their children the song " Pitong Araw sa Isang Linggo" and other educational songs to emphasize addition and multiplication concepts while doing attendance check and giving them examples of how to go about collage making to enrich mathematics learning will be very helpful.

2. Provide orientation to parents on the development stages of children to help them understand more the hurdles of kindergarten learners maintaining attention on things they do especially when studying. This understanding will guide the parents how to handle lesson sessions with the youngsters without causing stress on the latter that may hinder their openness to learn and discover.

3. Chat groups be created so that parents may interact with teachers and with one another to report their children's modular journey progress, be an avenue for inputs and success stories, serve as a depository of sample materials and activities the parents may use and to become a platform where school and home treat each other as partners in making learning, not only in numeracy, more effective.

4. Related studies be conducted in the line of kindergarten attention span and its connection to modular learning effectiveness be conducted by future researchers.

References

Alam,S. (2015). Effect of Community Factors on Primary School Learners Achievement in Bangladesh, Journal of learning for Development, Vol.2, No. I.

Annum, Godfred Y., (2019). Research Instruments for data collection (Updated). https://www.academia.edu/36865594/RESEARCH_INSTRUMENTS_FOR_DATA_COLLECTION_Updated_.

Bhandari, Pritha (2020). An introduction to qualitative research. https://www.scribbr.com/methodology/qualitative-research/

Carlisle E., Stanley L. & Kemple K.M.(2005). Opening doors:Understanding school and family influences on family involment. Early Childhood Education Journal,33(3), 155-162).

Green, Christa L., Hoover-Dempsey, Kathleen V., Walker, Joan M.T., Sandler, Howard M. (2017). Parents' Motivations for Involvement in Children's Education: An Empirical Test of a Theoretical Model of Parental Involvement; Article in Journal of Educational Psychology 99(3):532-544 ·Retrieved August 17, 2020.

Guru99 (2020). https://www.guru99.com/what-is-data-analysis.html . Retrieved September 2, 2020.

How to teach kindergarten and preschool math. (2020). https://www.kindergarten-lessons.com/kindergarten-and-preschool-math/

Hughes, J., & Kwok, O.-m. (2007). Influence of student-teacher and parent-teacher relationships on lower achieving readers' engagement and achievement in the primary grades. Journal of Educational Psychology, 99(1), 39–51. https://doi.org/10.1037/0022-0663.99.1.39

Llego, Mark Anthony (2020). DepEd Learning Delivery Modalities for School Year 20202021. Retrieved August 18, 2020.

McCombes, Shona (2019). Descriptive research. Revised on September 3, 2020

McNabb, Connie (2008). Descriptive Research Methodologies. Powerpoint Presentation; Shuttleworth, Martyn. Descriptive Research Design, September 26, 2008. Explorable.com website.

Mc Wayne C, Hampton V, Fantuzzo J, Cohen HL, SekinoY . (2004). A multivariate examination of parent involvement and the social and academic competencies of urban kindergarten children. Psychol. Sch.41(3): 363- 377).

Minicozzi, Liza L. (2016). The garden is thorny: Teaching kindergarten in the age of accountability. Research Article https://doi.org/10.1177/2043610616664817.

Newby, P. (2010). Research methods for education. Harlow: Pearson Education Limited.

Rahman, S.M. Mahbubur, Chowdhury Kamrul Qader and Obaydullah A K M (2019). Perception of Parents of Their Involvement in Children's Learning Activities in Preschool.

Sharma, Ritu (2017). How hard is it to teach kindergarten. https://www.quora.com/How-hard-is-it-to-teach-kindergarten. Retrieved August 21, 2020.

Sheridan, S. M., Bovaird, J. A., Glover, T. A., Garbacz, S. A., Witte, A., & Kwon, K. (2012). A randomized trial examining the effects of conjoint behavioral and the mediating role of the parent-teacher relationship. School Psychology Review, 41, 23–46.

Sophian, Catherine (2009). Numerical Knowledge in Early Childhood. Encyclopedia on Early Childhood Development-researchgate.net. Retrieved August 15, 2020

Stearns, Clio (2020). Strategies for Teaching Early Numeracy Skill. https://study.com/academy/lesson/strategies-for-teaching-early-numeracy-skills.html. Retrieved August 15, 2020.

Thorne, Sally (2000). Data nalysis in qualitative research. RCN Publishing Company and BMJ Publishing Group for Evidence-Based Nursing.

VanRoekel, D. (2008). Parent, family, community involvement in education. Washington, DC: National Education Association Education Policy and Practice Department.

Van Voorhis, Frances L., Maier, Michelle F., Epstein, Joyce L., Lloyd, Chrishana M. (2013). The impact of family involvement on the education of children ages 3 to 8. http://dev.mdrc.org/sites/default/files/The_Impact_of_Family_Involvement_FR.pdf