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Effectiveness of Online Approach in Teaching Language on Distance Learning to Pre-school Learners

Ma. Niña Joy C. Belicario, Therese L. Villarmia, Dianna Rose T. Rosauro, Ramil Manguilimotan, Reylan G. Capuno, Gengen Padillo, Raymond C. Espina, Jonathan O. Etcuban, Veronica O. Calasang

Cebu Technological University – Main Campus

Abstract

This study investigated the effects of the use of online approach in teaching language on distance learning to pre-school pupils. A quasi-experimental design was used in the study with a two-way test using pretest and posttest. We divided the respondents into two groups: the control and the experimental group. A group of respondents exposed in Reading Apps during and a group of respondents in a traditional way of teaching. The researchers were catered at the school where we conducted the study. A normality test also was used to determine the datasets. The study revealed that the group of respondents who are exposed in ICT integrated lessons obtained score higher than the group in traditional teaching strategy. With these findings, the study concluded that the effects of Online Education in teaching reading to kindergarten learner are substantially operative, statistically supported based on the data sets given. It is recommended that the administration of the institution as well as the higher official in Department of Education must view and support thus implement this ICT integrated teaching strategy as an effectual tool to aid the literacy needs of kindergarten learners. The education system should redouble its effort in enhancing the teaching techniques suited for the kindergarten learner.

Keywords: distance learning, early childhood, language teaching, online approach

Introduction

Online education is now being widely accepted as a major viable component of educational set up with the restrictions that the global pandemic COVID19 has brought to everyone on a virtual classroom not just on higher education but also in the Early Childhood Education learners. This is fueled by the emergence of worldwide information and computer communications technologies. As a result, teachers are suddenly faced with the challenge of how to continue their students' education. While this might seem a daunting task, there are several ways teachers can utilize the technology and resources already available to support online learning and ensure students still receive a quality education. Teachers attended series of trainings and Webinars to substantially fulfilled the purpose of continuing educations despite the adversities that they are all battling for. The concepts of distance learning are prevalent in developing countries for last few decades, and it is very much in clear in developed countries.

Creating the Virtual Classroom gets right down to the real issues of the design and management of online learning programs giving practical advice on putting together effective activities and programs. People find out how to propose, plan and fund an online approach learning program for any level even from kindergarten. People learn all of the techniques one needs to evaluate and advertise your program. There's in-depth coverage of all the latest technologies, including the Internet and the Web, as well as an illuminating chapter on reconceptualizing education and training through distance learning especially in Language since kindergarten is the basic foundation of knowledge. However, teachers should take some comfort in the fact that there are hundreds of online resources to guide them as to how to teach online.

It is notable that there were numerous studies about using multimedia as a learning tool in distance learning, but the scope is limited only for a one-on-one class or a tutorial program. but not included in the curriculum program of the Department of Education in the Philippine education system. There is no study yet

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which to attempt to determine the effectiveness of online approach in teaching language on distance learning of the preschool learners of the Division of Cebu City South District 3. This scenario entices the researcher who are also educator to conduct the study and propose an intervention plan to enhance the language of kindergarten.

Theoretical Background

This study is anchored on Cognitive Theory of Multi-Media Learning is a theory studied by Richard Mayer which emphasized words and graphics are more conducive to learning, rather than just text or graphics alone. The theory is based on the idea that learners learn better when they engage in relevant cognitive pressing such as attending to the relevant material in the lesson, mentally organizing the material into a coherent cognitive representation and mentally integrating the material with their existing knowledge (Mayer, 2015). His study also shows that learners may engage in less in-depth learning with just text alone, not connecting what they have read with new or prior knowledge.

Kindergarten pupils tend to engage in learning when the instructional materials are captivating and catches their attention. They relate the audio-visual presented and to their prior knowledge when they are not yet enrolled in formal education. Studies have shown that there are two main channels that learners use to process information, the auditory and visual channel. The auditory channel processes sound that one hears while the visual channel processes things that one sees. By combining these two process studies have shown that learners, learning will be more in depth and stay in the learner's memory longer. Their studies have also shown that too many visuals or too much text can overload the learner so there is a need to have a balance between the two, so they do not confuse the learners learning process (Kento & Kagambe 2017).

The second theory is Experiential theory of learning which is advocated by the experientialists like Rogers made significant contributions in the field of education because they believed that all human beings have a natural desire to learn. Thus, when there is failure to learn, it is not caused by the person's inability to learn, but rather to problems present with the learning situation. He also maintained that experiential learning answers the needs and wants of the learner and involves the learner more to initiate and evaluate himself. With this process, the learner earns long lasting effects of what he does. He added that experiential learning is equivalent to personal development and that everybody has an innate tendency to learn.

The teacher facilitates the learning process by encouraging the students to do their task, by clarifying and explaining how things should be done, and organizing learning resources that aid learning. The teacher does not impose his own views on the students (Sharma, 2019). It is an instructional material which possesses the qualities that will make the individual an independent learner, self- pacing and progressing at his own rate, finally giving him the feeling of self- satisfaction, the very essence of modular instruction.

The third theory is Pedagogical Approach Theory by Dr. Radhika in kindergarten education. Other areas that have been considered are developmental milestones and good manners and decorum. In kindergarten education, pedagogy is a crucial aspect; the reason being that the foundation of an individual's learning begins with kindergarten education. It is vital to understand the theories, approaches of pedagogy, developmental milestones and good manners and decorum, besides these concepts, in the field of early childhood education. instructional methods, extra-curricular activities, and early childhood education standards.

With the development of computer industry and internet networks during the last three decades things have changed and global communication has reached an unprecedented height with these developments immense scopes have come to the surface to impart learning in a much more efficient and interactive way.

Multimedia technology and internet networks have changed the whole philosophy of learning and distance learning and provided educators with the opportunity for close interaction between teachers and learners with improved standard of learning materials compared to what was existing only with the printed media. It has gone to such an extent to create a virtual classroom where teachers and students are scattered all over the world. Although some of these facilities are expensive still the developed world can take advantage of

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these facilities to impart much better distance-learning to students. But for developing countries like the Philippines the story is different as computerization and network connections are still very limited compared to the developed world. In this paper the researchers focus their attention on defining the problems of using these technologies for much more improved and extensive distance- learning and suggest how they could possibly reach these vast to their Pre-school and kindergarten pupils.

It is important to note that there is no one size fits all when it comes to learning. Different groups have different priorities and the resources that should be used are context dependent. There are also special considerations to think about for students in kindergarten who are still on the beginning stage and needs further learning assistance and guidance from their teachers and for students who might not have access to high-speed broadband.

It takes a great passion, patience, and sense of responsibility for teachers in kindergarten and preschools teaching language to their learners. Teachers must guide them from the most basic and simple things in learning language from the letter recognition, phonic awareness down to the syllabic reading. They must find ways in attracting and engaging their attention and interest in learning language. One of the biggest concerns for teachers is how they will continue to engage students and keep an eye on their progress from afar.

Additionally, this study is anchored on the Department of Education (DepEd) order number 13, series 2020, which says, 2020-20 light of the COVID-19 Public Health Emergency. This amendment states that the COVID-19 pandemic poses challenges to various sectors, especially in responding to fundamental rights. With the physical distancing and community quarantine being among the measures to contain COVID-19, basic education is among the sectors profoundly affected as schools and community learning centers are closed for physical conduct of classes. Since face-to-face classes are not yet allowed, the DepEd will implement Blended/Distance learning wherein the combination of the various distance learning modalities such as printed modules, offline digital modules, online, and TV and Radio-based instruction will be used by students and teachers when classes formally open.

Objective of the Study

The study aimed to determine the effectiveness of online approach in teaching language to preschool learners in the identified elementary public schools in the Division of Cebu City during the school year 2020-2021. The findings of the study were used as the bases for proposing action plans. What is the profile of the subjects of both groups in terms of: age and gender; and Parents Highest Educational Backgrounds What are the performance scores in reading and writing of both groups in: pre-test; and 2.2. post-test? Is there a significant relationship between profile of the subjects and their performance in reading and writing in: pre-test; and post-test? Is there a mean gain difference between the performances in reading and writing of both groups in: pre-test; and post-test? Based on the results, what action plans maybe proposed?

Methodology
Research Design

This study employs quasi-experimental method in determining the effectiveness of Online Approach in teaching language on distance learning for kindergarten learners in the three identified public elementary schools in South District 3 of Cebu City. Also, an interview method used to gather data on the challenges of the kindergarten parents regarding the child's learning in the use of online approach in teaching language It also involves analysis of numerical data of the learners obtained scores from the controlled group and the experimental group. Likewise, this study used a written examination as part of respondent's feedback.

Research Instrument

A researcher made questionnaire was validated through a dry run process it was first exposed and was checked by the class advisers to identify the reliability of the tool. Also, this tool was composed of a 30-item researcher's made test aligned to the competencies as set by the curriculum guide for the kindergarten. The

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first set the researchers used questionnaires, pretest, and posttest in gathering the data. The first test is letter sound recognition composed of 10 items. The second test is word recognition in which they identified the same set of words. Last part is cognition writing which is also for 10 points.

Data Gathering Procedures

Before the actual collection of the data and the testing procedure, the researchers send out a request letter to the Schools Division Superintendent (SDS) of Cebu City Division, the letter would bear the information as to the importance of the study and its purpose. The letter also included an information which ask permission that the researchers conducted the test with the help of the teacher adviser in order to collect the data on the effectiveness of the online and modular printed materials in the kindergarten learners in their language skills Once the SDS granted the request, a different letter was sent to the school administrator of the selected schools asking for permission that the study will be conducted in their school. The letter further asked assistance from the principal from the data collected from the teachers.

Both letters would include information as to the observation of established ethical standards in social science research which include the protection of the sources of data and that the information generated from the study would be exclusively used for educational purposes only. As shown in the data they were the group of Kindergarten Learners who were exposed and learned through online classes. There was also a group who will take the modular classes. We were comparing of what learning modalities is more efficient to the kindergarten learners comparing they're obtained scored on their pre-test and posttest.

Data Analysis

To treat the gathered data on the pre-test and post-test performances of the kindergarten learners in online and modular classes in language, frequency, simple percentage, mean, and standard deviation will be used. To treat the significant difference between the pre-test and post-test performances of the kindergarten learners in the use of online and modular, mean, standard deviation, and t-test will be used. Scoring Procedures To determine the academic performance of the kindergarten learners using online and modular in learning language, the following ratings will be used.

Results and Discussion

Demographic Profile of the Respondents
Gender

This section presents the demographic profile of the kindergarten learners as to their distribution according to their age. The gender of the respondents is dichotomized into male or female and the results as to this data is presented in Table 2 below.

Table 2. Demographic Profile of the Kindergarten Learners as to Gender

Control Group Traditional Teaching			Experimental Group Reading Applications		
Gender	Frequency	Percent	Frequency	Percent	
Male	22	73.33	19	63.33	
Female	8	26.66	11	36.66	
Total	30	100	30	100	

Table 2 showed the survey results as to the distribution of the respondents in terms of their gender. Results revealed that the control group is dominated by male learners in which they comprised almost three-fourth or 73.33% from the total sample while their female counterparts only comprised more than one – fourth or 26.66% with a frequency of 8. For the experimental group, there were 11 learners or almost two-fifths, are

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males while the other almost two – thirds or 63.33%, with a frequency of 19, were females. The result showed that both respondent groups were dominated by male learners.

An implication could be made from the said results that the teacher should consider learning activities that would meet the learning needs of most of the learners which are the males. Likewise, the pedagogical approach that would be applied by the teacher should be gender – sensitive for both males and females since according to Early et al., (2009), Gender demonstrated evidence substantial to the effect on early skills and interests that shapes classroom experience of children. This result is contradicted the results from the study of Tonyan and Howes (2003) in which they claimed that girls were more likely than boys to be in a group associated with greater levels of creative thinking or a group participating in higher levels of language arts practices for children over three years of age in childcare, compared with a group characterized by high levels of non-play and non-educational activities. Girls were shown to outperform boys on kindergarten reading performance assessments and exhibit faster reading performance in elementary school (Wei, Liu, & Barnard-Brak, 2015). Although, providing a segregated learning task according to gender distribution could possibly lead into early stereotyping culture, Tonyan and Howes (2003) claimed that early learners tend to gain interest in learning competencies that are customarily practiced in the society.

Age

This section presents the demographic profile of the kindergarten learners as to their distribution according to their age. The age pertains to how old is the shown in Table 3 that follows.

Table 3. Demographic Profile of the Kindergarten Learners as to Age

Control Group			Experimental Group	
Age	Frequency	Percent	Frequency	Percent
5 years old	24	80	26	86.66
6 years old	6	20	4	13.33
Total	30	100	30	100

Table 3 showed the survey results as to the distribution of the respondents in terms of their age. Results revealed that for the control group, there were one- fifths or a frequency of 5 of the respondents that aged aged 6 years old while majority of the respondents from the control group are aged 5 years. For the Experimental group, a great majority of 86.66 of the respondents were also aged 5 years old. The control and experimental group has almost the same result and this could be due to the fact that being 5 years old is the optimum age for the a preschooler to be sent to kindergarten as a first step under current the K – 12 curriculum.

An implication could be drawn from this result that age is a major factor that needs to be considered in early childhood education since it plays a vital role in considering the learning competencies that would be expected from them to learn. The result showed that the sooner a learner could access at kindergarten it helps provide learners to social and cognitive experiences to become independent and develop a positive learning attitude. According to Elder and Lubotsky (2009), it stated that educational achievement is affected and can be improved by increasing class average age as it pushes the teachers to make teaching - learning materials that would be appropriate for them.

Highest Educational Attainment of the Parents of the Kindergarten Learner

Educational qualification is a significant factor in parenting and supervising their children's academic growth and performance, Table 1 presents the highest educational attainment of the parents of the respondents.

Table 4. Highest Educational Attainment of the Kindergarten Parents

Degree	Traditional Teaching	Reading Application	Frequency (f)	Percentage (%)
Post Graduate Studies	0	0	0	0
Bachelor's degree Holder	0	2	2	2
College Level	2	16	18	15
High School Graduate	30	30	60	50
Elementary Graduate	30	10	40	33
Total	62	58	120	100

As presented in Table 4, High School Graduate parents comprised the largest number of respondents or 50 percent of the total; followed by the parents who were Elementary Graduate with the percentage of 33 percent; college level degree comprises 15 percent of the total, and lastly parents with bachelor's degree comprise only the 13 percent of the total respondents.

Results showed that mostly parents of our kindergarten learners are a high school graduate This is to adhere to the notion that most parents are busy and allotted their time mostly in work rather than attending supervision of the learners of their children.

Performance Scores in Reading and Writing of both groups in pretest and post test

In Table 5, the data showed that only 16 % of the respondents excelled in their Reading skills after being exposed to printed modular modality in teaching reading and 54 % of the respondents belonged to a very satisfactory level; this implied that only a few of them who learned fast in using this learning modality Furthermore, only few students belonged to an adequate level for they cannot easily comprehend nor follow the parents as they introduce the sounds of the letters.

Table 5. Test results of Kindergarten Learners on the Printed Modular Learning Modalities in Teaching Reading

Range	f	%	Interpretation	f	%	Interpretation
25-30	0	0	Excellent	5	16	Excellent
19-24	0	0	Very Satisfactory	16	54	Very Satisfactory
13-18	7	23	Satisfactory	9	30	Satisfactory
7-12	14	47	Fair	0	0	Fair
5-6	9	30	Needs Improvement	0	0	Needs Improvement

In Table 6, there is an evident that the respondents excelled more after being expose to the multi-media technology using the downloaded reading application during online classes. The data showed that only 54 % of the respondents excelled in their Reading skills after being exposed to the downloaded reading application in teaching reading skills and only 23 % of the respondents belonged to a very satisfactory level; this implied that the leaners learn faster in using downloaded reading application. Furthermore, only a few students belonged to a satisfactory level. It shows that there is a significant difference after the respondents are being exposed to technology and multi-media education.

Table 6. Test results of Kindergarten Learners using Multi-Media Education in Teaching Reading

Range	f	%	Int	F	%	Int
			Pre-Test			Post Test
25-30	0	0	Excellent	16	54	Excellent
19-24	0	0	Very Satisfactory	7	23	Very Satisfactory
13-18	5	16	Satisfactory	7	23	Satisfactory
7-12	17	57	Fair	0	0	Fair
5-6	8	15	Needs Improvement	0	0	Needs Improvement

Table 7 shows the difference between the pretest and posttest scores using the traditional method in the three different schools. Results show that in all schools, the p value is below .01 alpha which indicate a significant difference at the 99% confidence, which suggest that the traditional way improved the scores of the students.

Table 7. PRINTED MODULAR (PRETEST), PRINTED MODULAR (POSTEST)

Traditional

		Mean	Std. Deviation	t	df	p value
School 1	Pretest	9.80	3.68	-7.29	9	0.000
	Posttest	21.20	2.62			
School 2	Pretest	9.90	3.18	- 10.419	9	0.000
	Posttest	22.10	3.00			
School 3	Pretest	11.10	3.96	-9.009	9	0.000
	Posttest	24.60	2.12			

Table 8 shows the difference between the pretest and posttest scores using the online reading application in the three different schools. Results show that in all schools, the p value is below .01 alpha which indicate a significant difference at the 99% confidence, which suggest that the online reading application also improved the scores of the students.

Table 8. ONLINE MULTI-MEDIA (PRETEST), ONLINE MULTI- MEDIA (POST)

Online Reading Application

		Mean	Std. Deviation	t	df	p value
School 1	Pretest	10.00	4.67	-6.39	9	0.000
	Posttest	21.70	6.17			
School 2	Pretest	8.60	2.67	- 19.13	9	0.000
	Posttest	29.20	1.14			
School 3	Pretest	8.90	2.23	- 17.68	9	0.000
	Posttest	27.90	1.60			

Mean Difference Between the Performances in Reading And Writing Of Both Groups

Ancova results show the comparison between the traditional and online reading platforms in the three schools. Ancova is an analysis which considers a variable that is covariance. A covariance is a variable that has influence on the final variable, e.g., pretest is connected to the posttest. Results show that for school 1 there was no difference between traditional and online reading application as indicated by a p value of .837 which is higher than the .05 alpha, however for school 2 and 3, it is observed that the p value are .000 and .004 respectively, which means that there is a significant difference. Based on the mean score it is seen that the reading application showed higher scores than the traditional. Thus, the application was found to be better than the traditional for schools 2 and 3.

These results implies that the utilization of reading apps and other multi- media educational materials increases pupils' performance on reading. It has a clear evident that reading application would help the learner's improved their ability and capability and would boost their self- confidence in reading. Integrating technology to learning reading improve the reading skills and writing skills of pupils.

Table 9. Mean Gained Difference Between the Performances in Reading and Writing Of Both Groups Analysis of Covariance (ANCOVA) Between Traditional and Online Reading

		Mean	Std. Deviation	Type III Sum of Squares	df	Mean Square	F	p value
School 1	Traditional	21.20	2.62					
	Reading Application	21.70	6.17	0.96	1	0.956	0.044	0.837
School 2	Traditional	22.10	3.00					
	Reading Application	29.20	1.14	244.66	1	244.656	45.273	0.000
School 3	Traditional	24.60	2.11870	38.764	1	38.764	11.195	0.004
	Reading Application	27.90	1.59513					

Conclusion

There is a big disparity between the respondents that belongs in the class which uses the traditional teaching method in reading than the respondents who uses multi-education in their lessons. Statistically supported by the results of the T-test showing the significant differences of the controlled group and the experimental group. The results indicate that the obtained score from the kindergarten learner who uses online multi-media education is notably higher than those who are in the printed modular learning modalities. Thus, the reading learning environment of the school compensate for the needs of the kindergarten learners. They have their functional libraries; big books and they have E- classroom for ICT integrated lesson. They even have a SMART TV per grade level for the realization and implementation of the study.

Recommendation

It was further recommended that the administration of the institution as well as the higher official in Department of Education with the help of other stakeholder must view and support and implement this ICT integrated teaching strategy like using online multi-media education as an effective tool to aid the literacy needs of our kindergarten learners. The education system should redouble its effort in enhancing the teaching techniques suited for the kindergarten learner. The school should implement this proposed plan as part of their learning strategy so that the learners' ability of kindergarten learners will be prioritized. The school should plan extension activities primarily literacy training where the kindergarten can participate well and be motivated to study hard. Moreover, we recommend using technology more frequently during class discussion.

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