

**EFFECTIVENESS OF EARLY CHILDHOOD EDUCATION RESOURCE ROOMS ON
LEARNING ENGLISH LANGUAGE VOCABULARY**Arooj Fatima¹, Dr. Ammara Farukh*², Samina Bashir³, Arzam Hussain⁴**Original Article**

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Abstract

This quantitative study investigated the effectiveness of physical facilities of ECE rooms on learning English language vocabulary. The students of government primary schools of Punjab, Pakistan were selected as the population of this study. The sample of the study was the students of a small town of South Punjab, Pakistan. The sample of study consisted of 80 students, equally divided into two groups; experimental and control. The students, reading in ECE rooms, by using all physical facilities of ECE room i.e. the AV aids were taken as experimental group, and the students being taught by using traditional method without using audio-visual aids were taken as control group. Test was delivered to both groups. The test contained the 15mcq's and each question had two marks. Experimental and control groups were taught for four weeks as a whole. All the students, selected for the study were between four to five years. The data was collected in numbers and after that it was analyzed by statistical method. Data, collected through tests was analyzed by using the descriptive method (i.e., percentage, mean and SD). And inferential statistical methods (i.e. paired-sample t-test and SPSS) were also used to get more reliable results. There was a considerable difference among the scores of pre-test and post-test of control group and experimental group as the significant value was < 0.05. On the basis of data analysis it can be said that the use of ECE rooms and its physical facilities are very useful in teaching and learning of English language vocabulary. Some suggestions and recommendations are described on the basis of findings of this study to increase the effectiveness of ECE setup like more separate rooms must be built so that the students may be able to learn in small groups. It was also suggested that further studies may explore some other aspects of this area.

Keywords: Teachers, Students, ECE setup, Physical facilities, AV aids

Introduction

A language class depends heavily on vocabulary teaching. An immense focus is laid on teaching vocabulary recently. And it appeared as a result of "The development of new approaches to language teaching, which are more 'word-centred'" (Thornbury, 2002). This one main chore of this language has ominously contributed to the improvement of teaching methodology (Evans, 1978). Educators, teachers and researchers in TEFL, TESOL and technical semantics have been probing for suitable plans and performances. Therefore, in order to remove the utmost pressure

to reform the language learning process at the very initial stage of learning, Government of Punjab has introduced a kindergarten sort of programme named, ECE Resource Rooms.

Since 1947, from the independence of Pakistan its Government has targeted to hit 100% attendance of school children at elementary level. In 2005 Government of Pakistan listed the ECE as one of the major projects to work on. In 1970s, ECE was arranged in a proper way in Pakistan. In the National Education Program of 1992 the Katchi course was formally recognized.

In the first round, 300 schools of Toba Take Singh were selected by the Government of Punjab for the construction of ECE rooms. In the second phase UNICEF supported the establishment of 575 ECE rooms in Jhang and Rahim Yar Khan. In Lahore and Rawalpindi, ECE rooms were built in December 2016. After experiment Punjab Government has decided to extend its scope by establishing an ECE room in every public school. The major purpose of the project was to increase the quality of education for students. To achieve this goal the ECE rooms were painted to make the environment attractive. And all the teaching aids were provided as The National Curriculum of ECE 2007 recommended it. The training was given to the heads of the schools. ECE teachers, school council members and caregivers were also given training to implement the programme successfully in the first phase. This project is mainly based on the use of low cost and no cost material, so trainings were also conducted for ECE teachers so that the teachers might be expert in the well use of these materials. Government of Punjab has spent large amount and attention on this program to get better results from students. If we look at our education system, the primary level is the most important area of learning.

And primary education starts from kachi class (Nursery). The major purpose of the project is to learn by play. Such learning through games and physical facilities has worked wonders in second language learning. Frimpong (2021) describes ECE as one of the most suitable programme for the development of young children, because it focuses on learning by play. Normally, the individuals, who are trained at the very early stage of their life get high cognitive development. Whether it is about their intellectual experience and language, or perception and socio-passionate aspiration (Akinrotimi & Olowe, 2016).

Therefore, reliable teaching aids, demonstrating lessons with the use of DVDs in English language class, plus points of showing animated pictures in ECE Rooms through English descriptions, and experimental studies in which learning happens by watching cartoons are documented in this study. Most of the researchers have acknowledged that reliable resources throw a great impression on students' stimulation and motivation (Fast, 2010; King, 2002; MacGillivray, 2005; Stemplaski, 1987). Through this medium, learners will feel pleasure and amusement in learning English vocabulary. With precise and good vocabulary you can convey the message more effectively and also save energy.

Yudha et al. (2022) conducted the study "Improving Vocabulary Mastery and Distinguishing Vocabulary through Listening to Audio-Visual" to show the value of the implementation of audio visuals in teaching vocabulary. The findings of pre-test and post-test among control and experimental groups revealed that teaching through aids increased students' listening, speaking and pronunciation skills. Aqad, et al., (2021) looked at how Malaysia's Management and Science University's third-year students utilize multimedia in English language learning. The researchers employed both qualitative and quantitative techniques to achieve the study's goals. The outcomes of the research show that multimedia motivates BTESL learners and they learn English in a fun and creative way. It also drew pupils' attention and forced them to acquire new

vocabulary. Elena (2020) researched "The Effective use of Audiovisual Material and its Influence on the English Vocabulary Learning in Second Grade Students". For that purpose, a representative sample of Primary school students was selected. Findings showed that there was an increment in the number of learned words after using audiovisual materials.

This study mainly focused to check the effectiveness and usefulness of ECE rooms on English language learning by keeping in view the utter universal importance of the English language. Policy makers may benefit from the study findings and mould the programme accordingly. It may also be helpful on administrative grounds to let the Government know about the latest progress of this programme. Further researchers will get the guideline from the study findings too.

This study is conducted to seek the answers of these questions:

- To what extent ECE rooms affect the learning of English vocabulary of the students at primary level?
- How does the use of physical facilities of ECE room positively affect the vocabulary?

Material and Method

This quantitative design study investigated the effectiveness of ECE resource rooms in teaching English language vocabulary in Pakistani public schools. All public primary schools of South Punjab, having ECE rooms were taken as population of study. 80 pre-nursery students of a small city of South Punjab, studying in four different schools were selected as a sample of study. Therefore, study was conducted in four public primary schools and average performing students of ECE classes, excluding high achievers and low achievers, were selected as sample so that more reliable and authentic results might be achieved. The selected sample was divided equally into two groups, experimental group and control group. The students, reading in ECE room, by using all physical facilities of ECE room i.e. the Audio Visual aids were taken as experimental group, and the students being taught by using traditional method without audio-visual aids were taken as control group. Study was conducted for four weeks long as a whole, and partly for one week in each school out of four schools.

Achievement Test was designed to collect the data from the students. This test was descriptive in nature and the design was appropriate and set according to the objectives in order to investigate whether the use of AV aids and the physical facilities of ECE rooms are effective in teaching English or not. Pre-test was conducted in every class before the start of teaching session and then at the end of one week teaching post-test was conducted. Test was delivered to both groups. The test contained the 15 MCQ's and each question carried two marks. Experimental group was taught through the use of all AV aids available in the class i.e. cartoon movies, charts, pictures, playing gadgets, blocks, LED etc. These aids contained the information about animal names, their kids, sounds and parts of body names. Control group was taught through the traditional method i.e. the lecture method without the use of audio-visual aids. All the students were between four to five years. Students attended the classes from 8 am to 11 am. The data was collected in numbers and after that it was analyzed by statistical method. The members of both groups belonged to the same level of vocabulary knowledge and they had the same level of mental abilities. They had the same geographical and ethnic background.

Instrumentation

The achievement test was prepared to evaluate the students' vocabulary learning and perception of lesson through the use of AV aids of ECE room. The test comprised 15 Multiple Choice Questions and each question had two marks. All the AV aids used during vocabulary teaching contained the information which was the part of this study. The cartoon movie (in which different animation characters were singing poems), different types of blocks and gadgets having names and pictures of animals were utilized while teaching a lesson to the experimental group. And the control group did not use all these facilities in learning English lesson. Achievement test was taken by the students to check the effectiveness of ECE room on learning English vocabulary.

Data was collected by using these procedures:

A small town of South Punjab was selected as the place of study. 80 average performing students from four different primary schools of the city having ECE rooms were selected as a sample. After the selection of students, an equal division was made they were divided equally into experimental and control groups. They all belonged to pre-nursery level. Experimental group being studied with the help of AV aids and other physical facilities of ECE room and the control group being taught through traditional way. Both the groups attempted the pre-test. The test containing the 15 MCQ's was used as an instrument for this specific study of primary students. The test was distributed among the students one by one. They filled the test with the help of their class teachers in the appearance of researcher and returned instantly. The pre-test results were evaluated. The cartoon movie and all other physical facilities of ECE room were used in the class to teach the English lesson to the experiment group. The control group did not receive the cartoon movie. After conducting post-test the results of post-test were also evaluated. After collecting the data tests were scored and scores were transferred to an Excel organizer and then to a SPSS information record.

Data Analysis

The primary level students of English were selected as the population of the study and achievement test was arranged to collect data in order to meet the challenges and was analyzed with the help of descriptive statistics along with tables and graphs. Data was collected and the test results were analyzed through latest version of SPSS. The results were analyzed with t-values and with mean score by applying t-test. For this study comprehension test was designed which was a tool to check the effectiveness of ECE rooms on learning English language vocabulary. The t-test methodology was utilized for the test on the basis of the two groups (control and experimental) required in the test.

Table1 Paired SampleT-test for Experimental Group

Variable	category	N	Mean	SD	df	T	Sig
Experimental	Pre-test	40	7.5	2.46	78	-38.88	.000
	Post-test	40	27.65	2.17			

Table 1 describes the comparison between the scores of pre-test and post-test of experimental groups. Table1 shows the results of an independent sample t-test, applied to compare the scores of pre-test and post-test of experimental groups. There was statistically noticeable difference in the results of pre-test (M=7.50, SD=2.46) and post-test (M=27.65, SD=2.17)of experimental group about effectiveness of ECE rooms on learning English language vocabulary with $t(78)=-38.88$, $p=0.00$ at significant level of 0 .05. The results showed that experimental group performed

well in comprehension scores of pre-test and post-test. It also shows that the scores of pre-test and post-test of experimental group are contrary as the sig value is $0.00 < 0.05$.

Table2 Paired Sample T-test for Control Group

Variable	category	N	Mean	SD	df	T	Sig
Control	Pretest	40	7.05	2.03	71.56	-12.98	.000
	Posttest	40	20.03	2.76			

Table 2 describes the comparison between the scores of pre-test and post-test of control groups. Table 2 shows the results of an independent sample t-test, applied to compare the scores of pre-test and post-test of control groups. There was statistical contradiction in the scores of pre-test ($M=7.05$, $SD=2.03$) and post-test ($M=20.03$, $SD=2.76$) of control group with $t(71.56)=-12.98$, $p=0.00$ at significant level of 0.05 . The results showed that control group performed well in comprehension scores of pre-test and post-test. It also shows that there is share distinction in the scores as the sig value is $0.00 < 0.05$.

Table 3 One-Sample Test of pre-test of both groups

Variable	Category	N	Mean	SD	df	T	Sig
Pretest	Control	40	7.05	2.03	78	-.89	.75
	Experimental	40	7.50	2.46			

Table3 describes the comparison between the scores of pre-test of both groups. Table 3 also shows the results of an independent sample t-test applied to compare the scores of pre-test of both groups. There was no statistically valuable distinction in the marks of post-test of control group ($M=7.05$, $SD=2.03$) and experimental group ($M=7.50$, $SD=2.46$) about effectiveness of ECE rooms on learning English language vocabulary with $t(78)=-.89$, $p=0.00$ at significant level of 0.05 . The results showed the two different groups i.e. those who were taught with ECE room and those who were taught without ECE room, performed equally in comprehension test before start learning. It also manifests that there is found no difference in the marks of both groups as the sig value is $0.89 > 0.0$

Table4 One-Sample Test of post-test of both groups

Variable	Category	N	Mean	SD	df	T	Sig
Posttest	Control	40	20.03	2.76	73.85	-13.75	.00
	Experimental	40	27.65	2.17			

Table 4 describes the comparison between the scores of post-test of both groups. Table4 gives the findings of an independent sample t-test that was applied to make a comparison of the scores of post-test of both groups. There was statistically noticeable difference in the marks of post-test of control group ($M=20.03$, $SD=2.76$) and experimental group ($M=27.65$, $SD=2.17$) about effectiveness of ECE rooms on learning English language vocabulary with $t(73.85)=-13.75$, $p=0.00$ at significant level of 0.05 . The results showed the two different groups i.e. those who were taught with ECE room and those who were taught without ECE room, performed quite

differently in comprehension test. Using ECE room class performed better than without ECE room. The result revealed that the use of ECE rooms in learning English language vocabulary is significantly better than conventional method in schools. It also shows the immense score difference between both groups as the sig value is $0.00 < 0.05$.

Discussion

The major purpose of this research was to evaluate the effectiveness of ECE Resource Rooms on learning English vocabulary at primary level. The objectives of the research were the main reason to conduct this study and it was found that English language vocabulary teaching through ECE rooms along with all its physical facilities i.e. AV aids, pictures, playing gadgets, L.E.D, and ECE kit was useful and the learners who have been teaching in ECE room performed better results. The results of this study clearly show that the use of audio-visual aids in ECE room enhances the comprehension skills.

Many other studies justify our results' significance such as (Baltova, 1999). Results of this study also in line with studies conducted by researchers such as (Danan, Neuman & Koskinen, 1992). The general findings of these supported the common assumptions that subtitle and captions prove to be helpful in teaching vocabulary and improve listening capabilities of language learner. These arguments are favoured by these researchers as (Garza, 1991; Markham, 1993, 1999). Our study results indicate that ECE room and its physical facilities create learning in an effective way which brings interest in atmosphere. Children do not get bored in learning vocabulary. These results relate with previous studies such as (Kausar, 2013; Ague & Rule, 2005; Kayaoglu, 2011). As described by Kausar (2013) Pakistani students effectively enjoy the replacement of boresome learning environment with interesting and attractive learning classroom. Similarly, it would not be wrong to say that ICT has a remarkable impact on the students (Apriani, 2016; Gusmuliana, et.al, 2020). The study's target was to convey the advantages and disadvantages of multimedia, which opened the new ways for discovering a novel teaching strategy. Kayaoglu (2011) also supported the findings that the students were more excited and more eager to learn. The result of this study shows that best teaching method makes the learning interesting and enjoyable. These results relate with previous researches such as (Mansourzadeh, 2014; Gilakjani, 2012; Abebe & Davidson, 2012; Hoogeveen, 1997).

Many other studies favour our results such as Abagi (2008) and his findings show that early childhood education should be essentially imparted through audio visual aids and other physical facilities. He argued that in the implementation of ECE, teaching material played a vital role. And the provision of such teaching material in schools should be unbiased without the distinction of village area and city area. Moreover, our study results, that implementation of ECE in schools has been made feasible just because of the provision of teaching aids, are supported by the Komboand Gogo Study (2012). They argued that proper installations of physical facilities are an influencing factor in meeting the challenges of ECE project. One more research (Hailu & Biyabeyen, 2014) also seems inclined to favour our study's findings that teaching through physical facilities always works and gives fruitful results at the early age. The results of our study indicate that the curriculum of ECE is being taught successfully in schools, having ECE setup.

Mansourzadeh (2014) found the result that to make the classroom environment enjoyable and interesting teacher should select the method and data that is in accordance with the student's desires and needs. Students should be given clear, short and basic direction by the teacher. The teacher should regularly conduct the student's exercises. These suggestions can only be destined in such an environment as ECE room. ECE rooms provide vast chances to practice

different kinds of activities in a healthy and attractive environment. Similarly, Gilakjani (2012) found in his survey that it is necessary for students to have various learning chances and teachers should achieve a match between instructing methods and the learner's distinctive learning capabilities. It allows an optimistic approach towards the language innovation. The purpose behind the use of ECE room was to find the best behaviour for both students to learn effectively and teachers to teach proficiently. Abebe and Davidson (2012) also suggested that both teachers and learners favoured our findings that visual materials develop students' vocabulary learning. But still, visual materials are seldom utilized by teacher to teach English vocabulary. It seems that there were fewer challenges with respect to instructors to supplement the course reading with visual materials that encourage vocabulary learning.

This study was basically conducted to evaluate the effectiveness of ECE rooms on learning English language vocabulary in the public schools of Pakistan. Overall conclusion and findings of the study reveal the fact that the utilization of ECE rooms and its physical facilities positively affect the English language learning process. In the light of findings, it can be said that language learning in ECE room perfectly suits the students' nature, inclinations and mental growth in the age between 2 to 8 years. Furthermore, this study recommends that the Government should take steps to sustain and perpetualize this ideal environment of learning by providing necessary materials and well trained teachers on regular and permanent basis. The contribution of media can also be very helpful in this respect. It can describe the benefits and advantages of ECE setup, public awareness will be developed in this way and people will send their kids to Public Schools.

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