

Information and Communication Technology (ICT) and Pre-Primary School Pupils' Literacy Acquisition in Uyo Local Government Area of Akwa Ibom State

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Abstract

The study investigated ICT and Pre-Primary School Pupils' Literacy Acquisition in Uyo Local Government Area. To guide the study, two research questions and two research hypotheses were formulated and tested at 0.05 level of significant. Survey design was used for the study. The population of the study consisted of 508 Nursery two pupils and the sample of 224 pre-primary pupils in Uyo Local Government Area. The instrument entitled "Pre-Primary School Pupils' Literacy Acquisition Test" was used for data collection. The instrument was subjected to face and content validation by three experts, two from the Department of Early Childhood and Education and one expert from Psychological Foundations University of Uyo. After test-re-test exercise from 30 respondents who were not part of the main study, Pearson Product Moment Correction (PPMC) was used to analyse the data and a reliability coefficient .89 was obtained. The research questions were answered using mean and standard deviation and independent t-test statistics was used to test the hypotheses. The findings of the study revealed a significant difference in pre-primary school pupils' acquisition of letter knowledge of male and female pre-primary school pupils' reading skills acquisition among pupils taught with the use of ICT and those taught without the use of ICT. Based on the findings of the study, it was recommended among others that utilization of ICT resources should be made an integral part of instructional process in pre-primary school to help development learner intellectual abilities.

Keywords: Acquisition, Information and Communication Technology (ICT) Literacy, Pre-Primary, Utilization

Introduction

ICT is a short form for Information and Communication Technology which is any form of technology that is used for sharing information. Information and Communication Technology according to Ikoh and Nwankwo (2018) play an important role in the teaching and

learning in early childhood. It is a powerful means of communication and education. It is now acknowledged over the years that children learn through their own interpretation of situations, events, experience and expectations to their play and toys for play but today children are not seen much playing toys instead they are spending more time with smart phones, Ipads, camera, computer, etc. Today, young children are growing up in a world which is not only contains but is also increasingly shaped by ICT. In both the developed and developing nations, an increasing number of children and young people walking through the school gates each morning are required to leave behind an entire suite of competencies, practices and knowledge about digital technologies. Nigeria being one of the developing nations does not want to be left out, thus the introduction of Information and Communication Technology in the school curriculum, to be in line with the needs and aspirations of the country. In order to survive in this competitive global economic environment, a highly skilled and educated workforce with knowledge and aptitude in the application of information technology competencies is very essential. This however highlights the important of Information and Communication Technology to support the teaching and learning process.

Ekanem (2017) had stressed that the business of educating the child at semiformal for formal settings in pre-primary and primary schools has become a necessity to parents. This is borne out of the desire to provide a sound educational base for the children. It is through Western education that a nation can move from the under developing status to a developed one. Parents pay close attention to the provision of education to their children. When parents send their children to early education institution, the expectation is that adequate facilities would be used to give them a head start into formal education. This can be enhanced by the use of Information and Communication Technology (ICT).

Information and Communication Technology in education is the wholesome integration of modern telecommunication devices, particularly the e-learning technology in education system (Basseyy & Umoren, 2017). ICT as an aspect of Information Technology is relatively new in Nigeria's educational system. It is a departure from the conventional approach in curriculum implementation. Evans (2016) defines ICT as the acquisition, processing and dissemination of vocal, pictorial, textual and numerical information by a micro-electronics-based combination of computing and telecommunications. The main purpose of ICT in education is to transform the old methods and approaches to curriculum implementation and not to silence the curriculum or to erase the content of the curriculum. According to Adomi and Kpangbam (2018), ICT is the use of various kinds of e-learning facilities and other technological devices; the retrogressive nature of learning in school posed challenges to technological advancement in learning. In other words, ICT is an inclusive technology for all forms of educational support learning and teaching.

With application of information technology tools, education must support the acquisition of the abilities or competencies enhancing pupils' adaptability, knowledge and skill

transfer into new contexts and the ability to learn in a rapidly changing environment. It is to develop pupils' critical thinking skills, their ability to make a decision and argue reasonably, it is to develop algorithmic thinking and problem-solving skills; it is to enhance creativity and creative thinking in pupils. These features lead to application of competence approach with the support of transmittance of knowledge and skills in ICT literacy education leading to the acquisition of key competencies building up information technology, or digital literacy (Lewin, 2017; Ala-Mutka, 2018).

Literacy acquisition is the process of learning words, sounds and language. The acquisition of early literacy skills begins in a child's first year, when infants begin to discriminate, encode, and manipulate the sound structures of language, an ability called phonological awareness (Ferrari, 2018). Literacy is an important acquisition for the future of children. Rogers (2018) argues that literacy can no longer be defined in reading and writing only but also includes computers and digital literacy to prosper all layers of society better in the information age. In this era which is digitalized, requires children to be able to master science since they need literacy skills to understand it. However, the use of technology especially ICT in children, still has a continuous limit.

In the field of the acquisition of education ICT, it is necessary to invest in the quality information and communication technologies and networks, which constitute an essential prerequisite for the acquisition of learners' intellectual skills in dealing with problems of the real world. It should be noted that the acquisition of the learners' skills is only possible if their teachers are able to integrate ICT into the teaching curriculum. However, in the study of Haugland (2019), it was found out that children who have experience in ICT can improve children's acquisition and skills such as verbal and non-verbal, problem-solving, long-term memory abstraction and structural knowledge. Another study by Van Scoter & Boss (2016), ICT can provide a rich contribution to children's literacy in four areas, namely, speaking, listening, reading and writing. From the foregoing, instructors in Early Childhood Education need more than just being aware of the use of Information and Communication Technology (ICT) as enriching agents in the curriculum or as a tool for instruction. Hence there is need to take cognizant of ICT and literacy acquisition in Early Childhood Education in Akwa Ibom State. Nowadays, children prefer to play gadgets or computers than books, because gadgets and computers are more accommodating to various things and comfortable to play, so that children's knowledge of technology is needed to get broader knowledge.

According to Healey (2017), ICT is not suitable for early childhood under 7 years, because children need verbal interaction with other humans, besides computers, do not teach intersensory children who can reduce other acquisitional tasks. Modum (2018) states that some people think that new technology is a distraction from activities that are more natural, healthy and in accordance with acquisitions, or cause concern that can access inappropriate content, endanger safety through online relationships. Dakin and Chung (2016) in their study have

studied 1000 students in 10 different countries who use technology for 24 hours which can make students feel frustrated, lonely, and anxious and heart palpitations. These theories essentially have the same opinion that makes children passive, because the world of children is a world of play that is fun with friends so that the existence of it is rejected for the sake of health, safety, and a healthy childhood.

Everyone can access any information to get knowledge easily including children. In era of digital technology, especially computers and mobile phones, is equipped with several applications that can make it easier for children to play and learn. So, parents need to give confidence to children as competent users so that children's creativity increases.

In recent years, the Information and Communication Technology environment has experienced prolific acquisition. With multiple forms of representation, some research has indicated that content delivery in blended or internet-based conditions may be more efficient than that which is provided in traditional classrooms (Abdous & Yoshimura, 2017). However, when comparing the differences between distance education and classroom-based instruction, some studies have found no significant differences in effectiveness between distance education within blended or inter-based learning settings and face-to-face education (Bernard *et al.*, 2018). Indeed, a variety of results have been derived from the studies relating to internet-based learning. For instance, one of the features of internet-based is that it fosters learners' active participation in the construction of knowledge (White & Frederiksen, 2015). Some studies have indicated positive effects on pupils' knowledge construction in internet-based learning process whereas some have reported that discussions among learners are generally at low levels of knowledge construction in internet-based systems (Guan, Tsai & Hwang, 2016). Hence, it may be suggested that due to the divergent components of the internet-based context created by a variety of researchers, different traits may be produced.

One of the most vital contributions of information and communication technology in the field of education is easy access to learning. With the help of information and communication technology, pupils can now browse through e-books, sample examination papers, previous year of papers, among others and can also have an easy access to resource persons, mentors, experts, researchers, professionals and peers all over the world. This flexibility has heightened the availability of just-in-time learning and provided learning opportunities for many more learners who previously were constrained by other commitments (Young, 2018). Information and Communication Technology provide opportunities to access an abundance of information using multiple information resources and viewing information from multiple perspectives, thus fostering the authenticity of learning environment (Alexander, 2019).

Literacy and reading ability acquisition in early childhood is one area where ICT can be used potentially to support effective teaching and learning throughout the curriculum. The growing rate of acquisition with ICT has now changed the very nature of print-based literacy.

According to Genlott and Gronlund (2013), one of the most important contributions that ICT can make to early literacy can reading ability acquisition is that of helping early childhood teachers provide children with resources that allow to focus on the specific learning objectives and avoid getting bogged down with the issues. There are many ICT activities for early childhood that can promote reading ability acquisition (Cordes and Miller, 2020). Word processors that talk is one of the most effective activities that can be used in child acquisition as it allows children to play with reading ability. This is because word processing is closely associated with literacy and reading ability work at all levels and as a consequence has a contribution to make across the curriculum (Bolstad, 2014). Computers in the classroom can offer a print-rich environment enabling young children to make banners, signs and other props for role playing.

If used effectively, ICT tools can offer a variety of ways for children to weave together words and pictures (Karemaker, Pitchford & O'Malley, 2020). Putting captions onto photos offers opportunities to develop children's written reading ability skills while leaving captions off can promote children's oral reading ability skills. However, new technologies require new literacy competencies and new pedagogy. The successful integration of ICT into the early childhood learning environment will depend teacher's ability to structure the learning environment in non-traditional ways, to emerge new technology with new pedagogy, and to develop socially active classrooms that encourage cooperative interaction, collaborative learning, and group work (Lankshear & Knobel, 2016). If provided with the right equipment, using ICT in the whole class teaching in early childhood education can be very powerful (Snyder, 2016). Such teaching strategies and methods which it can allow instructors to implement provide fantastic opportunities to develop literacy and reading ability skills. Digital projectors are starting to become common in many learning environments and their use can be coupled with good software such as MS Word or Power-point. The real power of ICT here lies in its ability to allow children to interact with the text in different ways (Meyers, et al., 2013).

Studies suggest that ICT use can provide a context for collaboration, co-operation and positive learning experiences between children, or between children and adults (Lankshear & Knobel, 2016; Davies & Merchat, 2019). According to Rogers (2017), ICT has the potential to not only enhance learning but also to promote engagement in new ways. For example, ICT can enable 'print rich' environments when children use fully functional ICT devices to support 'emergent literacy' in offices, travel agents and cafes. We are increasingly seeing children's early literacy and play experiences being shaped by digital technologies and electronic media. Hence, ICT support learning and acquisition of children in early childhood education. Technology in early childhood education and the activities that children engage will have the potential to extend learning in new and exciting ways.

The review of literature related to the study was done based on key sub-headings. The review showed that Information and Communication Technology (ICT) as the technology used

to manage information and aid communication. The review to the best of the researchers knowledge shows there is paucity of research on ICT utilization in the study area, hence the study of Information and Communication Technology (ICT) and pre-primary school pupils' literacy acquisition in Uyo Local Government Area of Akwa Ibom State intends to fill the existing gap

Statement of the Problem

Proprietors and caregivers on their part see Information and Communication Technology play as destructive, messy, waste of time and value. Therefore, they suppress or prohibit it. Such attitudes are dangerous to primary school pupils' learning and acquisition and also contravene the child's right to exploration of his environment. In order to empower children and assist them in becoming competent and active participants in their environment, they must be given opportunities to develop their level of utilization of these electronic media, a new form of literacy, which is increasingly considered to represent an essential curriculum entitlement in any broad and balanced curriculum for the 21st century. Therefore, the researcher found a gap in the utilization of Information and Communication Technology on the acquisition of social skills among children's early literacy and are shaped increasingly by emerging electronic media. There is therefore a need to take cognizance of ICT and Pre-Primary School Pupils' literacy acquisition in Uyo Local Governmet Area.

Purpose of the Study

The main objective of this study is to determine the influence Information and Communication Technology (ICT) and Pre-Primary School Pupils' literacy acquisition Uyo Local Government Area. Specifically, the study seeks to:

- i. determine the difference in Pre-Primary School Pupils' acquisition of letter knowledge among pupils taught literacy with ICT and those taught literacy without the use of ICT in Uyo Local Government Area.
- ii. determine the difference in Male and Female Pre-Primary School Pupils' reading skills acquisition among pupils taught literacy with ICT and those taught literacy without the use of ICT in Uyo Local Government Area.

Research Questions

The following research questions were formulated:

- i. What is the mean difference in Pre-Primary School Pupils' acquisition of letter knowledge among pupils taught literacy with ICT and those taught literacy without the use of Information and ICT in Uyo Local Government Area?

- ii. What is the mean difference in males and females Pre-Primary School Pupils' reading skills taught literacy with Information and Communication Technology (ICT) in Uyo Local Government Area?

Null Hypotheses

The following research hypotheses were formulated and stated in their null (Ho) form

- i. There is no significant difference in Pre-Primary School Pupils' acquisition of letter knowledge among pupils taught literacy with ICT and those taught literacy without the use of ICT in Uyo Local Government Area.
- ii. There is no significant difference in males and females Pre-Primary School Pupils' reading skills taught literacy with Information and Communication Technology (ICT) in Uyo Local Government Area.

. Significance of the Study

This study will be helpful to future researchers in gaining secondary knowledge and can serve as literature review for potential references. It will also serve as a centerpiece idea to other students willing to purpose research in a similar field.

The findings of this research study would serve as a benchmark to educational administrators to understand the implications of integration of ICT in Pre-Primary Schools. Hence, parent and caregiver would benefit from the findings of the study to acquire the kind of information technology resources necessary for child's literacy acquisition at home and also support for the acquisition of some in school. The result of the findings will provide teachers with requisite knowledge that will enable them develop speaking, listening, reading and writing ability of learning during the instructional process.

The finding will also provide in-depth insight into the various aspect of intellectual ability of learners in early childhood education which could be easily influenced by the integration of ICT resources. Hence, education ministries would benefit from the findings as it would be a pointer to the provision of ICT resources in early childhood education in Akwa Ibom State.

Finally, the findings of this research would help in actualization of educational goals and provide good theoretical background on adaptation of information and communication technology resources and to alleviate some of the problems that is facing literacy acquisition in early childhood education in Uyo Local Government Area.

Methodology

Quasi-experimental design was employed in this study pretest posttest non-equivalent group design. The study was conducted in Uyo Local Government Area of Akwa Ibom State. Uyo is the State capital of Akwa Ibom. It lies between latitude 5.05°N and longitude 80°E

which is within the equatorial rainforest belt and also a tropical zone. Uyo is blessed with several mineral resources which include deposit of various stones, clay, sand and crude oil. Uyo Local Government Area has several pre-primary and primary schools, secondary and post-secondary schools, prominent among them is University of Uyo. The use of the study area stem from the fact that Uyo has many private and public pre-primary schools, some of the schools have large environment and the needed equipment for the experimentation where the students may not be sensitive to the experimentation.

The population of the study was 108 pupils obtained from 42 pre-primary school pupils with in Uyo Local Government Area of Akwa Ibom State. Uyo LGA has four Clans, (Offot with 18 pre-primary school, Etoi, with 9 pre-primary school, Oku, with 9 pre-primary schools. and Ikono with 6 pre-primary schools) (Source: SUBEB, 2022).

The sample size was 54 pre-primary school pupils. Using Multi-stage sampling procedure, the first stage was the used of simple random sampling to select two schools from the four clans. The second stage was the use of simple random sampling technique to assign the intact classes found in the two sampled schools into experimental with 25 pupils and control group with 29 pupils.

The researchers developed an instrument titled “Pre-Primary School Pupils’ Literacy Acquisition Test”. The instruments contain 10 items where the pupils were asked to read and spell each of the word. The researchers developed lesson plans as instrument for the treatment of the groups. The experimental group was taught literacy with ICT, while the control group was taught literacy with demonstration method. The teaching lasted for 5 weeks for both the experimental and control groups

The research instrument was subjected to face and content validity by . The instrument was subjected to face and content validation by three experts, two from the Department of Early Childhood Education and one expert from Psychological Foundations, all from the faculty of Education, University of Uyo. The experts were provided with the instrument. They were requested to read through the instruments, vet the items for clarity, relevance and suitability. The essence of the validation was to ascertain the appropriateness of the instrument for the study. All their corrections, comments and suggestions were incorporated into the final draft of the instrument to ensure face validity of the instrument.

To determine the reliability of the research instruments, a test-retest was done using 30 respondents drawn from the population area. After test- re-test exercise, Pearson Product Moment Correction (PPMC) was used to analyse the data and a reliability coefficient .89 was obtained. This indicated that the instrument is reliable and can be use for the intended purpose In order to facilitate data collection, the researcher obtained an introductory letter from the Head, Department of Early Childhood Education, Akwa Ibom State College of Education, and was presented to the Headmasters/Headmistress of the selected schools for the study. Two intact classes were selected for the study. Pre-test was administered, after the pre-test, the

experimental group was taught using ICT and the control group was taught without the use of ICT. After the five weeks of the experiment, a post-test was administered to the two groups. The researcher questions were administered using mean, standard deviation while Analysis of Co variance was used to test the null hypotheses at 0.05 level of significance.

Results

Research Question 1: What is the mean difference in Pre-Primary School Pupils' acquisition of letter knowledge skills taught with Information and Communication Technology (ICT) and those taught without the use of ICT in Uyo Local Government Area?

Table 1: Summary of pretest and posttest means gain of experimental and control group pupils taught letter knowledge skills using literacy with ICT and those taught without among pupils in Uyo Local Government Area of Akwa Ibom State

groups	pretest			posttest		Mean diff	Mean gain
	N	\bar{X}	SD	\bar{X}	SD		
Experimental group	25	45.60	6.60	61.06	10.64	15.46	
Control group	29	39.20	5.81	42.18	6.14	2.98	12.48

Table 1 revealed that the pretest mean achievement scores of the acquisition of letter knowledge of pupils in experimental group was 45.60 with a standard deviation of 6.60 and 39.20 and standard deviation of 5.81 for control groups giving a mean difference of 10.64. At posttest the mean scores of 61.06 with a standard deviation of 10.64 was obtained by the experimental group while the control group had post test scores of 42.18 and a standard deviation of 6.14. The mean gain of 12.48 was in favour of experimental group. This implies that pupils exposed to ICT have letter knowledge skills than pupils not expose to ICT in private schools in Uyo Local Government Area.

Research Question 2: What is the mean difference in males and females Pre-Primary School Pupils' reading skills taught literacy with Information and Communication Technology (ICT) in Uyo Local Government Area?

Table 2: Summary of pretest and posttest means of male and female pupils taught reading skills using literacy with ICT among pupils in Uyo Local Government Area of Akwa Ibom State

Variables	gender	n	pretest		posttest		Mean diff	Mean gain
			\bar{X}	SD	\bar{X}	SD		
Teaching literacy skills with ICT	male	24	33.60	8.60	66.66	12.64	33.06	.12
	female	30	36.20	8.81	69.38	8.84	33.18	

Table 2 revealed that the pretest mean achievement scores of the reading skills of male pupils was 33.60 with a standard deviation of 8.60 and posttest mean score for the male was 66.66 and standard deviation of 12.64 for males giving a mean difference of 33.06. while the pretest mean scores of female stood at 36.20 with a standard deviation of 8.81 while at posttest the female group obtained a mean of 69.38 with a standard deviation of 8.84. The mean gain was in favour of the female with 0.12. This shows that female pupils acquired reading skills through the use of ICT more than the male pupils after the exposure to ICT by the teachers.

Testing of the Research Hypotheses

H₀₁: There is no significant difference in Pre-Primary School Pupils' acquisition of letter knowledge among pupils taught literacy with ICT and those taught literacy without the use of ICT in Uyo Local Government Area.

Table 3: Summary of Analysis of Covariance test for Significant difference in Pre-Primary School Pupils' acquisition of letter knowledge among pupils taught literacy with ICT and those taught literacy without the use of ICT in Uyo Local Government Area

Source of Variation	Sum of Squares	df	Mean square	Compound F-ratio	p-value
Corrected model	214.375	2	107.1875	9.894	.000*
Intercept	19.419	1	19.419	1.792	.005*
Pretest	34.561	1	34.561	3.190	.001*
Main Effect	214.314	2	107.157	9.890	.038*
Error	2134.316	51	10.834		
Total	2437.54	54			
Corrected Total	2348.691	53			

* Significant at .05 alpha level.

Table 3 shows that the calculated F-value of 9.890, df =1 @ 53, p-value = .038 From this result, the null hypothesis which stated that there is no significant difference in pre-primary school pupils' acquisition of letter knowledge among pupils taught literacy with ICT and those taught literacy without the use of ICT in Uyo Local Government Area was rejected. Hence

there is a significant difference in mean performance of pre-primary school pupils' in experimental and control groups. This shows. the acquisition of letter knowledge among pupils taught literacy with ICT was significant among pre-primary pupils in Uyo Local Government Area

Research Hypothesis 2: There is no significant difference in males and females Pre-Primary School Pupils' reading skills taught literacy with Information and Communication Technology (ICT) in Uyo Local Government Area.

Table 4: Summary of Analysis of Covariance test for Significant difference in males and females Pre-Primary School Pupils' reading skills taught literacy with Information and Communication Technology (ICT) in Uyo Local Government Area.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	6.006 ^a	2	.273	1.107	.359
Intercept	7.925	1	7.925	32.126	.000
pretest	4.975	1	.237	.960	.519
Posttest+Gender	.305	1	.305	1.237	.270
Error	18.994	51	.247		
Total	250.000	54			
Corrected Total	25.000	53			

Result of data analysis in Table 4 revealed that the calculated F-value = 1.237; df = 1.@ 53; p = 0.270. From the result, the null hypothesis which stated that there is no significant difference in males and females pre-primary school pupils' reading skills taught literacy with Information and Communication Technology (ICT) in Uyo Local Government Area was retained. This implies that there is no significant difference in the performance of pre-primary school pupils' male and female in the acquisition of reading skills in Uyo Local Government Area. This shows the male and female pre-primary public performed equally in reading skills in Uyo Local Government Area.

Discussion of Findings

Pre-Primary School Pupils' acquisition of letter knowledge skills with Information and Communication Technology (ICT) in Uyo Local Government Area

The result from Table one shows that pupils exposed to ICT have letter knowledge skills than pupils not expose to ICT in schools in Uyo Local Government Area. The corresponding null hypothesis has it that the acquisition of letter knowledge among pupils taught literacy with ICT was significant among pre-primary pupils in Uyo Local Government Area. The effect could be attributed to the fact that the applications of information technology

tools in education support the acquisition of the abilities or competencies enhancing pupils' adaptability, knowledge and skill transfer into new contexts and the ability to learn in a rapidly changing environment. The findings of this study is in consonant with Eurydice (2002) that the aim of ICT in Pre-Primary School is to develop pupil's critical thinking, their ability to make a decision and argue reasonably, it is to develop algorithmic thinking and problem-solving skills; it is to enhance creativity and creative thinking in pupils.

Males and Females Pre-Primary School Pupils' reading skills taught literacy with Information and Communication Technology (ICT) in Uyo Local Government Area

The result from Table 2, indicate that female pupils acquired reading skills through the use of ICT more than the male pupils after the exposure to ICT by the teachers. The corresponding null hypothesis however indicated that the gain in the research question was not significant enough. Thus, male and female pre-primary public performed equally in reading skills in Uyo Local Government Area. The effect could be attributed to the fact that ICT can help children to learn to read more easily because writing is clearer and they can use the keyboard to comment on other writings so that they can be read by other friends than using a pencil. The finding of this study is in line with Segers and Verhoeven (2002) that some multimedia language programs can support several aspects of a child's early literacy such as vocabulary, reading and writing. Symbols contained in multimedia can help them express writing that has meaning.

Conclusion

As the center of education revolve around the learner, it would be unwise if instructional process fails to recognize the central position of the learner and hence due attention paid. It is necessary to focus on learners' literacy acquisition through adaptation of information technology resources on pedagogical process to actualize the objectives of Early Childhood Education of providing methods and strategies to help children develop the emotional, social and cognitive competencies needed to become lifelong learners in the 21st century.

This study therefore concludes that children's early literacy and play experiences are shaped increasingly by electronic media. In order to empower children and assist them in becoming competent and active participants in their environments, they must be given opportunities to develop "technological literacy", a new form of literacy, which is increasingly considered to represent an essential curriculum entitlement in any broad and balanced curriculum of the 21st century. Hence, there is a significance influence of ICT and literacy acquisition in Early Childhood Education in Uyo Local Government Area.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Teachers in Early Childhood education should utilization of ICT resources as an integral part of instructional process to help develop children's intellectual abilities.
2. The Head teachers should be set to entice pupils with ICT classroom to learn language by understanding the meaning of images and sounds in the video and their expressions.
3. Curriculum experts should update on a regular basis trending gadget in Information Technology Resources to keep Early Childhood Education to be in pace with the emerging technological changes of the 21st century.
4. Akwa Ibom State Ministry of Education should ensure supply of ICT resources to all preprimary schools to reverse the train of illiteracy in ICT among pupils of pre-primage age.

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