



The Integration of ICT in Teaching and Learning the English Language in Nasarawa State Polytechnic LAFIA: Challenges and Prospects

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Abstract

The purpose of this study was to review the integration of ICT in the teaching and learning of English language in Nasarawa State Polytechnic, Lafia. The study adopted the descriptive research design. The population of the study consist of academic staff and students of the Polytechnic. Data was generated and analyzed using descriptive statistics of mean and standard deviation, while a non-pragmatic statistic of chi-square was used to test the hypothesis. The findings of the study reveal that there is a significant influence of ICT and English language teaching and learning. Based on the findings, the study recommends that the development of ICT then teaching and learning of English language in the Polytechnic.

Keywords: Integration, ICT, Teaching, Learning, EnglishLanguage

I. Background to the Study

The modern world is dynamic. The dynamism of the modern world is evident in the rapid development and application of scientific and technological tools, such as computers, software, hardware and others linked globally by network of computers, the internet, new media or social media, in various spheres of human endeavours (Davies, 2013). In virtually all fields of human endeavour, Information and Communication Technology (ICT) is applied in carrying out diverse functions. ICT is applied in commerce, banking, medicine, mass media, government, military and, more importantly, education (Lightbown & Spada, 2013).

Language teaching has been extensively influenced by the innovations made in the field of science and technology. The 21st century's academic study has been guided by the recent innovations. We can observe various changes in the forms and mode of education. The present day language pedagogy is

leaning towards the integrated pedagogy with the use of ICTs. It is a form of learning that is supported by the use of highly deliberate tools. ICT integrated instruction is a way of learning in an interactive way with the excessive use of ICT (Davies, 2013). It typically includes the learning interactively with an online support and use of techno-based tools between the teachers and the learners.

The modern educational world has changed rapidly. There are innovations and creativity triggered by the emergence of ICT (Lightbown & Spada, 2013). The modern teacher does not need to physically stand in front of his students before delivering his lectures. Lectures, seminars and conferences can be conducted using the latest technology. Classwork and homework can be done and submitted over the Internet. Instructional materials and teaching aids are readily available in the digital space. Millions of books are brought to teachers and learners from across the world more easily. Chalkboards are being phased and replaced with electronic marker boards. Power Point presentations are integrated into teaching to enhance lasting experience of the learners. Classrooms and lecture halls are fitted with speakers and microphones equipment to reach every end of the building. The learning environment is conducive for learning. Some national and international examinations are now conducted using ICT. Even tests by some hiring and recruitment agencies are now administered to test, not the candidates' academic abilities, but also their proficiency in the use of ICT (Holmes & Gardner, 2016).



Statement of the Problem

A lot of stakeholders in the educational sector have expressed sincere feelings about the decline of the value of education, the decay in the training of manpower, laxity in the teaching and learning and lack of educational materials.

This study is saddled with the task of ascertaining the desirability of enhancing English language studies in Nasarawa State polytechnic, Lafia with the use of ICT.

Aim and Objectives of the Study

The aim of this research work is to integrate ICT into the teaching and learning of English Language in Nasarawa State Polytechnic, Lafia, with the following objectives:

- i. Ascertain the impact of ICT in English language teaching and learning in Nasarawa State Polytechnic, Lafia
- ii. Examine the lecturer's perception on integrating ICT in the teaching and learning of English language in Nasarawa State Polytechnic, Lafia
- iii. Assess the strategies used in integrating ICT in English language teaching in classes
- iv. Examine the challenges faced in ICT integration.

Research Questions

The following questions are raised to guide the research:

- i. What are the impact of ICT in teaching and learning of English language in Nasarawa State Polytechnic, Lafia?
- ii. What are the lecturer's perception on integrating ICT in the teaching and learning of English language in Nasarawa State Polytechnic, Lafia?
- iii. What are the strategies used in integrating ICT in English language teaching in classes?
- iv. What are the challenges faced in ICT integration?

Research Hypothesis

There is no significant relationship between ICT usage and integration of ICT in teaching and learning of English language in Nasarawa State Polytechnic, Lafia.

II. Literature Review

English language is an important world language. Its speakers spread across the five continents. Nigeria as a country needs English language to speed up the process of development. (Tarhamba and Ogah, 2008). English is considered a

global language because it is used by the natives, as well as the non-natives in politics, media, commerce, advertising, Internet, music, films, among others (Martin, 2006). Learning and acquiring it is acknowledged as the most important avenue to engage with the world in communication. It is therefore important to attain a high degree of proficiency by the speakers of English Language. In order to improve the whole experience of English Language teaching and learning, we have to integrate ICT with current learning methodology afforded with the development of ICT. ICT has been discovered to be a very powerful tool for educational change and reform.

According to Dash and Dash (2007), the electronic media can now bring real English to all our schools, however, remote, if we provide them with the channels of distribution, students will learn real English in schools with much greater ease and eagerness through radio, television and other electronic devices.

With the help of ICT enabled English Language classes, the lecturers would find it easier to conduct classes. It has been proved to be an excellent method of enhancing the teaching and learning process. This is the technology era, and these days even a toddler is familiar with the use of computers and laptops. Technology plays an important role in creating innovation and motivation for the learners (Stockwell, 2016). This is one major reason as to why technology has come up with the idea of ICT enabled learning methodology, which could help the children of today's generation in a better way and enhance their knowledge, skills and abilities. It has been explained that ICT enabled language learning can help to ameliorate the efficiency and effectiveness of their learning process. It is a very flexible, interactive and rich platform that would provide the users a whole new different experience. Technology is a way in which people use the idea of science to make their task easier, faster and available (James, 2015).

As it is widely known, we are in the digital era today, and this is the age of technological learners and digital teachers. These technological learners know well how to use technological tools without any formal instruction. Even if they require instruction, they would be able to grasp and implement it very quickly. These learners interact and communicate with others mostly with the help of electronic mediums like mails, internet, etc. They obtain most of the information from electronic devices, which has made such tools, a very essential component of their daily lives (Marshall, 2002).



The application of ICT in a classroom as a tool for language learning has a lot more benefit. It gives impetus to undertake the tasks that the students may otherwise avoid. In an ICT enabled language learning class, the students would conduct the activities on the computer software platform and they will not have any sorts of hesitations or inhibitions usually associated with traditional methods. It would make repetitive tasks more interesting and would have content which could be in multimedia formats. The use of multimedia while learning English could help in creating a long lasting impact on the learners. The role of teacher will change from an Instructor's role to that of a Coordinator. In other words, both the students and the teachers would be working in a more profitable and collaborative environment. For the students, it makes for independent learning methodology and the practice of ICT enabled English Language Teaching (Dornela, 2016).

Computer and Internet Centre

A functional computer and Internet centres should be established in the school to help students access their mails, school website, and other educational resources.

Udoh and Egwachukwu (2014) opined that the integration of ICT in the English language teaching allows students to become competent users as well as consumers in English.

Electronic Books

Electronic book or e-book is one that utilizes computer technology to deliver multimedia information in the form of a compact and dynamic. An "e-book can be integrated impressions" sound, graphics, images, animations, and "movie" so that the information presented is richer than conventional books. Multimedia format allows e-book provides not only written information but also sound, images, movies and other multimedia elements. A description of the type of music, for example, can be accompanied by footage of the sound of music so that the user can clearly understand what is meant by the renderer (Ogumsola, 2005).

E-learning

Various definitions can be found for the "e-learning". Victoria (1999), for example, states that "e-learning" includes learning at all levels, formal and informal, which uses a computer network (intranet and extranet) for the delivery of teaching materials, interaction, and/or facilitation. For most of the process of learning that takes place with the

help of the Internet is often referred to as online learning.

ICT Tools in Language Context

According to Hartoyo (2008), there are some kinds of technologies classified into information and communication technology commonly used in language context, such as:

Interactive multimedia

Interactive media is the integration of digital media including combinations of electronic text, graphics, moving images, and sound, into a structured digital computerized environment that allows people to interact with the data for appropriate purposes. The digital environment can include the Internet, telecoms and interactive digital television.

Internet

Internet can be used as a medium of language learning through email, www (world wide web), text, audio and video conferencing.

Interactive whiteboard

An interactive whiteboard or IWB, is a large interactive display (such as a touch screen monitor) which is connected to a computer and projector. A projector projects the computers' desktop onto the board's surface, where users control the computer using a pen, finger or other devices.

Analysis

The development of ICT is seen as a better way of teaching and learning a certain language compared to the existing methods. Through the internet, teacher or learners can obtain as many as possible sources related to the learned-language; such as text, songs, stories, etc. Those sources can contribute as models of the learned-language use in the real context and in a proper manner. In addition, computer can also be used as a more interactive aid to support the learning of language compared to that of tape recorder, or chalk and blackboard.

III. Methodology

The study shall adopt a survey research design which enabled the researcher to administer the instruments to the respondents in Nasarawa State Polytechnic, Lafia in Nasarawa State. The population consist of 230 lecturers. A sample size of 163 lecturers formed the sample for the study which was determined using Taro Yemen. The researcher employed the random sampling technique. 163 questionnaire were distributed for data collection. The study used frequency counts, percentage, mean and standard deviation for data analysis while hypothesis was tested using linear regression.



The instrument for data collection is a self-structured questionnaire. The instrument is titled; the integration of ICT in teaching and learning of English Language Questionnaire (TITLLELQ). It comprises of a 20 – item questionnaire divided into four clusters and each cluster contains relevant question items that addressed each of the four research questions. The instrument was validated through expert opinion and the completed copies questionnaires were analyzed for reliability using

Cronbach Alpha coefficient. Eventually, the reliability statistic of 0.790 was established for the whole set of scores. Research questions were answered using percentage, mean and standard deviation while linear regression analysis was used to test the formulated hypothesis. The model used in ascertaining the relationship of the independent variables on the dependent variables of the study has been specified in this section as:

Functional Relationship

$$Y = f(X)$$

$$y_1 = f(x_1) \dots\dots\dots 1$$

Regression Models

$$y_1 = B + B_1x_1 \dots\dots\dots \text{Eqtn 1}$$

These are the expectations on the subject of the existing effect of the dependent variable on independent variable. This refers to level of integration of ICT in line with the hypotheses formulated

S/N	Models	A Priori expectations	Sign
1	$y_1 = B + B_1x_1$	$\beta_1 > 0, p < 0.05$: HO1 will be rejected	Positive
2	$y_2 = B + B_2x_2$	$\beta_2 < 0, p < 0.05$: HO2 will be rejected	Negative

IV. RESULTS AND DISCUSSION

This study has investigated The Integration of ICT in Teaching and Learning of English Language in Nasarawa State Polytechnic, Lafia

Research Question 1: What are the impact of ICT in teaching and learning of English language in Nasarawa State Polytechnic, Lafia?

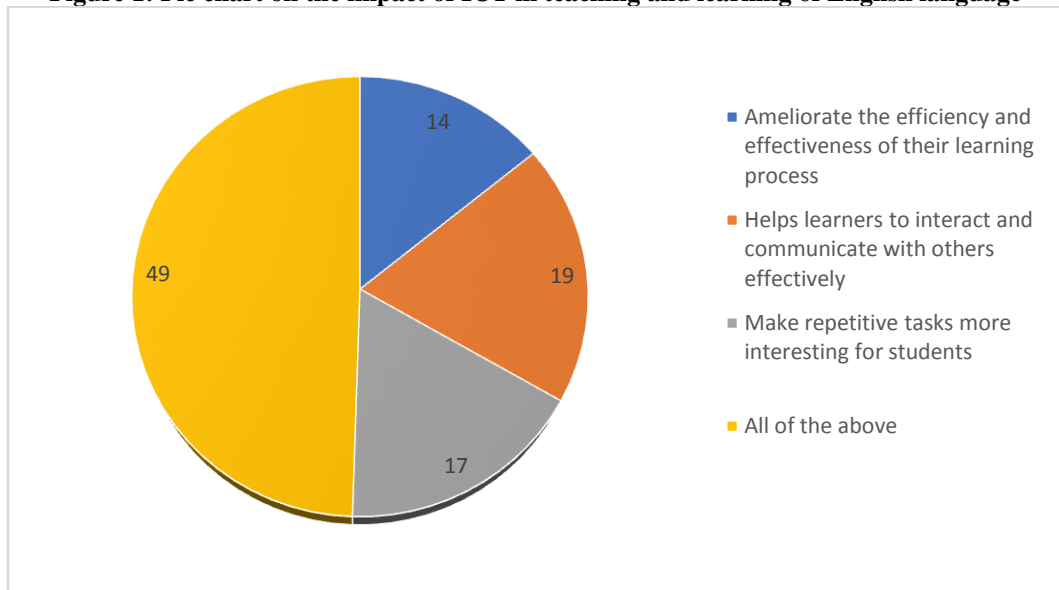
Table 1: Awareness of Virtual Library

Awareness Level	Frequency	Percentage
Ameliorate the efficiency and effectiveness of their learning process	23	14.1
Helps learners to interact and communicate with others effectively	31	19
Make repetitive tasks more interesting for students	29	17.8
All of the above	80	49.1
Total	163	100

Source: Field Data, 2022



Figure 1: Pie chart on the impact of ICT in teaching and learning of English language



The table and pie chart above show the impact of ICT in teaching and learning of English language. The result indicates a variety of impact of integrating ICT in the teaching and learning of English language in Nasarawa state Polytechnic, Lafia in Nasarawa State, Nigeria.

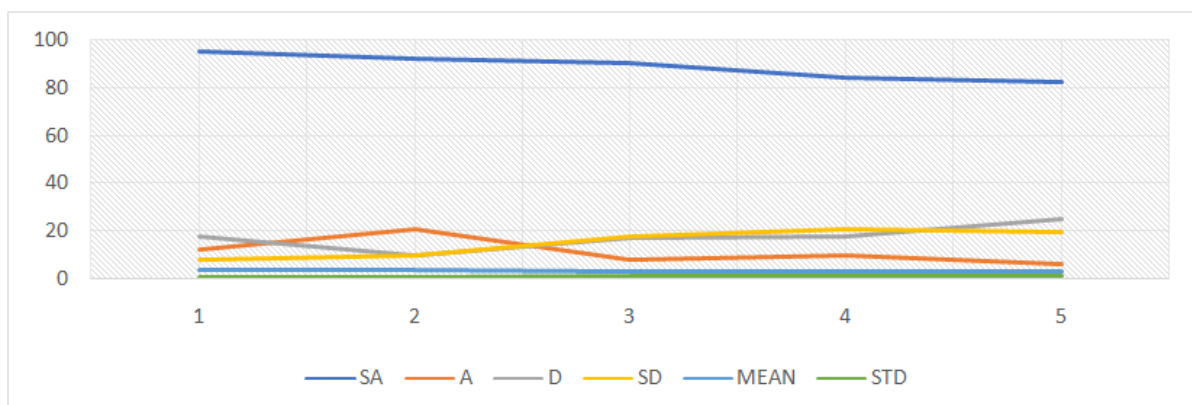
Research Question 2: What are the lecturer's perception on integrating ICT in the teaching and learning of English language in Nasarawa State Polytechnic, Lafia?

Table 2: Attitude of lecturers towards ICT

S/No	Items	SA	A	D	SD	Mean	STD	Decision
1	I hardly make use of ICT	95	22	28	18	3.46	0.94	Positive
2	I don't have adequate knowledge on the usage of ICT	92	31	20	20	3.47	0.92	Positive
3	Maintenance of ICT equipment is too high	90	18	27	28	3.28	1.13	Positive
4	Am afraid of ICT usage in teaching students in classroom.	94	20	28	21	3.18	1.17	Positive
Cluster Mean						3.35	0.83	Positive

Source: Survey 2022

Line chart on attitude of staffs towards virtual library





The table above shows the perception of lecturers towards ICT. As shown in the above table, respondents rated I hardly make use of ICT as their top choice. The cluster mean and standard deviation are 3.35 and 0.83 which is an indication that lecturers develop negative attitude towards ICT.

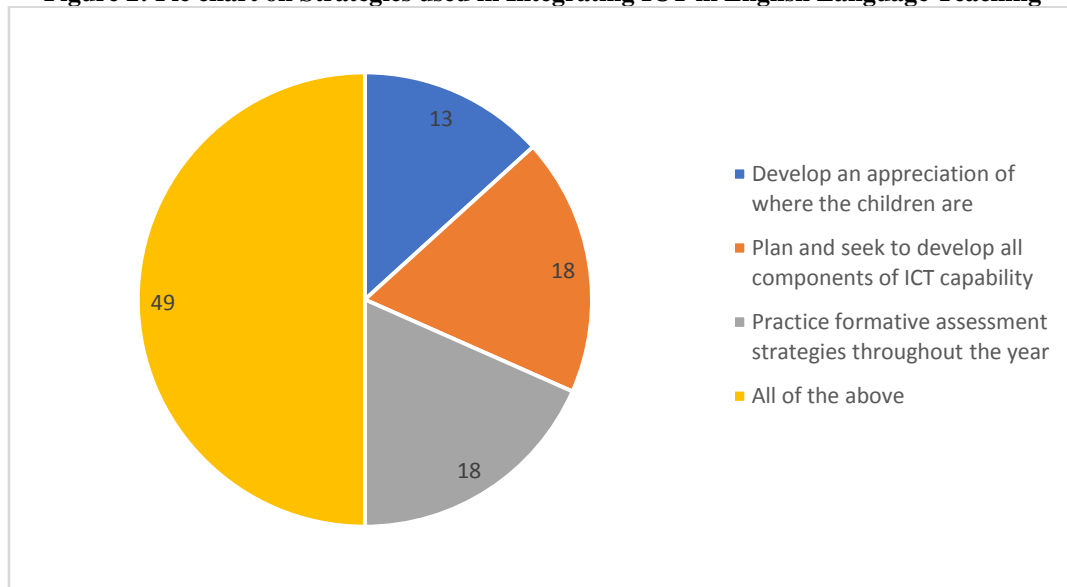
Research Question 3: What are the strategies used in integrating ICT in English language teaching in classes in Nasarawa State Polytechnic, Lafia?

Table 3: Strategies used in Integrating ICT in English Language Teaching

Response	Frequency	Percentage
Develop an appreciation of where the children are	22	13.5
Plan and seek to develop all components of ICT capability	30	18.4
Practice formative assessment strategies throughout the year	30	18.4
All of the above	81	49.7
Total	163	100

Source: Field Data, 2021

Figure 2: Pie chart on Strategies used in Integrating ICT in English Language Teaching



The table and pie chart above shows strategies used in integrating ICT in English language teaching. The result indicates that developing an appreciation of where the children are, planning and seeking to develop all components of ICT capability and practice formative assessment strategies throughout the year are the strategies used in integrating ICT in English language teaching.

Research Question 4: What are the challenges faced in ICT integration in Nasarawa State Polytechnic, Lafia?

Table 4: Challenges Faced in ICT Integration

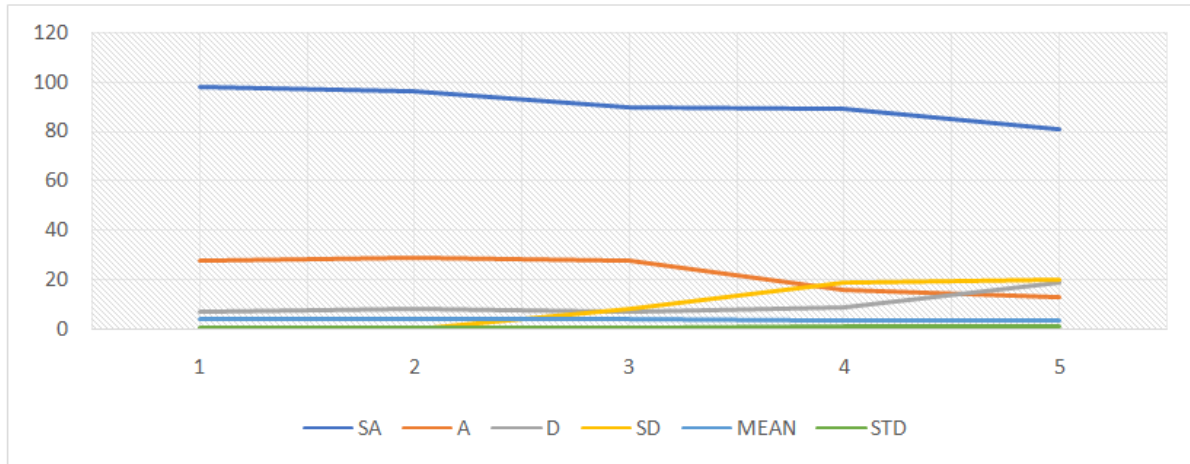
S/No	Items	SA	A	D	SD	Mean	STD	Decision
1	Limited accessibility and network connection	98	38	17	10	3.68	0.57	Positive
2	Limited technical support	96	39	18	10	3.66	0.59	Positive



3	Lack of effective training	90	38	17	18	3.50	0.85	Positive
4	Limited time	89	26	19	29	3.32	1.10	Positive
5	Lack of Lecturers' competency	81	23	29	30	3.17	1.15	Positive
Cluster Mean						3.47	0.85	Positive

Source: Survey 2022

Line chart on attitude of staffs towards virtual library



The table and line chart above show the challenges faced in ICT integration in Nasarawa State Polytechnic, Lafia. Respondents rated limited accessibility and network connection as the top most choice. The clustered mean and standard deviation are 3.47 and 0.85 respectively. Limited accessibility and network connection, limited technical support,

lack of effective training, limited time and lack of teachers' competency

Testing of Hypothesis

There is no significant relationship between ICT usage and integration of ICT in teaching and learning of English language in Nasarawa State Polytechnic, Lafia.

Table 5: Relationship between ICT usage and integration of ICT in teaching and learning of English language Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.216	.081		2.665	.009
Integration	.990	.054	.849	18.352	.000

a. Dependent Variable: ICT usage

From table 5, the regression model equation using unstandardized coefficient is:

$$Y = B + B_1x_1$$

$$Y = .216 + 0.990x_1 \text{ ----- Equation 1}$$

Where: Y = ICT usage

x₁ = Awareness

The result on the table reveals the level of awareness have positive and significant influence on level of usage

of ICT in teaching and learning of English language in Nasarawa State Polytechnic, Lafia β = .849, t statistic of 18.352 and computed p-value of 0.000 which is below the level of significance (0.05)

adopted for this study. The Table shows that unit change in usage leads to an increase in level of integration of ICT. Based on this result, the null hypothesis is rejected which affirms that there is



significant relationship between the level of ICT usage and the level of integration of ICT in the teaching and learning of English language in Nasarawa state Polytechnic, Lafia is hereby accepted.

V. Discussion of Findings

After the analysis, the first finding concentrated on the impact of ICT in teaching and learning of English language in Nasarawa State Polytechnic, Lafia. The findings revealed that, ICT ameliorate the efficiency and effectiveness of learning process, it helpslearners to interact and communicate with others effectively and it makes repetitive tasks more interesting for students. This finding is in agreement with that of Akintunde &Angulu (2015).

The second finding reveals the perception of lecturers on integrating ICT in the teaching and learning of English language in Nasarawa State Polytechnic, Lafia. It was revealed that lecturers hardly make use of ICT, some don't have adequate knowledge on the usage of ICT, while others feel the maintenance of ICT equipment is too high and some are afraid of ICT usage in teaching students in classroom. This finding is in agreement with Mewcha&Ayele (2015).

The third finding reveals that developing an appreciation of where the children are, planning and seeking to develop all components of ICT capability and practice formative assessment strategies throughout the year are the strategies used in integrating ICT in English language teaching. This finding is in agreement with that of Dornela(2016) whose study reveals same strategies

The fourth finding reveals challenges faced in ICT integrationin the teaching and learning of English language in Nasarawa State Polytechnic, Lafia which includes, limited accessibility and network connection, limited technical support, lack of effective training, limited time and lack of lecturers' competency.

VI. Conclusion

Based on the results of this study, it has been established that ameliorating the efficiency and effectiveness of learning process, helping learners to interact and communicate with others effectively and making repetitive tasks more interesting for students is the impact of ICT in teaching and learning of English language in Nasarawa State Polytechnic, Lafia. Lecturers perception on integration of ICT are that they hardly make use of ICT, some don't have adequate knowledge on the usage of ICT, while others feel the maintenance of

ICT equipment is too high and some are afraid of ICT usage in teaching students in classroom.

Developing an appreciation of where the children are, planning and seeking to develop all components of ICT capability and practice formative assessment strategies throughout the year are the strategies used in integrating ICT in English language teaching and the challenges faced in ICT integration in the teaching and learning of English language in Nasarawa State Polytechnic, Lafia which includes, limited accessibility and network connection, limited technical support, lack of effective training, limited time and lack of lecturers' competency.

VII. Summary and Recommendations

By and large, this study has been used to examine and showcase how the employment of digital gadgets can aid the teaching and learning of English language. The development of the science and technology of any nation can be easily facilitated through the use of ICT and automated gadgets. If the English Language pedagogy is facilitated through ICT, it will not only improve the communication and mutual understanding among people of diverse ethno-linguistic and cultural backgrounds, but it will also develop the nation's technology. Consequently, the development of the technical skills not only helps the production and economic self-reliance, but it will also develop the nation's economy. If government can help develop the utilization of ICT in language pedagogy, Nigeria's technology and economy will be drastically developed.

The use of information and communication technology (ICT) cannot be underestimated in language teaching and learning process because emerging technologies make it pertinent and practical to approach learning in ways that have been advocated by scientists, theorists and educational psychologists. It is imperative for modern day teachers and learners to keep abreast of the modern trend at improving teaching and learning of English Language through the use of Information and Communication Technology. Suffice it to say that information and communication technology has revolutionized society globally, including how language instruction is taught and delivered.

The internet in particular has become a conduit where people can learn, share and collaborate in ways not possible many years before now. A great deal of success however comes from preparing students to interact and learn in this internet age. Therefore, if ICT is integrated into the teaching and learning of language, our renewed



approach to the teaching and learning of English will go a long way in making ICT a more rewarding partner in the teaching-learning process.

In the light of the foregoing, it is recommended that teachers should upgrade and familiarize themselves in the use and application of ICT facilities in the acquisition of language education.

The commitment and enthusiasm to the teaching and learning of English through the effective use of ICT should be of utmost importance not only to the curriculum planners and education policy makers but also the teachers and the learners of English.

In order to facilitate the integration of ICT into English language learning, the following should be put in place:

- i. Constant/regular supply of electricity
- ii. Teaching of computer course in schools
- iii. Encouragement of Research and Development Centers on ICT
- iv. Provision of computers in schools for learners and laptops for teachers of English language
- v. Recruitment of an adequate remuneration of competent instructors
- vi. Regular computer training and re-training for English language teachers
- vii. Provision of internet facilities in schools
- viii. Government should develop policies and programmes that enhance the development of ICT in schools and the country as a whole.

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REFERENCES

- [1]. Akintunde, F. & Angulu, Y. (2015). The Use of Information and Communication Technology (ICT) in the Teaching and Learning of English Language in Nigeria. *Journal of Literature, Languages and Linguistics*. Vol. 15, No. 44 Pg. 89-101
- [2]. Dash, N. & Dash, M. (2007). *Teaching English as an Additional Language*. Noida, UP: India Pustak Mall.
- [3]. Davies, J.M. (2013). ICTs and their significant application in teaching foreign languages. *COPSSE Documents*. Vol. 5 (2) Pg. 121-129.
- [4]. Dornela, O. (2016). Strategies of Enhancing ICT Use in the Delivery of Management Services in Public Secondary Schools in Siaya County in Kenya. *European Scientific Journal*. Vol. 12, No.28, Pg. 29-40
- [5]. Hartoyo, C. (2008). *Individual Differences in Computer-Assisted Language Learning*. Semarang: Pelita Insani Sernarang
- [6]. Holmes, B., & Gardner, J. (2016). *E-learning: concepts and practice*. London: Sage.
- [7]. James, S.W. (2015). The Technological Devices and Language Teaching and Learning. *The Qualitative Report*. Vol. 15, 1164-1190.
- [8]. Lightbown, P.M., & Spada, N. (2013). *How languages are learned*. Oxford: Oxford University Press.
- [9]. Marshal, J.M., (2002). *Learning with Technology, evidence that Technology can and does support Learning*. San Diego: State University.
- [10]. Martin, E.A. (2006). *World Englishes in the Media*. Oxford: Blackwell Publishing Ltd.
- [11]. Mewcha, A. & Ayele, A. (2015). Teachers' Perception on Integrating ICT in Teaching/Learning Process: The Case of Adwa College. *Journal of Education and Practice*. Vol.6, No.4, Pg. 114-121
- [12]. Ogumsola, L.A., (2005). Information Technology and the effects of Globalization: Twenty-first Century "Digital slavery for Development Countries- Myth or Reality? *Electronic Journal of Academic and special Librarianship*, 6(1-2): 1-0.
- [13]. Stockwell, A. (2016). *Integrated instruction in ICT*. Cambridge: Cambridge University Press.
- [14]. Tarhemba, A. E. & Ogah, L. J. (2008). English Language for National and Global Development. *International Journal of Development Studies*. Vol. 3, No. 1 Pg. 62-65
- [15]. Udoh, V.C. & Egwuchukwu, D. (2014). *Approaches and methods in language teaching*. World Journal of Management and Behavioural Studies Vol. 2 (3) Pg. 69-73.
- [16]. Victoria L. T., (1999). Modifying Teaching through ICT. *The American Journal*. Vol. 12, Pg. 56-63