

## **Knowledge of Educational Psychology, ICT Skills and Quality of Teaching among Basic Education Teachers in Calabar, Nigeria.**

Dr. Mrs Joy N. Njoku & Dr. Mrs Maureen O. Okon

*Corresponding Author: Dr. Mrs Joy N. Njoku*

---

**Abstract:** *This study examines the relationship between Knowledge of Educational Psychology, acquisition of ICT Skills, and quality of teaching among basic education teachers in Calabar, Cross River State Nigeria. A sample of ninety two teachers (92) out of a population of two hundred and ninety three (293) were randomly selected from seven schools (four junior secondary schools and three primary schools). The schools were purposely selected for the study since the emphasis was not on comparing schools but on quality of teaching among teachers. A self-designed instrument titled: knowledge of Educational Psychology, ICT Skills and Quality of teaching questionnaire (KEPIQ) was used for data collection. The questionnaire were served to the teachers in their various schools and retrieved after their responses. Pearson Product Moment Correlation Coefficient (PPMCC) and multiple regressions were adopted for data analysis. The first two hypothesis were tested with Pearson Product Moment Correlation Coefficient while the third was tested using Multiple Regressions. The findings of the research revealed that there is relationship between Knowledge of Educational Psychology, ICT Skills and quality of teaching among the teachers. The higher the knowledge of educational psychology and acquisition of ICT skills, the better the quality of teaching. It was therefore recommended among other things that regular workshops and intensive training be organized for teachers to get them acquainted with theories and practice of educational psychology as well as ICT skills.*

*Key Words: Knowledge, Educational Psychology, Teachers, Calabar.*

---

Date of Submission: 16-07-2018

Date of acceptance: 30-07-2018

---

### **I. Introduction**

Education plays a very significant role in the development of individuals and the society they live in. The quality of education can be assessed by the quality of teachers as well as the quality of teaching. Quality of teaching can be judged by the teachers knowledge of the subject matter, use of adequate teaching methods, good classroom management, knowledge of individual differences, proper assessment techniques and so on. Njoku and Kalgo (2003) noted that education is bedrock of national and personal development. It is easy to assess the level of development of a nation by assessing the level of education of her citizenry. Accordingly, Ifunanya, Onyia and Iketaku (2013) suggested that the quality of education depends on the quality of teaching to a large extent and by extension the teacher quality. Quality teaching covers a wide area which includes the ability of teachers to use proper teaching methods to impart knowledge, have good assessment techniques, manage their class and the children properly, achieve the stated educational objectives, etc. The role of the teachers therefore in ensuring quality education cannot be over emphasized. Teachers are key players in the teaching-learning process and strong contributors to sustainable development.

The important role which teachers play in giving quality education is emphasized in literature (Stefanescu & Stefanescu, 2013, Eduwene Osagie-Obazie, 2016). The improvement of the quality of education is a continuous attempt by the teacher to bring innovation into the teaching strategies he/she adopts to ensure sustainability and efficient transfer of scientific information. Rice (2003) noted that teacher quality is the most important school-related factor influencing students' achievement. To further ascertain the importance of quality education. Hanushek and Wodman (2007) posit that it is the quality of education rather than the mere access to education that impacts positively on economic growth. Quality in education is defined by its ability in improving learning outcomes by taking cognizance of the qualitative differences found among learners irrespective of their age and class. Also, in ensuring that teaching is done in ways that every learner would benefit from instruction meaningfully

Hanushek & WoBmann (2007) in emphasizing the importance of quality in education noted that good quality education impacts directly on individuals' earnings and economic growth. They further stressed the point by stating that schooling has failed in driving economic success. This is because they adduced that attention to the quality of education in ensuring that students actually learn has been missing in essence. This is because educational quality has a strong causal impact on individuals earnings and economic growth.

The question of how teaching can be improved upon remains one of fundamental significance internationally (Gore, Lloyd, Smith Bowe, Ellis & Lubans, 2017). Low teacher effectiveness or low teaching quality impacts negatively on economic development. The major task of teacher is to ensure that learners learn and learning outcomes are achieved. Basic to the teacher succeeding in giving quality education is in his/her ability in delivering instruction meaningfully and productively. In view of this, Eduwen and Osagie-Obazee (2016) suggested that the professionalization of teaching as well as making the teacher the centre of educational reform in Nigeria is a necessity. Basically, because doing so will enhance among other things, teacher quality and teacher productivity, it will also ensure effective service delivery. It is in effective and efficient service delivery that teaching quality is exposed.

To ensure quality teaching, a teacher must understand the entire teaching-learning process. One of the key elements of the process is the learner. The teacher therefore to succeed must among other things understand the learner. His behavior, how he learns, what motivates him/her and a whole other personal and social conditions that may interfere with learning, understanding the learner is in the domain of educational psychology. The role of educational psychology in ensuring success in the teaching learning process is enormous.

To enhance teaching quality, there is need to improve the knowledge of Educational Psychology. Educational Psychology is a discipline that is directly involved in the process of acquiring education and the realization of educational goals. John (2012) viewed educational psychology as scientific and behavioural study. He defined educational psychology as the field of psychology in which the findings of psychology are applied in the field of education. Bruce and David (2011) defined educational psychology as scientific study of human behaviours applied to teaching and learning process. In other words, educational psychology is a study of the experiences and behavior of the learner in relation to educational environment. Educational Psychology covers very wide scope which can be compressed into five major areas namely: the learner, teacher, learning experience, learning process and the learning environment.

Like every other discipline, Educational Psychology is expanding in scope and methods through the use of Information and Communication Technology (ICT). The term ICT has attracted a wide range of definitions according to purpose and usage. Colrain (2012) categorically stated that it will be difficult to come up with a definition that will suit every group from business, education, research, politics and so on. However, James (2011) defined ICT as the integration of telecommunications, computers, middle ware pad data system that supports, stores and transmit unified communication technologies (UC) between systems. It is associated with the convergence of audio, visual and telephone networks with data systems through a single media unit. UNESCO's forum on ICT and Education in Qingdao emphasized the need for ICT in achieving quality education by the year 2030. They stated that "ICT" can contribute to universal access to education, equity in education, the delivery of quality learning, teachers' professional development and more efficient educational management, governance and administration. Gegeyehu, Ayeneo and Yi (2016) opined that ICT based education is essential for new emerging information and then facilitating large scale learning needs for social economic development. They saw ICT as the study and ethnical practice of facilitating learning and improving performance by creating, using and managing appropriate technological processes and resources. ICT behavioural and educational psychology is the use of modern technology such as computers, digital technology, networked digital devices and associated software and courseware with learning scenarios, worksheets and interactive exercises that facilitates the learning process (Anderson, 2004). Computers have become means by which educators pass theoretical idea in the classroom (Meier, 2012). Learning in the era of ICT has become more interactive with learners seen as those searching for information rather than those receiving informations.

Educational Psychology as a behavioural science has benefited immensely from the use of ICT. As a discipline that builds students, evaluates and improves teaching and learning, ICT equips educational psychologists to do their work more effectively. ICT has made major differences in teaching approach and learning of the students. It plays greater and more dynamic roles in learning by increasing students' activities and responsibilities. Students have moved from about using computers, learning computers to learning with computers (Gebeyehu et.al 2016). There is a sharp contrast in the education system between the traditional and modern method since the advent of ICT. Curriculum that was presented in parts in the traditional system is now presented as whole with emphasis on the big concepts. Learners are given more opportunity to brain storm and express themselves. Learners are now viewed as thinkers and no longer blank spaces on which information can be written. Assessment are now seen as interwoven with teaching and done during the course of teaching as both teachers and learners observe the process.

With the enormous contribution of ICT to the field of education in general and educational psychology in particular there is need to investigate how it relates with quality of teaching. Gebeyehu et al (2016) stated that large scale learning by means of ICT will result to improved social and economic development. The use of ICT has greatly improved time management in teaching, assessment techniques and students participation in class. On the side of educational psychology access to information about the behavior of learners and education is of

greater importance and ICT has helped in acquiring that knowledge. However, traditional and Western education have existed for ages before the advent of ICT. The ICT has also generated a lot of behavioural and academic problems. This is why many nations according to James (2011) changed the name in their schools to suit their needs, for example: in United Kingdom, it is rather referred to as “computing”.

Talking about the need for teacher innovativeness in improving quality in teaching, in view of the ability of ICT in promoting innovation in teachers and teaching as well as potential in improving development, the researchers deemed it fit to assess the relationship between knowledge of educational psychology, ICT skills and quality of teaching among basic education teachers in Calabar, Cross River State.

### **Statement of problems**

Many scholars like Njoku (2016) have lamented that the standard of education is falling in recent times. Quality of teaching encompasses the whole processor impacting knowledge. If the process is faulty, then the outcome cannot be better. Many teachers lack methods of impacting knowledge to the learners. Adesulu Uwandu and Inuoma (2016) posited that it is not just standard but quality of education has fallen primarily because of the abolition of teachers grade II (TGII) which primarily groomed teachers on methods to achieve effective teaching. Ezekwesili (2016) also blamed quality of teachers and teaching for the problems of education in Nigeria. Arong and Ogbadi (2010) blamed the administrators of schools for declining quality of teaching and education in general.

Jennifer, Nick & Ausukiya (2017) also decried the fallen standard and quality of education in Nigeria that has led to mass exodus of students to other countries. Many children finish secondary school without learning how to read or do simple everyday arithmetic. This can be attributed to poor quality of teaching; examples are in poor methods of lessons delivery at various stages, poor questioning methods, poor classroom management, lack of interest in the work, etc. Teachers adopt lecture method regularly at all levels of education in Nigeria due to lack of teaching materials.

This ugly situation has become a concern to parents, teachers, school administrators and the government. The cause of this regrettable trend needs to be unraveled and tackled. Teachers are key players in the process of teaching and learning. The quality of delivery or the effectiveness of the teachers reflects on the products of any school. Educational Psychology is among the core courses taken by every teacher during their training in colleges of education and universities to equip them with the skills and knowledge of teaching. Yet the products of the teachers are not justifying the fact that these teachers apply the technique learnt in this discipline. The world is going paperless and chalkless. ICT is gradually taking over paper and chalkboards. Any individual or nation that wants to have scientific, economic and social breakthrough must key into the new trend. It becomes imperative that teachers who play significant role in dissemination of knowledge must be ICT literate and compliant. This research therefore aimed at assessing how knowledge of Educational Psychology and acquisition of ICT skills can relate with quality of teaching among teachers in Calabar. On the other hand, it tries to answer the query of how Educational Psychology and ICT skills can predict quality of teaching among teachers.

### **Objectives of the study**

This study is aimed at finding out if;

- i. There is any significant relationship between knowledge of Educational Psychology and quality of teaching among teachers in Calabar.
- ii. There is any relationship between acquisition of ICT skills and quality of teaching among teachers in Calabar.
- iii. Knowledge of Educational Psychology and ICT skills can predict quality of teaching among teachers in Calabar.

### **Null Hypothesis**

The following null hypotheses are formulated to guide the study

- i. There is no significant relationship between knowledge of Educational Psychology and quality of teaching among teachers in Calabar.
- ii. There is no significant relationship between acquisition of ICT skills and quality of teaching among teachers in Calabar.
- iii. Knowledge of Educational Psychology and ICT skills do not significantly predict quality of teaching among teachers.

## **II. Methods**

The researcher adopted the survey design in this research since the design helps in sampling opinion of respondents concerning the subject of study. Survey also helps the researcher to reach out to as many

respondents as possible in the location where the research is carried out. Purposive and randomly sampling techniques were used. The purposive sampling technique was used to sample seven schools which comprised of three primary schools and four junior secondary schools in the area of study. This was considered appropriate since the emphasis is not on the schools but on the quality of teaching among the teachers. However, random sampling technique was used to select ninety two (92) teachers out of a total of two hundred and ninety three (293) in the seven schools that were used. The sample size represented thirty two percent (32%) of the population of teachers. The questionnaires were distributed to the teachers in their various schools by the researchers and retrieved after they completed their responses.

The instrument used for data collection was a self-designed questionnaire titled Knowledge of Educational Psychology, ICT and Quality of teaching Questionnaire (KEPIQ). The instrument has four (4) sections. Section A was to elicit information on personal data (e.g. sex, age, qualification, school you are teaching). Section B was for knowledge of educational psychology. Here questions were asked to find out how much they knew on individual differences, child development, learning processes and interpersonal relationship and how these can help them in their teaching section C was for acquisition of ICT skills. Here questions were asked to know how the teachers operate or make use of ICT equipment in teaching, assessment of students and lesson preparation. Section D elicited responses for quality of teaching. Here questions were asked on how educational psychology helps them in choosing teaching methods that fit their children in various classes, achievement of objective of their lessons, management/class control and assessment of their students.

The researcher adopted a three point scale of Low (1), Average (2) and High (3) for scoring sections B, C and D. The responses of every respondent were summed up in each of the sections which formed the raw scores used for analysis of data. The data collected was analyzed using Pearson Product Moment Correlation Coefficient for hypothesis 1 and 2. Multiple regression for hypothesis 3. The statistics are very good for finding relationships and making predictions. To ascertain the validity of the instrument, the researcher subjected the questionnaire to peer review with your senior lecturers from the Department of Educational foundations. Two lecturers of Educational Psychology and the two lecturers of Measurement and Evaluation. The questionnaire was judged to have high face validity.

### III. Result

#### Hypothesis one

There is no significant relationship between knowledge of educational psychology and quality of teaching. The independent variable is knowledge of educational psychology while the dependent variable is quality of teaching. To test this hypothesis, Pearson Product Moment Correlation was used and the result showed that ( $r_{cal} = .502$ ;  $p < .05$ ). This shows a significant positive correlation. Since  $p (.000)$  is less than  $p (.05)$ , the null hypothesis is rejected. The result is represented in table 1.

**Table 1**  
Pearson Product Moment Correlation Coefficient showing a relationship between teacher's knowledge of Educational Psychology and teacher's quality of teaching in Calabar.

Variables	N	X	S.D	r.cal.	p-val
Knowledge of Edu. Psy.	93	6.82	1.421		
				.052	.000
Quality of Teaching	93	7.53	1.273		

Correlation Significant at the 0.05 level

#### Hypothesis two

There is no significant relationship between ICT skills and quality of teaching. The independent variable is ICT skill while the dependent variable is quality of teaching. To test the hypothesis, Pearson Product Moment Correlation was used for data analysis and the result as presented in table 2 revealed that ( $r = .442$ ,  $p < .05$ ). This is a significant positive correlation. Since  $p (.000)$  is less than  $p (< .05)$ , the null hypothesis is rejected. This implies that ICT skills relates positively with quality of teaching.

**Table 2**  
Pearson Product Moment Correlation Coefficient showing relationship between teachers' acquisition of ICT skills and their quality of teaching.

Variables	N	X	S.D	r.cal.	p-val
ICT skills	93	5.05	1.549		
				.442	.000
Quality of Teaching	93	7.53	1.273		

Correlation Significant at the 0.05 level

### Hypothesis 3

There is no significant relationship between teachers' Knowledge of Educational Psychology, ICT skills and teachers quality of teaching in Calabar.

**Table 3**

Summary of multiple regression analysis of knowledge of Educational Psychology, ICT skills and quality of teaching among teachers in Calabar

Source of Variation	Sum of squares	df	X <sup>2</sup>	f-ratio	Sign
Regression	3.228	2	56.61		
Residual	145.955	90	1.622	.34.90	.000
Total	194.183	92	1.273		

**Table 4**

	Regression				
	Coefficient	Std. Error of	Beta (B)	t-value	Sign.
Variables	Unstandardized	Weight			
	R-Weight				
Constant	6.698	.723		9.260	.000
KNOPSY	.042	.095	3.47	2.439	.000
ICT	.108	.087	.131	.1.231	.221

Dependent Variable QOTEACH

R = 147  
 R<sup>2</sup> = .022  
 Adjusted R square = .000  
 Std. error of estimate = 1.273

From the summary above, the collective effect of the two variables (KNOPSY AND ICT) yielded a multiple regression (R.147) and multiple R-square of .022. This implies that only 2.2% of the teachers were influenced by Knowledge of Educational Psychology and acquisition of ICT skills in their quality of teaching.

Further study of the data revealed the strength of the individual variable as.047 and .131 respectively for knowledge of Educational Psychology and ICT skills. This shows that ICT skills predicted quality of teaching than knowledge of Educational Psychology. However, the composite effect of the two variables is significant, therefore the hypothesis is rejected.

### Discussion of findings

The findings of this research showed that knowledge of Educational Psychology positively influenced or predicted teachers' quality of teaching. There is no gain saying that knowledge of educational psychology can help the teacher in the daily discharge of his duties. Ellen (2017) defined Educational Psychology as the application of theories of human development to understand learning styles and inform the instructional process. Educational Psychology improves teacher/students relationship which is very vital in creating cordial and peaceful learning environment. John (2012) and Barry (2011) elaborated on the role of educational psychology in teaching and learning process. Educational Psychology equips teacher with wide range of skills such as proper classroom management, knowledge of individual differences, test and measurement skills for class assessment, child growth and development, theories of learning, etc. It is difficult for a teacher to go through proper training in educational psychology skills without it reflecting in his daily discharge of duties. Helen. Lynley, Paulie and Lisa (2005) pointed out that educational psychology improves teacher-pupil interaction, instruction theories, emotional learning, special education needs and class management.

This study also revealed that ICT skills acquisition by teachers improve their quality of teaching. Information and Communication Technology (ICT) has become a veritable tool in nearly every field of human endeavour. The teaching profession is one of the mostly impacted by ICT. Many teachers use ICT to support innovative pedagogy e.g. video conference learning and digital video are being incorporated in methods of teaching. ICT makes teaching and learning more learner based than teacher based. Learners are given the opportunity to manipulate their computers and come up with creative ideas. ICT is viewed by UNESCO (2008) as a major tool for building knowledge, societies and particularly as a mechanism at the school education level that could provide a way to rethink and redesign the educational systems and processes. Knowledge of ICT have helped teachers in preparation and presentation of lessons.

Albert (2010) pointed out that Information and Communication Technology at the disposal of teachers has created room for regular update of knowledge. Teachers who have keyed into the new and available

resources find teachings more interesting than the traditional chalk and chalkboard system. This research supported the findings of Gebeyehu (2016) who stated that the use of ICT will improve teachers' effectiveness which will bring about improved social and economic development.

Knowledge of Educational Psychology and acquisition of ICT skills will improve quality of teaching and this will reflect on the quality of products. When the products of the school system is good, there will be increased activity and innovation which will lead to national development. Economic development is one of the key reasons every government invest huge amount of money in the education system. There is hardly any skill or human endeavour that does not require some level of education. Teachers' quality of teaching will reflect on the products of schools and eventually impact on the economic development of the society.

#### **IV. Conclusions**

The researchers after the investigation concluded that knowledge of educational psychology and acquisition of ICT skills among teachers in Calabar have significant relationship with their quality of teaching. This means that the more the knowledge of educational psychology and ICT skills, the better the quality of teaching. It is therefore imperative that teachers will upgrade their knowledge and skills in these areas for better output.

#### **V. Recommendations**

Having noted and discussed the findings of this research which showed that knowledge of educational Psychology and acquisition of ICT skills have significant relationship with teachers' quality of teaching in Calabar. The researchers recommended the regular workshops and in-service training be organized to keep them constantly abreasted with knowledge in these areas.

- i. Educational Psychology as a course must be made compulsory for student teachers during the course of training.
- ii. The government should assist in proving the teachers with basic ICT equipment like good phones, laptop, I pads, etc to enable them do their work with better ease.

#### **References**

- [1]. Adesulu D, Uwandu E & Iruoma K (2016). Education in Nigeria the problem with quality not standard Vanguard October 6, 2016
- [2]. Albert: S (2010). The role of ICT in improving teaching and learning process in primary and secondary schools, Journal of ALT-J research in learning technology, 18 (3), 207-220.
- [3]. Anderson: T (2004). Toward a theory of online learning. Theory and practice online learning. Athabasca University, Anabasca.
- [4]. Arong: F.E & Ogbadu ; M.A (2010). Major cause of declining quality education in Nigeria from administrative perspective, candian social science journal, 6 (3), 183-198.
- [5]. Barry:W.J (2012). Challenging the status quo meaning of educational quality, introducing transformational quality theory. Educational Journal of living theories 5 (1) 1-26
- [6]. Bruce: W.T & David: M.M. (2011) Educational Psychology WADSWORTH CENGAGE learning, United Kingdom.
- [7]. Colrain: M.Z (2012): Refining ICT in boundary less world. The development of a working hierarchy, International Journal of Managing information Technology (IJMIT), 4 (3). 13-21
- [8]. Ellen: M (2017). Educational Psychology promotes teaching and learning. Psychology: science in action. www.apa.org/laction. Retrieved 13/10/2017
- [9]. Elliot: S.N. Krtochwill, T.R, cook; J.L & Travess: J.F (2002). Educational Psychology, effective teaching, effective learning. 3<sup>rd</sup> edition. McGraw Hill Companies, USA.
- [10]. Ezekwesili: O (2016). Factors that hinder quality education in Nigeria Guardian Newspaper, 29/09/2016
- [11]. Gebeheyu: B.G, Ayeneo: A.K & Yi; C (2016). The paradigm of role of ICT for behavioural and educational psychology. The case of developing countries. International journal of information and educational technology. 6 (4), 301-307
- [12]. Hanuhaek E A, & Wobmann L (2010) Educational and economic growth, International Encyclopedia of Education 2, 245-252
- [13]. Helen: P. Lynley: H.A, Paige: S.B & Lisa, C.D (2011). The role of educational psychology in teacher education: three challenges for educational psychologist. Journal of educational psychologist. 46 (2), 71-83
- [14]. Ifunaya AM, Onyia CN & Ketaku IR, (2013). Journal of Educational and social research 3 (8) 69-73
- [15]. James: M (2011). Modern Network architecture, cloud network architecture and ICT. IT Knowledge exchange Tech Target. Retrieved 20/9/2017
- [16]. Jennifer: O. Nick. C & Asukuya C. (2017). Education in Nigeria, INENR, March 7, 2017 www.wes.org. World Education Service, USA
- [17]. John: P (2012). Meaning, nature and scope of educational psychology, <http://johnparankmaile>. Retrieved 20/9/2017
- [18]. Mangal: S. K (2010). Essentials of educational Psychology. PHI Learning Private Limited, New Delhi
- [19]. Maria: P (2015). Educational Psychology within teacher education. Journal of teachers and teaching, theory and practice. II (6), 555-574
- [20]. Meier: D (2012). The accelerated learning online: Journal of communication and media technologist. 2 (3) 1-5
- [21]. Njoku: J. N & Kalgo: F.A. (2003). Comparing the performance of direct entry and UME students of Usmanu Danfodiyo Univeristy. Sokoto. Sokoto educational review. 6 (1), 131-140
- [22]. Santrock: J.W. (2001). Educational psychology. Mcgraw Hill Companies, New York.
- [23]. UNESCO: (2008). ICT competency standards for teachers. Competency Standards Modules UNESCO Press, Paris.

Dr. Mrs Joy N. Njoku "Knowledge of Educational Psychology, Ict Skills and Quality of Teaching among Basic Education Teachers in Caliber." IOSR Journal of Research & Method in Education (IOSR-JRME) . vol. 8, no. 4, 2018. pp. 29-34.