

**RELATIONSHIP BETWEEN INFORMATION COMMUNICATION
TECHNOLOGY (ICT) AND TEACHING-LEARNING CAPACITY IN PRIVATE
SECONDARY SCHOOLS IN IBADAN METROPOLIS**

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Abstract

This paper examined the relationship between Information Communication Technology (ICT) and teaching-learning capacity in private secondary schools in Ibadan metropolis. The design adopted for the study was descriptive survey research design. The population of the study were teachers in Ibadan Metropolis Area of Oyo State. The study sampled five Local Government Areas in Ibadan Metropolis. Five private secondary schools were randomly selected in each Local government. This made up of 25 private secondary schools. However, five teachers were randomly selected in each school. A total a hundred and twenty-five (125) teachers made up the respondents for the study. Questionnaire tagged "Teachers' Perceptions on ICT Questionnaire" (TPICTQ) were used to collect data. Descriptive statistics like frequency counts, simple percentage and Spearman Moment Correlation Analysis were used to test three hypotheses at 0.05 level of significance. The findings revealed that that there was a significant positive relationship between Information Communication Technology (ICT) and students' academic performance. ($r = 0.65$; $p < 0.05$), significant positive relationship between Information Communication Technology (ICT) and teacher capacity building ($r = 0.93$; $p < 0.05$). It also showed that there was a significant positive relationship between Information Communication Technology (ICT) and teaching-learning process ($r = 0.93$; $p < 0.05$). It is therefore recommended that the state government should regularly implement the module of ICT education in private secondary schools, education ministries have to dedicatedly address the set back facing ICT development and that teachers need to improve their teaching skills in computer by attending conferences and

workshops, hence boost better instructional quality that would enhance the attainment of educational objectives in private secondary schools.

Keywords: Information Communication Technology, Teaching-learning capacity, Private secondary schools, Teacher capacity building

Introduction

Teaching involves far more than an inappropriate match between the school's curriculum and the students' needs. It also an expectations that a teacher communicates to students, the teacher's ability to deal with special needs in the classroom depend on his or her knowledge of the child development and sensitivity to students' different learning and behavioral styles. It is believed that whenever there is a better teaching facility, it helps a lot in passing messages to the learners. Moreover, when teachers do not have a better way of given instruction to accommodate individual differences, then large number of students may find it very difficult (Lemp, 1989).

Researchers who are demonstrating that instruction helps to establish and strengthen specific neural networks point out that poor instruction leaves a child without the necessary neural substrate to support academic progress. The foundation objectives of any communication effort in schools management is to make positive information or idea common, to share progressive opinions, to positively impact on the attitude of stakeholders towards the organization and to transmit objectives and not subjective decisions. Peretomode (1991) posited that "if communication is hampered in the administration of any organization, the entire organization suffers; when it is accurate, thorough and timely, the organization can move effectively toward goal achievement."

A communication process that would yield result in school security and management must be inclusive and not exclusive in nature. It should be a collective process that involves all the stakeholders in the school system situation. Even though various governments at all levels and at different times in Nigeria have shown very keen interest in education. Indeed, attempts had been made at local, state and federal levels in Nigeria to introduce universal basic education however, the concept of Information Communication Technology (ICT) programmes

was not well pronounced hence there is low level of ICT in Nigerian secondary education.

The word “telecommunication” means Communicating across distances (Betty, 1992). In addition, Lamp (1999) in his views defined telecommunication in term of its components parts as all services, products, media and methodology used to deliver information electronically while Friend (1985) in Adelokun and Abidoye (2013) pointed that telecommunications as the electronic process that permits the passing of information from one sender to one or more receivers with the output in a usable form. Essence of Information Communication Technology (ICTs) cannot be overlooked because it supports activities involving the creation, storage, manipulation and communication of information, together with the related methods, management and application. ICTs enables teachers to record, store, process, retrieve and transmit information .It also encourages use of modern technologies such as computers, telecommunications facsimile and microelectronics (Ayelaagbe and Loto, 2013).

The introduction of Computer Education in Nigeria came through the foundation of the IBM African Training Centre at the University of Ibadan, Ibadan in 1963. This was meant for training of computer personnel to operate, program and to service and repair IBM 146/1620 machine. The first compute Education Programme started at University of Ife. (Now Obafemi Awolowo University in 1971). Nowadays, there is establishment of computer section at every level of education: University, polytechnics, monotechnics, secondary schools, primary schools, Nursery schools e.t.c. (Ayelaagbe and Loto, 2013). According to Adelokun and Abidoye (2013), the application of telecommunication tools in secondary schools in Nigeria include Radio and Television Broadcasts. This is avenue through which secondary school students are reached at a particular air time with educational instructions in various subjects (Afolabi, 2003). Secondly, tele-tutorial focused on tele-instructions session involving demonstration, explaining by a tutor, practice, by the students/participants and corrective feedback by the tutor.

Purposes of Telecommunications in Secondary Schools according to Betty (1992) highlighted reasons for using telecommunication in secondary schools as follows: as an object of study in the context of information technology, informatics and

computer literacy, as a medium through which students and teachers can have on-line access to off-site collections of electronically stored information, as a medium through which Computer-mediated Communication(CMC) can occur and as a medium for the distance delivery of courses and other structured educational experiences.

Objectives of Nigeria Information Communication Technology (ICT) Policy

Osei (2007) listed some objectives of Information Communication Technology (ICT) as follow:

- To ensure that Information Communication Technology (ICT) resources are readily available to promote efficient natural development.
- To guarantee that the country benefits maximally, and contributes meaningfully by providing the global solution to the challenges of the information
- To empower Nigerians to participate in software and ICT development
- To empower the youth with Information Communication Technology (ICT) skills and prepare them for global competitiveness.
- To integrate Information Communication Technology (ICT) into the mainstream of education and training.

Statement of the Problem

Poor teaching not only aggravates existing learning problems, but it can also increase the number of students' failure in the classroom. This can happen when many students fall behind the expected standard because they haven't had the right learning opportunities. The discrepancy between their intellectual ability and achievement is really a matter of concern that wouldn't have occurred if teaching had been personalized and effectively taught through the use of Information Communication Technology (ICT).

In recent time, it seems that teaching-learning in private secondary schools is being appreciated by the society. Is there logic that made this happen? What makes the difference between public and private secondary schools? Therefore, this study tends to investigate into the relationship between Information Communication Technology

(ICT) and teaching-learning capacity in private secondary schools in Ibadan metropolis.

Hypotheses

The following hypotheses were formulated and tested:

- Ho₁:** There is no significant relationship between Information Communication Technology (ICT) and students' Academic Performance in Ibadan Metropolis Area of Oyo State.
- Ho₂:** There is no significant relationship between Information Communication Technology (ICT) and teacher capacity building in secondary schools in Ibadan Metropolis Area of Oyo State.
- Ho₃:** There is no significant relationship between Information Communication Technology (ICT) and achievement of National educational objectives in Ibadan Metropolis Area of Oyo State.

Methodology

The design adopted for the study was descriptive survey of the correlation type. The population of the study were teachers in Ibadan Metropolis Area of Oyo State. The study sampled five Local Government Areas in Ibadan Metropolis. Five private secondary schools were randomly selected in each Local Government Area. This made up of 25 private secondary schools. However, five teachers were randomly selected in each school. A total a hundred and twenty five (125) teachers made up the respondents for the study.

Personal design questionnaire tagged "Teachers' Perceptions on ICT Questionnaire" (TPICTQ) was used in the collection of data. The questionnaire is divided into two (2) sections. Section A deals with the respondents personal data such as name of schools, age, sex, educational attainment e.t.c, Section B consists of the question items that has 30question items for teachers designed by the researcher. Section B has Likert scaling format in which respondents were required to respond using the response format.

The sample was given to experts in the field of Educational Management and Teacher Education, for review and necessary corrections. Their observations and suggestions were used to make necessary adjustments. The instrument of this study was considered

reliable after the experts must have done modifications and adjustment. Also, after which correction was done by the researcher.

After this schedules of visitations, permission was sought from the principals or vice principals of the sampled schools for the administration of the instrument; with the support of 2 research assistants who were trained and supervised by the researcher to assist in the administration and collation of the instruments. The administration of questionnaire was carried out within five weeks. Descriptive statistics like and Spearman Moment Correlation Analysis were used to test three hypotheses at 0.05 level of significance.

Descriptive Statistics such as frequency counts and percentages, inferential statistics such as frequency counts, simple percentage and Pearson Product Moment Correlation (PPMC) were used for analysis. The three hypotheses were tested at $p < 0.05$ level of significance.

Analysis of Data

Table 1: Educational Background of the Respondents

Educational Attainment	No of respondents in the range	%
Diploma/OND/NCE	20	16
BA/BSC/B. Ed	100	80
MA/M sc/M. Ed	5	4
Total	125	100

From table 1 above, the largest no of respondents are those that have obtained first degree certificates, they are 100 representing 80%, master degree are 5(4%) and 20(16%) respondents with NCE/OND/Diploma.

Table 2: Years of Teaching Experience of Respondents

Years of Teaching Experience	Frequency	%
1-5	5	12.5
6-10	80	64
11-15	15	12
Above 15	25	11.5
Total	125	100

Table 2 above displays the years of teaching experience of the teachers used in this study. 5(12.5) are between 1-5 years of experience, 80 (64%) respondents are between 6-10 years. Between 11-15 are 15(12%).15 respondents representing 11.5% have 15 years experience.

Testing the Hypotheses

Hypothesis 1: There is no significant relationship between Information Communication Technology (ICT) and Students' Academic Performance in Ibadan Metropolis.

Table 3: Pearson Moment Correlation between Information Communication Technology (ICT) and Students' Academic Performance.

Variables	N	Mean	SD	r	p	Remarks
Students' Academic Performance.	125	12.38	19.63	0.65	0.05	Sig.
Information Communication Technology (ICT)		11.17	17.04			

Table 3 reveals that there is a significant positive relationship between Information Communication Technology (ICT) and Students' Academic Performance. The correlation($r = 0.65$; $p < 0.05$) showed positive result hence H_01 is rejected. This implies that there is significant relationship between Information Communication Technology (ICT) and students' academic performance in Ibadan Metropolis.

Hypothesis 2: There is no significant relationship between Information Communication Technology (ICT) and teacher capacity building in secondary schools in Ibadan Metropolis.

Table 4: Pearson Moment Correlation between Information Communication Technology (ICT) and Teacher Capacity Building

Variables	N	Mean	SD	r	P	Remarks
Teachers' Capacity Building	125	12.081	8.11	0.93	0.05	Sig
Information Communication Technology (ICT)		18.17	7.04			

Table 4 shows that there is a significant positive relationship between Information Communication Technology (ICT) and teacher capacity building in secondary schools in Ibadan Metropolis. Since $r = 0.93$; $p < 0.05$). Therefore, H_02 is rejected. The positive relationship Information Communication Technology (ICT) and teacher' capacity building in secondary schools in Ibadan Metropolis.

Hypothesis 3: There is no significant relationship between Information Communication Technology (ICT) and achievement of National educational objectives in Ibadan Metropolis.

Table 5: Pearson Moment Correlation between Information Communication Technology (ICT) and achievement of National educational objectives

Variables	N	Mean	SD	r	P	Remarks
Achievement Teaching - Learning process	125	14.41	10.57	0.73	0.05	Significant
Information Communication Technology (ICT)		18.17	7.046			

Table 5 reveals that there is a significant positive relationship between Information Communication Technology (ICT) and achievement of teaching - learning process. The coefficient of $r = 0.73$; $p < 0.05$). Therefore, H_03 is rejected. The positive relationship implies that there is

relationship between. Information Communication Technology (ICT) and achievement of teaching - learning process in private secondary schools.

Discussion of Findings

On Hypothesis 1, the study revealed that majority of the respondents agreed that connection between Information Communication Technology (ICT) and students' Academic Performance cannot be overlooked. The performance of students in WAEC, NECO JAMB e.t.c vividly shown that ICT facilities in private schools promote excellence results. Hence, the impacts of Information Communication Technology (ICT) on the students' Academic Performance promote high and good performance of students in private schools sampled. This is in line with one of the objectives of Nigeria ICT according to Osie (2007) that ICT empower the youth with ICT skills and prepare them for global competitiveness.

In Hypothesis 2, majority of the respondent agreed that there was significant relationship between Information Communication Technology (ICT) and teacher capacity building in private secondary schools. The impacts of Information Communication Technology (ICT) to the teachers' capacity building in private secondary schools cannot be disregarded. The positive performance of teachers implies that ITC contributes positively to teachers' capacity in their duties compare with their public counterparts. The researchers observed that the availability and uses of ICT in the sampled schools facilities helps the teachers to get the necessary information they need for their teaching-learning process.

This is in line with the view on of Adedokun and Abidoye (2013) that teachers especially those in secondary schools can develop their skills and knowledge especially the skills they needed to help their students learnt and to find the particular contents and curriculum they required. In addition, Osei (2007) put it in one of the objectives that ICT is to build a mass pool of ICT manpower using the platforms as train-trainer scheme for capacity building.

The third Hypothesis vividly shows that there was positive relationship between Information Communication Technology (ICT) and achievement of teaching - learning process in Ibadan Metropolis. From the study, it was discovered that Information Communication

Technology (ICT) helps in proper dissemination of information and keep the teachers to the recent forms in classroom management, hence attaining teaching - learning process in the schools sampled for the study. The responses from the respondents show that resources available for teachers, the relevancy of instructional material and placement of instructional materials affects students performance positively.

Hence, there is correlation between Information Communication Technology (ICT) and achievement of National educational objectives in private secondary schools in Ibadan Metropolis. This is in line with the view of Adedokun and Abidoye (2013) that ICT facilities is to provide the quality of education through the use of sound teaching method(as can be seen in interactive Radio Instruction) and supplementary audio-visual materials. They added that ICT is to assist in curriculum reform through speedy and effective delivery.

Conclusion

Essence of Information Communication Technology (ICT) in the teaching-learning process in private secondary schools in Nigeria cannot be overlooked. There is no doubt that ICT have elevated all sectors of the economy, education inclusive, In the schools system, ICT is seen as a must for students performance and effective administration. The essence of ICT is inevitable and immeasurable in the education development.

Recommendations

The following recommendations are given based on the conclusions of the study:

- I. Information Communication Technology (ICT) education should be seen as a compulsory to every child hence they should be given computerized education to secure their future.
- II. Non-governmental organizations (NGOs) and philanthropists' should get involved in providing the necessary facilities needed in ICT Education for private secondary schools.
- III. The government should re-examine its educational policies to incorporate a planned component of ICT education at the secondary school level.

- IV. The education ministries have to comparatively address the problem of ICT especially in urban schools, this may give productive outcome.
- V. There is need for private secondary schools owners to provide necessary education materials needed for effective operation of Information Communication Technology (ICT) systems.
- VI. Orientation courses should be mounted for teachers and emphasis should be laid on the teaching of values of ICT. For instance, symposia, conferences, debates, seminars e.t.c should be encouraged among teachers.
- VII. Teachers should be well recognized by the government by providing affordable computer to them. This would allow them the chance of performing their duties diligently and satisfactorily.
- VIII. Education should be well funded so that student's interest in Information Communication Technology (ICT) can be raised.

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