## ANALYSIS OF ICT ACCESSIBILITY AND UTILIZATION IN TEACHING OF BUSINESS STUDIES IN SECONDARY SCHOOLS IN ANDONI LOCAL GOVERNMENT AREA OF RIVERS STATE

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### ABSTRACT

The study investigated information and communication technology (ICT) accessibility and utilization of teaching of business studies in secondary schools in Andoni Local Government Area of Rivers State. A 20 item instruments of (ICTFAQ) and (ICTFUQ) were used for this study. The study sampled 66 business studies teachers in selected secondary schools in Anolga, Rivers State. The collected data were analyzed using the descriptive statistics, while t-test was used to test the two generated hypotheses at 0.05 level of significance. The findings revealed that ICT facilities were not available, and accessed by teachers in secondary schools in Anolga. It was also revealed that business studies teachers in these schools, do not also have the skills of utilizing ICT for teaching of the subjects. Finally, recommendations on ways of solving the above menace were implemented for further consideration and implementation by both state and local government authorities.

Keywords; ICT, business studies, utilization and accessibility.

## INTRODUCTION

The emergence of information and communication technology (ICT) has totally re-volutionalized way we access, process, store, retrieve and disseminate information within organizations or across the globe. Whether it is in vocal, pictorial, textual numeric, or macro-electric based hence ICT is now a topical issue in Nigeria. It may not be because it is relatively new in this part of the world, but because ICT encompass a range of technologies and application systems of microprocessors that have had profound impact on the society and its way of life.

Information and communication technology (ICT) revolution is gradually affecting the nature of learning and the production of knowledge and transforming the world in unexpected way (Arunachalam, 2005). This has facilitated the paradigm shift from the traditional instructional material or traditional pedagogical methods to a more modern and innovative technological based teaching and learning methods. The impact of ICT is becoming more pronounced worldwide. Such that rarely is anything mentioned in any area of human endeavors without reference to this type of technology. Information and communication technology refers to the process of gathering accessing and dissemination of data for an enhanced learning Miller and Akume, (2009). Information and communication technology rise to new concepts, new ideas and making impact not only in the industries/businesses but also in the education sector. I.C.T. has simplified education through the application of electronics media, internet etc. According to Ndukwe (2006), the production and

introduction of calculators and computers in the education system worldwide has helped in simplifying teaching and learning in schools, thereby promoting national stability and economic survival.

Today, organizations such as educational/research institutions as well as individuals turn to the internet for accurate and up-to date information. Online collaborator, which refers to sharing of information, working or trading with various people at different places through the internet is becoming common practice. The evolution of ICT (globally) dates back to 1823, when Charles Babbage, a professor of mathematics invented the Analytical Engine. The design comprised of four components for performing the basic functions of input, output, processing and storage.

Akan (2002) in Ikenga; Akiti and Onyemah, (2009), outlined some characteristics that differentiate this technology revolution from others that have taken place before it, which are as follows;

- 1. It is happening at an extremely fast pace
- 2. It is impacting all corners of the globe
- 3. The demand for ICT products is insatiable and the generation that has grown up with information technology has developed intuitive means of absorbing and exploiting the capacities that technology offers sometimes to the bewilderment of the other generation.

The use of computer is continually gaining grounds in many aspects of human endeavors. These above characteristics have shown that ICT revolutional trend has transformed the global perception on the way we think and everyday application of our daily task. Subsequently, the effects of ICT on every human endeavour are so dramatic in speed and performance that its been viewed as the back done and information super highway of our modern lives.

## STATEMENT OF THE PROBLEM

Information and communication technologies are already a vital factor in successful development of education. Education for new emerging societies requires ICT to facilitate more meaningful learning. Information and scientific knowledge are not simply means of improving society only, but main products of improving teaching and learning. ICT has becomes a critical tool for professional training. The sooner learners know how to use products of ICT, the easier they can find their way to capture the newest still have to fully appreciate the importance of ICT in realizing their teaching objectives, while many may find themselves incompetent to handle ICT as instructional delivery, Okoro (2009). Recently the Federal Government contended that computer knowledge would be a requirement for some employments, interviews and in some cases promotions. Given the constant flux in global, economy and information and communication technology, it is not certain whether the present curriculum of business education can meet the modern and technological demand of teaching the subject all secondary school level, Ikenga; Akiti and Onyemah, (2009).

Despite these efforts of both federal government accessibility some vital areas of application still appear not attended to in secondary school in Andoni Local Government Area. From the background information provided above, the need for accessibility and utilization of ICT facilities by the academic in secondary educational system cannot be over emphasized. It is based on this foregoing that the study tend to empirically test utilization of ICT facilities in the teaching of business studies in selected secondary schools in Andoni Local Government Area of Rivers State.

### **Research Questions**

For the purpose of carrying this study, two research questions were formulated to guide the study:

1. What is the extent of ICT facilities accessibility to business studies teachers in the teaching of business studies in secondary schools in Andoni Local Government Area of Rivers State?

2. What is the extent of ICT facilities utilization in the teaching of business studies by business studies teachers in secondary schools in Andoni Local Government Area of Rivers State?

## Hypotheses

The following hypotheses were tested at 0.05 level of significance:

- 1. There is no Significant difference in the mean responses of male and female business studies teachers on ICT facilities accessibility in the teaching of business studies in secondary schools in Andoni Local Government Area of Rivers State.
- 2. There is no significant difference in the mean responses of male and female business studies teachers on ICT facilities utilization in teaching of business studies by business studies teachers in secondary schools in Andoni Local Government Area of Rivers State.

### Purpose of the study

The purpose of this study was to investigate into ICT accessibility and utilization in selected secondary schools in Andoni Local Government Area of Rivers State. Specifically, the study sought to:

- 1. Establish ICT facilities accessibility to business studies teachers in secondary schools in Andoni Local Government Area in Rivers State.
- 2. Establish whether ICT facilities are utilized in the teaching of business studies by business studies teachers in secondary schools in Andoni Local Government Area of Rivers State.

### Methodology

This study adopted the descriptive survey design. 66 business studies teachers drawn from 30 secondary schools were used. From the above population, 40 were males while 26 were females. A 20 item questionnaires titled Information and Communication Technology Facilities Accessibility Questionnaire (ICTFAQ) and Information and Communication Technology Facilities Utilization Questionnaire (ICTFUQ) were designed for data collection for the study. Respondents were asked to rate each of the items on 4 point likert scale as follows: Strongly Agree (SA – 4 points), Agree (A – 3 points), Disagree (D - 2 points), and Strongly Disagree (SD - 1 point) were used. The instruments were validated by three experts in the department of business education in the University of Nigeria Nsukka, Enugu State. A splift-half method was used with a pilot group of 10 business studies teachers from neighboring communities in Ogoni to derive the reliability coefficient of 0.86 using the Spearman Brown formula. The researchers administered the questionnaire with a research assistant who was specifically coached and instructed on the manner in which the instrument was to be administered. The completed questionnaires were returned within 2 weeks of administration. On the whole, all the 66 packed questionnaire (100%) was returned and used to carryout the analysis. The data gathered from the study were analyzed using the mean (x) standard deviation were used as statistical tools. The mean of 2.5 was regarded as "Reject" while a mean response on or above 2.5 were regarded as "Accept" for research questions, while the null hypotheses were tested at 0.05 level of significance such that any calculated t-test value of 1.96 or above at 0.05 level of significance (P>0.05) were regarded as "significant".

# RESULTS

### **Research Question 1**

What are the extent of ICT facilities accessibility to business studies teachers for the teaching of business studies in secondary schools in Andoni Local Government Area of Rivers State?

Table 1

#### **Academic Research International**

| Means  | and | standard | deviation | scores | of | views | of | business | studies | teachers | on | ICT | facilities |
|--|-----|----------|-----------|--------|----|-------|----|----------|---------|----------|----|-----|------------|
| accessibility in secondary schools in Andoni Local Government Area in Rivers State |     |          |           |        |    |       |    |          |         |          |    |     |            |

| S/N | ICT Facilities       | Mean | Standard  | Decision |  |
|-----|----------------------|------|-----------|----------|--|
|     |                      |      | deviation |          |  |
| 1   | Internet             | 1.24 | 0.429     | Reject   |  |
| 2   | Multimedia projector | 1.76 | 0.421     |          |  |
| 3   | e-mail               | 1.12 | 0.332     |          |  |
| 4   | Interactive radio    | 1.12 | 0.332     |          |  |
| 5   | Teleconferencing     | 1.25 | 0.438     |          |  |
| 6   | Audiotapes           | 1.77 | 0.422     |          |  |
| 7   | Computers            | 1.12 | 0.332     |          |  |
| 8   | Photocopiers         | 1.05 | 0.220     |          |  |
| 9   | Fax machines         | 1.75 | 0.839     |          |  |
| 10  | Dictating machines   | 1.79 | 0.421     |          |  |

In response to research question, table 1, shows that all the respondents disagreed on the ICT facilities accessibility in the teaching of business studies in secondary schools in Andoni Local Government Area of Rivers State. All the 10 items had mean scores below the cut-off point of 2.5.

### **Research Question 2**

What is the extent of ICT facilities utilization in the teaching of business studies by business studies teachers in Secondary schools in Andoni Local Government Area of Rivers State?

Table 2

Means and standard deviation scores of views of business studies teachers on ICT facilities utilization in secondary schools in Andoni Local Government Area of Rivers State

| S/N | ICT Facilities       | Mean | Standard  | Decision |
|-----|----------------------|------|-----------|----------|
|     |                      |      | deviation |          |
| 11  | Internet             | 1.24 | 0.429     | Reject   |
| 12  | Multimedia projector | 1.76 | 0.421     |          |
| 13  | e-mail               | 1.12 | 0.332     |          |
| 14  | Interactive radio    | 1.25 | 0.438     |          |
| 15  | Teleconferencing     | 1.77 | 0.422     |          |
| 16  | Audiotapes           | 1.12 | 0.334     |          |
| 17  | Computers            | 1.05 | 0.220     |          |
| 18  | Photocopiers         | 1.75 | 0.839     |          |
| 19  | Fax machines         | 1.25 | 0.438     |          |
| 20  | Dictating machines   | 1.77 | 0.422     |          |

### Hypothesis 1

### Table 3

There is no significant difference in the mean responses of male and female business studies teachers on ICT facilities accessibility in the teaching of business studies in secondary schools in Andoni Local Government Area of Rivers State

| Group                            |                    | Ν  | Х    | SD   | DF | t-cal value | t-crit<br>value | Decision |
|----------------------------------|--------------------|----|------|------|----|-------------|-----------------|----------|
| Male<br>studies tea              | business<br>ichers | 41 | 3.10 | 0.76 | 64 | 1.374       | 1.960           | NS       |
| Female business studies teachers |                    | 25 | 2.86 | 0.82 |    |             |                 |          |

Table 3 shows that the calculated t-test value of 1.374 is less than the criterion figure of 1.960 at 0.05 level of significance to accept the null hypothesis of significant difference. This in other words, implies that the views of both the male and female business studies teachers on ICT facilities accessibility in the teaching of business studies in secondary schools in Andoni Local Government Area of Rivers State did not differ.

## Hypothesis 2

There is no significant different in the mean responses of male and female business studies teachers on ICT facilities utilization in teaching of business studies by business studies teachers in secondary schools in Andoni Local Government Area of Rivers State.

| Table 4          |          |    |      |      |    |       |        |          |
|------------------|----------|----|------|------|----|-------|--------|----------|
| Group            |          | Ν  | Х    | SD   | DF | t-cal | t-crit | Decision |
|                  |          |    |      |      |    | value | value  |          |
| Male             | business | 41 | 3.11 | 0.78 |    |       |        |          |
| studies teachers |          |    |      |      | 64 | 1.382 | 1.960  | NS       |
| Female           | business | 25 | 2.69 | 0.80 |    |       |        |          |
| studies te       | achers   |    |      |      |    |       |        |          |

Table 4 also shows that the calculated value of 1.382 is less than the criterion figure of 1.960 at 0.05 level of significance to accept the null hypothesis of no significant difference. This in other words, implies that the views of both male and female business studies teachers on ICT facilities utilization in teaching of business studies in secondary schools in Andoni Local Government Area in Rivers State not differ.

# DISCUSSION

Ohakwe and Okwuanaso (2006) contented that the knowledge of computer application software's such as spreadsheet, excel, computer – aided design, and database are important skills in teaching and such skills should be impacted. On the recipients of business studies, these would make them to compete favorably in their education endeavors. The above study supported this current study on the importance of ICT in teaching-learning process. Umaru (2003) in Nworgu (2008) in their studies asserted that computer aided instruction is a programme of instruction or package presented in software for instructional purpose. They went further to state that ICT made the teaching and learning process efficient, most effective easier and less cumbersome. Nworgu (2008) further cited Ezeliora (2000) that the use of computer aided instruction provides the learner with different background and characteristics, such background may be in the form of tutorials, drills and practices as well as simulations. For instance, the drills and practices in business studies exposes the students to practical aspect of the learning process that have been carried out previously and which can be graded at the end of the exercise.

Nevertheless, Oladeji (2007) in his study also viewed that: there is no basis for comparism between the knowledge provided through the traditional teaching method and that given through information and communication technology. In view of the increasing need for effectiveness, efficiency and continuity, compared with rapid expansion of education and ever increasing need for new technologies, it has become imperative that new entrants into the world of work and in particular office technology graduates, should be well prepared.

# CONCLUSION

Based on the aforementioned findings, it is therefore imperative to conclude that the introduction and proper utilization of information and communication technology in the teaching and learning of

business studies would facilitate the students understanding and change in behavior in the use of modern educational technologies.

## RECOMMENDATIONS

Based on the results and findings of the study, the following recommendations were made, as these recommendations would go along way to solve the problems of ICT utilization in secondary schools in rural areas.

- a. Government should concentrate the ICT policies in the rural secondary schools in the State
- b. Government should also sponsor the re-training of business studies teachers on the utilization of ICT in education.

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