An Examination into the Application of Computer to Enhancing the Suitable Teaching and Learning of Statistics

(Studied in Institutions of Learning, Federal College of Education)

Atianashie Miracle A. & Chukwuma Adaobi

Introduction

Introduction to statistics courses serve as a general introduction to descriptive and inferential statistics theory and practice, in traditional classroom-based statistics courses, much of the learning comes from reading the selected textbook. Attending lectures and taking notes regularly. Recent technological developments, however offer instructors an additional method for teaching statistics
content and practice. Computer Assisted Instruction (CAI) continues to increase eventually offering several advantages. Studies have shown that computerized study guides can impact and improve students overall level of mastery. Also they emphasize that testing may be improved if student’s complete tests on computer screens and receive immediate feedback about their performance.

The use of computer in teaching statistics provides hands on activities, supports corporative learning, provides active constructive learning experiences and produces greater peer interaction. They traditional methods of teaching statistics are generally viewed as being ineffective because they fail to establish clear link between statistics and its uses in the real world. Using computers with software programs in introductory statistics course would be one of the important ways to improve student knowledge about statistics and its usefulness in real life.

It is based on the backgrounds that the researcher intends to investigate into the application of computer to enhance the proper teaching and learning of statistics in institution of learning; a case study of Federal College of Education, Obudu.

1.1 Statement of the Problem

The traditional methods of teaching statistics are generally viewed as being ineffective because they fail to establish a clear link between statistics and its uses in the real world. The traditional method generates errors that are not easily detected and corrected. Learning is not always interesting in the traditional method as complex solutions generate confusion in the minds of learners. All these problems have necessitated the researcher to embark on this research project.

1.2 Purpose of the Study

The aims and objectives of this study are;

a. Assessing the importance of the computer in the teaching and learning of statistics in F.C.E. Obudu.

b. Assessing the problems and solutions associated with the computerized approach of teaching and learning statistics.

c. Providing re-orientation for staff and students on the maintenance of such facility.

1.3 Research Questions

The following are the research questions generated from the purpose of study.

a. Does inadequacy of computer hinder the application of computers in teaching and learning of statistics in F.C.E. Obudu?

b. Does inadequacy of power supply affect the implementation of the computerized teaching and learning of statistics in F.C.E. Obudu?

c. Does F.C.E Obudu lack skilled instructors to manage the computerized teaching and learning of statistics?

1.4 Research Hypothesis

The following are research hypothesis formulated from the research questions:

a. Inadequacy of computer systems hinders the application of computers in teaching and learning of statistics in F.C.E. Obudu.

b. Inadequate power supply affects the computerized teaching and learning of statistics in F.C.E Obudu.

c. F.C.E Obudu lack skilled instructors to manage the computerized approach of teaching and learning of statistics.

2. LITERATUREREVIEW

2.1 Introduction

This chapter is concerned with the review of related literature on the application of computer to enhancing the proper teaching and learning of statistics in institutions of learning. The review was discussed under the following sub-headings;
Concept of computer system
- The application of computer in teaching and learning of statistics
- Problems associated with the computerized approach of teaching and learning of statistics.
- Solution to the problems of the computerized approach of teaching and learning of statistics.
- Summary of review.

2.2 Concept of Computer System

According to Obidinnu & Duke (2009), the concept of computer is derived from the word computer which implies to calculate. Computers were originally intended as calculating machines. Human beings have employed several devices to aid computation through the ages. Usually, the first counting device was probably a form of tally stick. Later, record keeping aids throughout the fertile crescent included clay shapes, which represented counts of items, probably livestock or gains sealed in containers.

Cliff (2010) added that the Abacus was used for arithmetic tasks. The Roman Abacus was used in Babylonia as early as 2400BC. Since then, many other forms of reckoning boards or tables have been invented. Every invention is geared towards the resolution of a new level of tasks that have become more complex than the available devices. As one device becomes unsuitable and limited for a higher level of task, the need for a new one becomes imperative.

According to Morphy (2011), today computers do more than calculations. They are no longer discussed from the perspective of counting machines. The computing aids described as counting devices cannot be regarded as computers. This is because they do not possess the hardware components of the computer like monitor, mouse, keyboard, printer, scanner, system unit, Uninterrupted power supply (UPS), software components which are the set of instructions or programs which gives or control the computer hardware functioning which is also responsible for the automation of the operations.

According to French (2010), a computer is an electronic machine that is operated by the use of stored program which are called software. Computers are electromechanical devices that accept data as input, processed data, make retrieval and gives results of process data as output to the uses via an output device like printer. These major activities of the computer are designed to mimic the functions performed by human beings while humans beings perform activities or operations manually, computer automate them. Automation implies the computer operations are guided by the instructions in executing program.

Hills (2013) added that software cannot be felt physically but only seen on screen of the computer. They exist as electronic files in memory. This software controls the activities or operations of the whole hardware parts of the computer. Without the software in action, the hardware remains redundant.

2.3 The Application of Computer in Teaching and Learning of Statistics

The teaching and learning of statistics has impacted the curriculum of elementary, secondary and post-secondary education. In the base of this growing movement to expand and include statistics into all levels of education, there is also a considerable interest in employing effective instructional methods, especially for statistics concepts that tend to be very complex or abstract (Jamie, 2002).

The computer simulation methods (CSMs) are to teach statistics in tertiary institutions. The teaching of statistics has pervaded all levels of education and has gained recognition in many disciplines over the past two decades. Statistics continue to be an integral part of the post-secondary schools like colleges of Education curriculum. In almost every discipline, the ability to understand, interpret and critically evaluate research findings is becoming an essential core skill (Giesbrecht, 1996).

According to Gordon & Hesterberg (1998) using current computing technology to teach and learn statistics is a way of supplementing standard data analysis assignments by providing students with additional statistical experiences through the use of computer simulation methods.

Computer simulation methods allow students to experiment with random samples from a population with known parameters for the purpose of clarifying abstract and difficult concepts and theorems of statistics.
Interactive simulating programs on the World Wide Web (www) are the latest internet resources many educators are now using to illustrate statistics concepts. One of the computer simulation methods used in teaching and learning statistics is the Central Limit Theorem (CLT) which can be demonstrated graphically, either in large lectures or by the students with some guidance from the instructor. The program begins by allowing the user to choose a distribution, from which the data are to be generated, a sample size for the sampling distribution for the mean and the number of samples to be drawn. By changing the sample size, the user can observe how fast the probability histogram approaches the normal curve as the sample size increases. The program (CLT) also allows the users to compare sampling distributions of other statistics as well as the median and standard deviation (Kersten, 2008).

Simulation methods can clarify concepts and theorems of statistics (such as the CLT) and may also allow the non-mathematically oriented students in elementary statistics to have inductive experiences with statistical concept in a very time efficient manner. The computer through the Central Limit theorem simulation can be used to generate random numbers between 0 and 1, where each number is equally likely to occur (that is, f(x) = 1, 0 < x < 1 for the uniform distribution). There simulations cab be performed, each of 300 random samples for n = 1, n = 4, and n = 16 from the population given. The mean of each sample can be used to construct a histogram. The students can then see how the mean of the sample means is close to the population mean but the standard deviations decrease for the 300 random samples from n = 1 to n = 16, (Jamie, 2002).

The simple linear regression model is also used as given by:

\[ Y = B_0 + B_1 x + E \]

where \( Y \) is the outcome or criterion, \( B_0 \) is the population intercept, \( B_1 \) is the population slope, \( x \) is the prediction variable and \( E \) is the random error. The class can choose a deterministic true model given by \( Y = B_0 + B_1 x \) relating two variables. The class can then choose values of \( x \) and their corresponding deterministic \( Y \) values. Using the simple linear regression model the students can simulate the random sample from a standard normal population. These random errors can then be added to each deterministic value of \( Y \) to given \( Y_i = B_0 + B_1 x_i + E_i \). The class can then be told that these are the actual \( y \)-values observed in practice. The simple linear regression or a statistic simulation program may provide software flexibility for instructors to utilize these methods in the classroom. Software improvements in simple linear regression eliminate the need for storing output in separate files for further analysis. In addition, having each student generate his or her own individual data provides the students with an experience that appears to be more convincing. Students are able to process their own meanings through a significant interaction with the new information (Horgan, 1991).

### 2.4 Problems Associated with the Computerized Approach to Teaching and Learning of Statistics

According to Crooks (2011), one of the problems affecting the computerized approach of teaching and learning of statistics is the inadequacy of qualified and skilled statistics/computer professional to handle the teaching of statistics through the use of computer technology. This has really affected institutions of higher learning. Learners when evaluated are seen performing very poor due to the poor traditional approach of teaching statistics to learners.

Jamie (2002) pointed out that inadequate computer system also affects the computerized approach of teaching and learning of statistics in tertiary institutions. Students are seen crowding a particular system during practical statistics lesson or lecture. This type of situation does not permit effective teaching and learning process. The inadequacy of computer system also limit student’s involvement in manipulating the system to solve statistical problems one after the other.

The cost of purchasing and maintaining computer systems also affect the application of computer in the teaching and learning of statistics in tertiary institutions like colleges of Education. With the vast population of students, it will be cost intensive to afford computers that will serve the purpose during teaching and learning a statistic. This limit the implementation of the computerized approach of teaching and learning statistics. The cost of maintenance is also there as it affects the use of computers to teach and learn statistics (Philips, 2011).

Udo (2012) added that, problems like viral attack and insecurity of computer systems. This hinders the teaching and learning of statistics through the application of computers. Computer systems malfunction and generate wrong or enormous results of statistical problems manipulated by students and even the teacher due to viral attack. This makes teaching and learning process ineffective. In the
issue of insecurity, unauthorized users may gain access to the system and temper with vital facts about student’s test/examination scores in respect to statistics. This causes misconception and thereby leading to false results of students’ performance in the course.

Kersten (2003) pointed out that inconsistent power supply also affects the application of computer in the teaching and learning of statistics in tertiary institutions. Computers are electronic in nature and can only function when they are powered.

Poor power supply from the public sector limits the application of computer in the teaching and learning of statistics. Poor students’ skills in operating the computer also hinder the computerized approach of teaching and learning statistics in colleges of Education. Poor operational skills delay practical lessons as it results to time consumption and stress resulting to poor teaching and learning conditions.

2.5 Solutions to the Problems of the Computerized Approach of Teaching and Learning of Statistics

Crooks (2011) affirmed that qualified and skilled statistics/computer professionals should be employed to utilize the computerized approach of teaching and learning statistics in colleges of Education. This will eliminate the issue of redundancy of computer systems as proper utilization will be done for effective teaching and learning of statistics.

Jamie (2002) added that institutions of higher learning like colleges of Education should make provision for adequate computer systems to avoid students crowding to a particular computer system for statistics lecture and practical class. With this, students can learn effectively as they manipulate figures as taught by their teacher using the computer.

Jamie (2002) added that the cost of purchasing and maintaining the computers can be remedy as school administrators can apply to computer vendors to supply computers to them which payment can be made install mentally. This will make payment convenient and make available computers and its maintenance as intended.

Udo (2012) added that all the computers used for the teaching and learning of statistics should be supported with anti-virus like Avast to protect system from being infected with virus. This will help to promote the effective implementation of the computerized approach in the teaching and learning of statistics. In the issue of insecurity of data and information, computer systems should be password to prevent unauthorized users to gain access to the system. All misconception caused by the unauthorized users who tempered with the computers can be limited through system password.

Kersten (2003) affirmed that there should be private generators made available by colleges of Education for effective power supply. This will call for the full implementation of the computerized approach of teaching and learning of statistics in colleges of Education. The public power source is always not available and a total failure. With the school’s private generators, power can be made consistent as the school can arrange to charge the students some small amount of money each for every school year to solve the problem of fuelling.

2.6 Summary of the Review

This review has reviewed facts on the concept of computers system, the application of computer in teaching and learning of statistics, problems associated with the computerized approach of teaching and learning of statistics and the solutions to the problems of the computerized approach of teaching and learning of statistics respectively. These were the basis of this review.

3. RESEARCH METHODOLOGY

This chapter deals with the general procedures for the research under the following sub-headings: Design of the study, the research area, population of the study sample/sampling techniques, instrumentation, data collection procedure, data analysis procedure and decision rule.

3.1 DESIGN OF THE STUDY

This study was a short-span research in which a survey method was used to investigate the application into enhancing the proper teaching and learning of statistics in institutions of learning, a
case study of Obudu Local Government Area. A survey design suit the research since it seeks opinions from the masses on how computer can be used for effective teaching and learning of statistics.

3.2 THE RESEARCH AREA
This study was focused on the application of computer in telecommunication and its effect on the society a case study of Obudu Local Government Area. The study was restricted to the urban centre of Obudu Local Government only since the federal college of education which was the major higher institution was located in the urban area of Obudu L. G. A. The area under study is Obudu Local Government Area of Cross River State in the south-south geopolitical zone of Nigeria. It is made up of ten (10) political wards. It is bounded in the North by Benue state, in the South by Obanliku Local Government Area and Ogoja Local Government and in the west by Boki Local Government Area of Cross River State.

3.3 POPULATION OF THE STUDY
The population of the study was drawn from the teaching staff of mathematics department, Teaching staff of computer department and the entire mathematic/computer combination students. From record gathered from the administrative unit as at the time of the research, mathematics teaching staffs were 12, while those of computer were 8. The total population of mathematic computer combination student for year one was 25, year two was 17 and year three was 36 giving a total population size of 102.

3.4 SAMPLE/SAMPLING TECHNIQUE
The population size for the study was small as such; the total population of 82 respondents was used for the study as such the sample size was 82 respondents and no sampling technique employed.

3.5 INSTRUMENTATION
A structured questionnaire was used as an instrument for data collection. The questionnaire was divided into two (2) parts. Part one (1) concerned with the personal information/data, while part (2) is corresponding to the research questions organized to elicit respondent opinion on the impact of computer technology on youth empowerment. There were twelve questionnaire items which were meant to elicit ideas about the investigation on the application of computer in enhancing the teaching and learning of statistics.

3.6 DATA COLLECTION PROCEDURE
The data used in this study were gathered through the questionnaire and interview method in the affected area. The questionnaires were administered to the respondents in their various offices or places of work by the researcher. The researcher used four days to administer and retrieve the questionnaires and these questionnaires constituted the source of all data relevant to this research. In the cause of collecting the served questionnaire, two respondents did not turn in their questionnaires, limiting the total questionnaire used for the analysis to 100.

3.7 DATA ANALYSIS PROCEDURE
Data collected was analysed using the simple percentage rating approach:
Percentage = NR/TR X 100
Where NR = Number of Respondents
TR= Total number of Respondents.

3.8 DECISION RULE
The questions in the questionnaires have two main decisions, that is, YES or NO. In this regard, the majority response with highest percentage was taken and analysis drawn in relation to the research hypothesis as accepted or rejected if the response is 50% and above, otherwise, it is rejected.
4. PRESENTATION AND ANALYSIS OF DATA
4.1 TESTING RESEARCH HYPOTHESIS ONE

The table below (table 4.1) illustrates true responses to the research hypothesis: “inadequacy of computer hinders the application of computer in the teaching and learning of statistics in FCE, Obudu” To collect data relevant to this research question, questionnaire items 1-5 were used.

<table>
<thead>
<tr>
<th>S/N</th>
<th>QUESTIONNAIRE ITEMS</th>
<th>YES</th>
<th>%</th>
<th>NO</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>There are too few, or no computers used for the teaching of statistics in FCE, Obudu</td>
<td>83</td>
<td>83%</td>
<td>17</td>
<td>17%</td>
</tr>
<tr>
<td>2</td>
<td>There is no statistic software in FCE, Obudu</td>
<td>64</td>
<td>64%</td>
<td>36</td>
<td>36%</td>
</tr>
<tr>
<td>3</td>
<td>Most teachers sees computer as entirely different thing from statistics</td>
<td>77</td>
<td>77%</td>
<td>23</td>
<td>23%</td>
</tr>
<tr>
<td>4</td>
<td>Computers are too expensive to be afforded by statistics students.</td>
<td>58</td>
<td>58%</td>
<td>42</td>
<td>42%</td>
</tr>
<tr>
<td>5</td>
<td>Statistics teachers don’t even have computers</td>
<td>66</td>
<td>66%</td>
<td>34</td>
<td>34%</td>
</tr>
<tr>
<td></td>
<td>Total/average percentage</td>
<td>348</td>
<td>69.6%</td>
<td>152</td>
<td>30.4%</td>
</tr>
</tbody>
</table>

In response to item one in table 4.1 above, 83 (83%) respondents agreed that there are too few, or no computers used for the teaching of statistics in FCE, Obudu, whereas 17 (17%) disagreed. Also, in the same table, 64 (64%) respondents accepted that there is no statistic software in FCE, Obudu, whereas 36 (36%) disagreed. Furthermore, 77 (77%) respondents agreed that most teachers sees computer as entirely different thing from statistics, but 23 (23%) respondents declined. In the same table 58 (58%) respondents agreed that Computers are too expensive to be afforded by statistics students, whereas 42 (42%) respondents disagreed. Lastly, 66 (66%) respondents agreed that Statistics teachers don’t even have computers, but 34 (34%) respondents disagreed. The table as a whole showed a total response of 348 (69.6%) that agreed with the research hypothesis and 152 (30.4%) responses that disagreed. Thus, research question one was accepted.

4.2 TESTING RESEARCH HYPOTHESIS TWO

This hypothesis states “inadequacy of power supply affects the computerized teaching and learning of statistics”. To collect relevant data relating to this research hypothesis, questionnaire item 6-10 were used.

<table>
<thead>
<tr>
<th>S/NO</th>
<th>QUESTIONNAIRE ITEM</th>
<th>YES</th>
<th>(%) YES</th>
<th>NO</th>
<th>(%) NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Power supply is poor in FCE, Obudu.</td>
<td>37</td>
<td>37%</td>
<td>63</td>
<td>63%</td>
</tr>
<tr>
<td>7</td>
<td>FCE, Obudu depends solely on epileptic public power supply.</td>
<td>43</td>
<td>43%</td>
<td>57</td>
<td>57%</td>
</tr>
<tr>
<td>8</td>
<td>Power supply cannot be scheduled for practical statistics classes in FCE, Obudu.</td>
<td>21</td>
<td>21%</td>
<td>79</td>
<td>79%</td>
</tr>
<tr>
<td>9</td>
<td>There is a power plant particularly for statistic laboratory.</td>
<td>64</td>
<td>64%</td>
<td>36</td>
<td>36%</td>
</tr>
<tr>
<td>10</td>
<td>There is no power supply in FCE, Obudu.</td>
<td>15</td>
<td>15%</td>
<td>85</td>
<td>85%</td>
</tr>
<tr>
<td></td>
<td>Total/average percentage</td>
<td>180</td>
<td>36%</td>
<td>320</td>
<td>64%</td>
</tr>
</tbody>
</table>
In table 4.2 above, 37 (37%) respondents confirmed that Power supply is poor in FCE, Obudu., whereas 63 (63%) respondents disagreed with the same question item. Furthermore, 43 (43%) respondents said that FCE, Obudu depends solely on epileptic public power supply, whereas 57 (57%) disagreed. Also, in the same table, 4.2, (21%) respondents agreed with the fact that, Power supply cannot be scheduled for practical statistics classes in FCE, Obudu, whereas 79 (79%) respondents disagreed. On the same table 4.2, 64 (64%) respondents agreed that there is a power plant particularly for statistic laboratory, whereas 36 (36%) respondents disagreed with the research question. Lastly, item 10 in the same table, 4.2 shows that 15 (15%) respondents that agreed to the fact that there is no power supply in FCE, Obudu., whereas 85 (85%) respondents disagreed. The table shows total responses of 180 representing 36% that agreed with the research hypothesis two (2) and 320 responses representing 64% that disagreed with the research question. Thus, research hypothesis two was rejected.

4.3 RESEARCH HYPOTHESIS THREE

This hypothesis states that, “FCE, Obudu lack skilled instructors to manage the computerized approach of teaching and learning statistics”. To collect data relevant to this hypothesis, questionnaire item 11-15 were used.

<table>
<thead>
<tr>
<th>S/NO</th>
<th>QUESTIONNAIRE ITEMS</th>
<th>YES (%)</th>
<th>NO (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>11</td>
<td>Statistics teachers in FCE, Obudu lack adequate computer knowledge</td>
<td>90</td>
<td>10</td>
</tr>
<tr>
<td>12</td>
<td>Application of computer in statistics is still a new concept to FCE statistics teachers</td>
<td>89</td>
<td>11</td>
</tr>
<tr>
<td>13</td>
<td>FCE, Obudu teachers used the traditional methods in teaching statistics</td>
<td>59</td>
<td>41</td>
</tr>
<tr>
<td>14</td>
<td>The statistics teachers lacks the knowledge of statistics applications</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>15</td>
<td>Statistics teachers in FCE Obudu need training on the application of computer in statistics.</td>
<td>72</td>
<td>28</td>
</tr>
</tbody>
</table>

In table 4.3 item 11 shows 90 (90%) respondents that agreed that Statistics teachers in FCE, Obudu lack adequate computer knowledge, whereas 10 (10%) disagreed. Also, item 12 showed that 89 (89%) respondents agreed that Application of computer in statistics is still a new concept to FCE statistics teachers, whereas 11 (11%) respondents disagreed. Furthermore, item 13 shows 59 (59%) respondents who agreed that FCE, Obudu teachers used the traditional methods in teaching statistics, whereas 41 (41%) respondents disagreed. Item 14 showed 60 (60%) respondents that agreed that the statistics teachers lack the knowledge of statistics applications, while 40 (40%) disagreed. Lastly, item 15 shows 72 (72%) respondents who agreed and 28 (28%) respondents that disagreed with the assertion that Statistics teachers in FCE Obudu need training on the application of computer in statistics. The table has total responses of 370 representing 74% who agreed and 130 responses representing 26% that disagreed. Thus, research question three was accepted.

5. SUMMARY OF FINDINGS

Based on the analysis of data as displayed in table 4.1, 348 (69.6%) respondents agreed that inadequacy of computer hinders the application of computer in the teaching and learning of statistics in FCE, Obudu, whereas 152 responses representing 30.4% disagreed. The higher “YES” percentage indicates that inadequacy of computer hinders the application of computer in the teaching and learning of statistics in FCE, Obudu.
Furthermore, table 4.2 produced 180 (36%) responses that agreed with research hypothesis two and 320 (64%) responses that disagreed. The higher, NO respondents show that there is no inadequacy of power supply in FCE, Obudu.

Finally, the analysis of questionnaire items in table 4.3 produced an average percentage of 74% representing total responses of 370 who agreed, and 26% representing 130 responses that disagreed. The higher percentage of YES means that, FCE, Obudu lack skilled instructors to manage the computerized approach of teaching and learning statistics.

6. DISCUSSION OF FINDINGS

Beginning with the first research hypothesis which states that: “inadequacy of computer hinders the application of computer in the teaching and learning of statistics in FCE, Obudu” The answer is affirmative because of the fact that 69.6% of the total population agreed, out of 100%. The acceptance of the 69.6% responses against 30.4% shows that the application of computer in is affected seriously by the availability of computers in FCE, Obudu. The finding corresponds with the view of Morphy, (2011) who noted that the information technology sector which is a product of computer offers tremendous opportunities for massive job creation and enhanced pedagogy, but the major issue is the lack of computers and its resources.

Also, the analysis of questionnaire items relating to research question two in table 4.2 shows 180 (36%) responses and 320 (64%) responses that agreed and disagreed respectively. The higher percentage of “NO” implies that there is sufficient power supply in FCE Obudu to carry out the application of computers in statistics, except that other factors such as availability of computer systems, virus, cost of maintenance, etc., rather affects the application of computer in statistics.

Finally, the analysis of questionnaire items in table 4.3 yielded 370 responses representing 74% that agreed and 130 responses representing 26% that disagreed. The higher, YES percentage response implies that FCE, Obudu lack skilled instructors to manage the computerized approach of teaching and learning statistics. This result supports the view of (Udo, 2012) who notes that one of the problems of computer applications is lack of computer skills and the high cost of training and retraining.

7. CONCLUSION

Based on the principal findings of the research, it can be concluded therefore that computers and its resources should be purchase and installed in statistics laboratories for effective teaching and learning of statistics. Also that staff of statistics should be trained and retrained in the application of computer in statistics.

8. RECOMMENDATIONS

The following recommendations are made based on the finding of this study.

a. Government should do the best they can to make computers and its resources available in schools
b. Seminars and workshops should be organized for training and retraining of staff of statistics on how to apply computers in teaching and learning of statistics
c. Teachers should be train on current teaching and learning methods using ICT.
d. Our leaders should think of posterity and such lesson corruption and invest on what would be of benefit to the people tomorrow as to sustain a progressive succession.
e. Government should as a matter of policy implement ICT at all tiers of its operation especially in schools beginning from the primaries.

9. SUGGESTIONS FOR FURTHER RESEARCH.

Base on the principal findings made in this study, the researcher makes the following suggestions for further research. Research should be carried out on:

a. The same topic but covering a higher population of study.
b. The role of computer benefits of applying computers in the teaching and learning of statistics in FCE, Obudu.
c. The impact of computer on the high rate of unemployment, with emphasis on statistics.
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