COMPUTER LITERACY LEVEL AMONG SENIOR SECONDARY SCHOOL STUDENTS IN BIDA: IMPLICATIONS FOR UTME COMPUTER-BASED TEST

BY

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ABSTRACT

The proliferation of computers and its use in almost every facets of life demand an effective use of computer by every individual. The increase in computer literacy of an individual in a society is an important ingredient for successful living in this digital era. This study investigates the computer literacy level of the senior secondary school (SSS) students in Bida with the aim of measuring the level of preparedness for the full adoption of Computer-Based Tests (CBT) option introduced by the Unified Tertiary Matriculation Examination (UTME) Board in the year 2012.

The research instrument used in this study is questionnaire entitled: Computer Literacy Questionnaire with internal consistency reliability test value of above 0.7 Data collected from the study were analyzed using descriptive statistics of group percentages and pie-chart depicting the influence of each group in the sample population. The study revealed a relatively high computer literacy level of the students sampled and that majority of the respondents (73.6%) will choose the CBT option in UTME.

1.0 INTRODUCTION

In order to be in compliance with the current trends in Information Technology (IT) almost every aspect of our lives are embracing computer and internet technology.

The introduction of Computer-Based Test (CBT) as an option in Unified Tertiary Matriculation Examination by its board last year 2012 was embraced with mixed feelings by the Nigerians. One of the great challenge one thinks of is that will our secondary school students able to cope? We mean judging from the lack of IT knowledge and training in schools. On the other hand, there were also great concern as to how the performance of students will look like with this new option. What about the secondary school students in rural areas? Are they not going to attempt UTME again, looking at the poor internet coverage even among urban areas of the country? All
these are questions that the board needs to provide practical answers to in order to ensure the success of the newly introduced option. This study therefore intends to practically reveal the readiness of SSS students to attempt the UTME computer-based tests option.

Computer literacy has been well studied by researchers and various contextual definitions had been given to it. Among these definitions are that computer literacy is the ability to use computers at an adequate level for creation, communication and collaboration in a literate society. (Son, Robb and Charismiadji 2011). Computer literacy has also been defined as a set of basic skills and understanding of personal computer operating systems, office styles software marrow Dixon (2013).

We adopt Son etal, (2011) definition for this research study because of its suitability in meeting all our desires for students relation with CBT option in any UTME.

There are many researches that had been carried out in the area of computer literacy levels of students, some of these researches are Johson, Bathlomen and Miller (2006), Ternus and Shuster (2008), Barrera and Lamprecht (2012), Ikolo and Okiy (2012), Ige and Orungbemi (2013), and Barrera (2013).

2.0 RESEARCH METHODOLOGY

The research instrument used is a self-reporting questionnaire entitled: Computer Literacy Questionnaire (CLQ) which has two sections on both Computer Literacy and Computer-Based Test (CBT). A hundred (100) copies of the questionnaire were administered to SSS students in 10 randomly selected secondary schools in Bida, Niger state from which 93 were filled and returned. The internal consistency reliability test was observed to be above 0.7.

Data collected were analyzed using descriptive statistics of group percentages and pie-chart depicting the influencing of each group in the sample population.
3.0 RESULTS AND FINDINGS

3.1 PRESENTATION OF RESULTS

The results of this study are presented in tabular form and buttressed by pie-chart representation as follows.

Table 1: Students’ knowledge and usage of computer

<table>
<thead>
<tr>
<th>Computer Literacy Indicators</th>
<th>Yes</th>
<th>Pop.</th>
<th>%</th>
<th>No</th>
<th>Pop.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Having Computer Training or computer knowledge before</td>
<td></td>
<td>58</td>
<td>62.4</td>
<td>35</td>
<td>37.6</td>
<td></td>
</tr>
<tr>
<td>Having Internet Awareness</td>
<td></td>
<td>70</td>
<td>77.8</td>
<td>20</td>
<td>22.2</td>
<td></td>
</tr>
<tr>
<td>Used Internet and other application packages before</td>
<td></td>
<td>64</td>
<td>69.6</td>
<td>28</td>
<td>30.4</td>
<td></td>
</tr>
</tbody>
</table>

The pie-charts representation of the three indicators in the table above is shown Fig 1–3 below.
Table 2: Choice of options for UTME

<table>
<thead>
<tr>
<th>Options</th>
<th>Population</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBT</td>
<td>67</td>
<td>73.6</td>
</tr>
<tr>
<td>Manual</td>
<td>24</td>
<td>26.4</td>
</tr>
</tbody>
</table>

The pie-chart representation for the table is as shown Fig. 4 below.
3.2 FINDINGS

The major findings in this research study are as follows.

- We discovered that the computer literacy level of the SSS students is high.
- Also the overwhelming majority of the students chose the Computer Based Test (CBT) option.

This may be attributed to the high level of computer literacy of students.

4.0 DISCUSSION

Computer Based Test (CBT) was not really a new concept from the UTME Board but has been a concept of assessment that had been well adopted by most standard organizations to test the capacity of any candidate for a post. It assures the organization of the computer literacy level of the potential employees which rule out the idea of including computer literacy as part of the qualification criteria for a job.

Expert in this area had set some practical considerations for e-assessment or CBT (Davey, 2011) for option utilization of the concept.

Some of the reasons we can attribute to the overwhelming acceptance of CBT by students are its being faster and well regulated when compare to the paper – assessment.

The high level of computer literacy among the students sampled and the large number of students who preferred the (CBT) option in UME indicates that the introduction of CBT by the UTME board is timely.

5.0 CONCLUSION

It is obvious that the CBT option in the yearly entry examination into tertiary institutions in Nigeria may be attempted by the majority of candidates as evident in the outcome of this study.
The only thing that we could not affirm, although not part of the goals of this study, is the resultant effect of the use of the CBT option on the performance of the students in the examinations.

6.0 RECOMMENDATIONS

In view of the on-going assertion by the findings of this study, the following suggestions will be useful if given considerations by both the principals of the secondary school and the UTME Board.

- The UTME board should begin an all-encompassing computer literacy programme for students in SSS 3 (i.e. final year students intending to sit for UTME) so as to facilitate their use of CBT option.
- All secondary school principals should strictly ensure the proper teaching of computer science as a mandatory course from JSS 1 to SSS 3 classes following the secondary school curriculum.
- Government, as a major stakeholder, should ensure that all secondary schools in the country are supplied with the right and adequate Information Technology (IT) equipments to facilitate the proper teaching and learning of computer science in secondary schools.
- Computer Science graduates with either HND or BSc degree must be employed for teaching of Computer Science in secondary schools and under no condition should quacks be employed for this purpose.
- Government must also ensure that the qualified teachers employed for teaching Computer Science course in these secondary schools are well motivated us morale booster for their excellent performance.
REFERENCES


