COMPUTER LITERACY AND UTILIZATION AMONG ACADEMIC AND NON ACADEMIC STAFF OF EBONYI STATE COLLEGE OF EDUCATION, IKWO

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Abstract
In all facets of human life ICT has become a tool for fast tracking development. Its usage is vital in the education sub-sector because any notable progress in other areas has always been linked to functional education. This study was therefore carried out to find out the level of computer literacy and utilization among academic and non academic staff of Ebonyi State College of Education, Ikwo. A population of 412 staff out of which a sample of 200 was drawn was used for the study. Computer Literacy and Utilization Assessment Questionnaire (CLUAQ) was used to collect data for the study. Data collected were analyzed using simple percentages. Results indicated that computer literacy level of the staff of the college was unimpressive as only 11.5% academic and 16.5% non academic staff of the sample were computer literate. Among the recommendations is that college management should train and retrain its workers on ICT.

Information and Communication Technology (ICT) has in recent times become appreciated, world over due to its great potentials for all sectors of the society, and especially for education. Report (Oladele, 2003; Agih and Epe, 2004) shows that all other sectors of the society depend on the education sub-sector for sustainable development. Education has remained a veritable tool in the quest by nations of the world to attain appreciable level of development. It is therefore the most effective tool for human resource development throughout the world (Ajayi, 2001). Quality and quantity of human resources available in a country has always been linked to functional education. Education plays major role in human resources development with which a country attains its level of productivity. Now that the world has become a global village through the development of ICT, it is only reasonable that for sustainable development to be attained in Nigeria, the education system must equally brace up the present ICT challenge for it to be relevant in an era of globalization where the free flow of information via the satellite and the internet hold sway in global information dissemination of knowledge (Agih and Joseph, 2008). Activities of man in this present time revolve around computer education, without which there may be no advancement in research and acquisition of knowledge.

As ICT has now become a global phenomenon, any nation that does not embrace it will be left behind and thus remain undeveloped. Aduwa-Ogiegbaen and Iyamu (2005) argued that any nation that does not want to be left behind has to articulate measures to be connected to the positive side of this international digital divide. Information Technology (IT) according to Hess
and Leal (2001) refers to a computer, auxiliary equipment, software and firmware (hardware) and procedures, services and related resources. Agih and Joseph (2008) described ICT as any equipment or interconnected system of equipment that is used in the automatic acquisition, storage, manipulation, management, display, switching and transmission of information. The report further describes ICT as tools that comprise electronic devices which are utilized for information and communication needs of institutions, organisations, students and individuals. Olorundare (2006) enumerated such electronic devices to include computers, networking, telephone, video, multimedia and internet. Gbadeyan (2005) defined computer as an electronic device which accepts and processes data by following a set of instructions (programmes) to produce accurate and efficient result at high-speed.

Computer literacy, according to Ughamadu (2008) is the knowledge and ability to use computer technology efficiently. Folajimi, Ejiior and Folajimi (2008) defined computer literacy as the knowledge and ability to efficiently use computers and information technology with other applications that are associated with computers. The computer as a tool has been exposed and is being utilized in the effective management of education in so many countries (Uvah, 2005). Similarly, Sekiguchi (1998) reported that in Europe more than 80% of Slovenian schools have access to computer for teaching and administrative work and that particularly in United Kingdom, the British government had concluded plans to connect all schools, colleges and Universities, libraries, and as many community centres as possible to the internet by the next budget. Ning (1998) reported that as at 1997, Japan equipped over 94% of her public schools with computer and connected about 10% of them to the internet.

In a related development, other industrialized nations are not left out. Agih and Joseph (2008) maintained that there has been a staggering amount of research and publication related to ICT use for educational development; for instance Berghein and Chin (1984) reported that the United States of America’s government made available $529 million to schools out of which 60 to 70 percent was spent on computer education. Progressively, in the United States administration’s fiscal 2001 budget, more than $900 million was earmarked for educational technologies (Hess and Leal, 2001).

The need for computer literacy especially in the education sub-sector of the economy has been summarized in the following statement.

In a rapidly changing world of global market competition, automation, and increasing democratization, basic computer education is necessary for an individual to have the capacity and capability to access and apply information. Such ability and capability must find bearings in information and communication technology in the global village (Agih and Joseph, 2008:2).

As it is known, the ability to access and effectively utilize information does not seem to be a luxury but a necessity for development. This fact has equally been stressed by Oyebanji (2003) in a related study. It is sad that many developing nations, Nigeria inclusive are not doing much to ensure proper educational use of the computer and ICT. Aduwa-Ogiegbaen and Iyamu, (2005) collaborates this view.
Education holds the key to a better world for Nigeria, and with the new development in education (computer literacy), it means there must be a paradigm shift if our educational system will be relevant in this information age (Agih and Joseph, 2008). The crux of the matter is that educational institutions in Nigeria ought to embrace this new challenge as to be better positioned to enhanced sustainable development.

The reason for this study is based on the truism that one does not give out what one does not have. Teacher trainers ought to be computer literate to be able to train others.

For the reason that every nation is making concerted efforts to develop the ICT literacy of their citizens, different demands have been placed on education and its management. This has led to the introduction of e-learning, virtual laboratory and video conferencing and so on to improve the quality of learning. In administration, this tool has introduced programmes like Management Information System (MIS), Executive Information System (EIS, the Decision Support System (DSS) for effective and efficient school management (Akukwe, 2003; Uvah, 2005).

It is then difficult to imagine how non computer literate academic and non-academic staff of a college of education will function effectively in academics and administration without computer use. Their approaches to issues on pedagogy and administration would be analogue thereby retarding productivity. This study is therefore set to examine computer literacy and utilization among academic and non-academic staff of the Ebonyi State College of education, Ikwo.

Research Questions

The study was guided by three research questions.
1. What is the computer literacy level of the staff of Ebonyi State College of Education?
2. What is the level of computer utilization in academic and administration by the staff of the college?
3. What are the constraints of the staff of Ebonyi State College of Education in the use of Computer?

Method

The study is a descriptive survey. The population of the study consists of all the 412 staff of the college out of which 100 staff each for academic and non academic totaling 200 respondents which constitutes 48.5% of the entire population were selected using simple random sampling procedure. A 15 item questionnaire titled “Computer Literacy and Utilization Assessment Questionnaire (CLUAQ) was used as instrument for data collection for the study. The instrument apart from its preliminary section meant to obtain personal information on respondents, has three other sections designed to obtain information on respondents’ levels of computer literacy, computer utilization and constraints. The questionnaire which was structured in ‘yes’ and ‘No’ format was validated by experts in measurement and evaluation in Ebonyi State University. Pearson product moment correlation coefficient method was used to test the reliability of the instrument and it yielded index of 0.64. Questionnaires were personally distributed by the researcher with the help of an Assistant. All questionnaires distributed were collected. Data were analyzed using simple percentages.
Data obtained were analyzed according to the research questions posed. Result is considered positive if its scores up to 20%.

**Research Question One:** What is the computer literacy level of the staff of Ebonyi State College of Education?

**Table 1: Percentage of Respondents' Opinion on Level of Computer Literacy**

<table>
<thead>
<tr>
<th>S/A</th>
<th>Question</th>
<th>Yes Academic %</th>
<th>Non-Academic Yes %</th>
<th>No %</th>
<th>Total Resp.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Have you ever tried to use computer?</td>
<td>100 50 0</td>
<td>85 42.5</td>
<td>15 7.5</td>
<td>200 100</td>
</tr>
<tr>
<td>2.</td>
<td>Are you computer literate?</td>
<td>23 11.5 77</td>
<td>33 16.5</td>
<td>67 33.5</td>
<td>200 100</td>
</tr>
<tr>
<td>3.</td>
<td>Do you own a personal computer?</td>
<td>25 12.5 75</td>
<td>11 5.5</td>
<td>89 44.5</td>
<td>200 100</td>
</tr>
<tr>
<td>4.</td>
<td>Can you type and store information with computer?</td>
<td>24 12 76 38</td>
<td>33 16.5</td>
<td>67 33.5</td>
<td>200 100</td>
</tr>
<tr>
<td>5.</td>
<td>Do you know how to surf the internet?</td>
<td>26 13 74 37</td>
<td>41 20.5</td>
<td>59 29.5</td>
<td>200 100</td>
</tr>
</tbody>
</table>

Average % 40 19.5 : 30.2 41 20 59 30 200 100

Results from table 1 shows that 50% of the respondents have tried to use computer while about 7.5% of them being non-academic counterparts do not. A percentage of 38.5 of academic staff and 33.5 of non-academic staff were not computer literate. Only 11.5% academic and 16.5% non-academic were literate in computer. 37.5% and 44.5% of academic and non-academic staff respectively have no computers of their own. 37% and 33.5% of academic and non-academic staff respectively cannot make use of computer. 13% academic and 20.5% non-academic staff respectively can surf the internet. On the whole the level of computer literacy among the staff of the college is unimpressive. It is worthy of note that more of non-academic than academic staff are computer semi-literate.

**Research Question Two:** What is the level of computer utilization in academic and administration by the staff of the college?
Table 2: Percentage Analysis of Respondents’ Opinion on Level of Utilization of Computer

<table>
<thead>
<tr>
<th>S/N</th>
<th>Question</th>
<th>Academic</th>
<th></th>
<th>Non-Academic</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>Yes</td>
<td>%</td>
</tr>
<tr>
<td>1.</td>
<td>Is there computer assigned to your office?</td>
<td>27</td>
<td>13.5</td>
<td>73</td>
<td>36.5</td>
<td>52</td>
<td>26</td>
</tr>
<tr>
<td>2.</td>
<td>Do you utilize computers during lectures and/or meetings?</td>
<td>5</td>
<td>2.5</td>
<td>95</td>
<td>47.5</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>3.</td>
<td>Are you familiar with the use of power point in presenting papers or reports?</td>
<td>5</td>
<td>2.5</td>
<td>95</td>
<td>47.5</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>4.</td>
<td>Do you successfully use computer accessories such as diskette, flash drive, CD rum to store and retrieve information?</td>
<td>23</td>
<td>11.5</td>
<td>77</td>
<td>38.5</td>
<td>32</td>
<td>16</td>
</tr>
<tr>
<td>5.</td>
<td>Do you compute students' results with computer?</td>
<td>5</td>
<td>2.5</td>
<td>95</td>
<td>47.5</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Results indicate that about 13.5% and 26% academic and non-academic staff have computers officially assigned to them by the college. 2.5% academic and 1.5% non academic staff can utilize computer. The same results apply to the use of computer in presentations. Computer accessories can be used by only 11.5% academic and 16% non-academic staff. Students' results can be computed using computer by just 2.5% and 1% academic and non-academic staff respectively. The percentage analysis reveals all the staff in the college under utilize computer in their daily services.

Research Question Three: What are the constraints of the staff of Ebonyi State College of Education in the use of computer?

Table 3: Constraints to Computer Utilization

<table>
<thead>
<tr>
<th>S/N</th>
<th>Question</th>
<th>Academic</th>
<th></th>
<th>Non-Academic</th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>Yes</td>
<td>%</td>
</tr>
<tr>
<td>1.</td>
<td>Computer costs a lot of money</td>
<td>20</td>
<td>10</td>
<td>80</td>
<td>40</td>
<td>43</td>
<td>21.5</td>
</tr>
<tr>
<td>2.</td>
<td>My institution cannot provide enough computers for the staff</td>
<td>66</td>
<td>33</td>
<td>34</td>
<td>17</td>
<td>71</td>
<td>35.5</td>
</tr>
<tr>
<td>3.</td>
<td>Some computer softwares are scarce</td>
<td>7</td>
<td>3.5</td>
<td>93</td>
<td>46.5</td>
<td>31</td>
<td>15.5</td>
</tr>
<tr>
<td>4.</td>
<td>I am yet to acquire relevant skills to operate computer</td>
<td>59</td>
<td>29.5</td>
<td>41</td>
<td>20.5</td>
<td>46</td>
<td>23</td>
</tr>
</tbody>
</table>

Average %

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Academic</th>
<th>Non-Academic</th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>%</td>
<td>No</td>
<td>%</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>38</td>
<td>19</td>
<td>62</td>
<td>31</td>
<td>47.7</td>
</tr>
</tbody>
</table>
Results indicate that the academic staff ranked the inability of their college to provide them with computer as their major constraint. The non-academic staff also ranked that as their major constraint in utilizing computer. Apart from that most staff both academic and non-academic lacked the skill to operate computer. All the constraints except scarcity of computer software were rated high as a problem in computer utilization.

Discussion

The study depicts a low level of computer literacy among the academic and non-academic staff of Ebonyi State College of Education. This is sad considering the enormous benefits of being computer literate in a society where change in the words of Ughamadu (2008) is phenomenal. The trend is indeed a negation of the aims and objectives of our educational system which designated ICT as an important education resource (Akudolu and Olibi, 2007). The finding vindicates Aduwa-Ogiegbaen and Iyamu (2005) who argued that Africa especially Nigeria was not taking the issue of ICT compliance and computer literacy serious. Iji (2006) warned that those who work in our educational institutions especially teachers should brace up to the challenge of ICT.

On computer utilization, the result in line with the first finding is not surprising. One cannot utilize what one does not have. Agih and Joseph (2008) wondered how academic and non-academic staff in a tertiary institution could function effectively without knowing how to utilize computer service. Poole (1996) had indicated that computer illiteracy is now regarded as a new illiteracy. The same fact is echoed by Oyabanji (2003) in a related study. This situation has invariably denied the staff and institution the benefit of enjoying work-made-easy as provided by the computer.

It is equally shocking to have identified those constraints as constituting serious challenges to computer literacy. Aduwa-Ogiegbaen and Iyamu (2005) had identified cost, poor infrastructure, lack of skills and lack of relevant software as obstacles to the use of ICT in secondary schools. It is shocking because with the same findings made in tertiary education institutions that train teachers for the nation, one endlessly contemplates on how possibly we can address the wroth in our educational system. Some other impediments to computer literacy apart from the ones identified exist. Power supply all over the country seems epileptic and therefore unreliable to do any serious ICT business. Developed countries as reported by Sekiguchi (1998) and Ning (1998) do not fail to equip all levels of their educational system with computer systems that have current software. In a country where basic needs such as food and shelter are difficult to afford, it will be unreasonable to expect workers to provide for themselves recent ICT facilities. These constraints to computer literacy are nevertheless negatively affecting Nigeria’s strides in the area of economic development.

Conclusion

ICT should be cherished and embraced for reducing the world into a global village apart from other numerous sundry benefits. There seems to be no way our society will be relevant in this present age unless our educational system is geared towards identifying with the realities of the time by using ICT. All efforts already made in the area appear inadequate as our sub-education sector is yet to harness the benefits offered by ICT. Until computer education is sufficiently developed, the vision 202020 will remain a mirage. Both the government and the citizens should join hands to inculcate into the citizenry the value and skill of computer literacy. We cannot afford to miss out in this technological age.
Recommendations

Based on the findings of the study, the following recommendations are made.

1. All categories of staff of the State College of Education, Ikwo should make it a point of duty to be computer literate. College management can ensure that it is possible by making computer literacy a prerequisite for enjoying promotions and other entitlements.

2. The college management should endeavour to equip college offices with modern computers and assist the staff to purchase their personal computers. In the class rooms, enabling environment should be created for the use of power points during lectures.

3. Government and indeed college management should sponsor staff training and retraining in ICT.

4. Finally, activities of the college such as result computation should be computerized so as to make the institution computer based to encourage staff to brace up to the challenge of ICT.

References


