The Usage of Information and Communication Technology in Nigeria Primary Schools: Problems and Prospects

Bada Tayo Abass, Ph.D.

Department of Educational Technology,
Faculty of Education,
Obafemi Awolowo University, Ile – Ife.

Ojediran Ayo

Department of Special Education and Curriculum,
Faculty of Education,
Obafemi Awolowo University, Ile – Ife.

Doi:10.5901/mjss.2012.v3n2.305

Abstract: The paper investigated the usage of Information and Communication Technology (ICT) in Osun State Primary Schools. Questionnaires were administered to 100 primary school teachers. The questionnaires were designed to find out the roles of ICT in teaching and learning and problems associated with its usage in the primary schools. Results showed that majority of the primary school teachers in Osun State lack the basic skills required for the usage of computer. In addition, the teachers support the implementation of ICT in the primary schools. The results also revealed that the ICT is facing problems in Osun State Primary Schools.

Key Words: Primary schools, skills, impact.

1. Introduction

Information Technology (IT) is conceived with the use of technology in managing and processing of information. In particular, Information Technology deals with the use of electronic computers and computer software to convert, store, protect, process, transmit and retrieve information. However, The Oxford Advanced Learner’s Dictionary defines information as facts or details about something or somebody. Chambers compact Dictionary defined information as knowledge gained or given. Technology has been defined as scientific knowledge used in practical ways in the industry. Cambridge international Dictionary of English defined technology as the study and knowledge of the practical use of scientific discoveries. The above definitions show that there is a close relationship between “information” and technology. Communication on its own part is an indispensable tool in all human Endeavour’s and it has been defined by Akanbi (1988) as the process of transmitting and exchanging ideas, knowledge, information and skills through symbol, writing to create mutual understanding between the communicator and the communicat. Adekomi (2004) also defined communication as the flow of information from a source to the receiver. Thus, information communication Technology is concerned with the transfer of information through scientific means. Information technology was formally integrated into the school curriculum when the national curriculum was first devised in United Kingdom (Forman 1987). It was quickly realized that the work covered was useful in all subjects. With the arrival of internet and the broadband connections to all schools, the application of information technology knowledge, skills and understanding in all subjects became a reality. According to Pringles (2002) this change in emphasis has resulted in a change of name from Information Technology to Information and Communication Technology (ICT). ICT in education can be understood as the application of digital equipment to all aspects of teaching and learning Winglet (2002). The growth of use of ICT and its tools in the field of education has seen tremendous growth in the recent past; technology has
entered the classroom in a big way to become part of the teaching and learning process. According to Carison, (1995), the roles of ICT in teaching and learning process cannot be underestimated. He therefore summarized the roles thus:
(a) It makes education more child-centered by providing many alternative paths with a variety of resources so that learning can take place in accordant to the learner’s study performance.
(b) It makes learning more immediate by bridging the gap between the worlds inside and outside, the classrooms by means of the experience that educational resource materials can provide.
(c) It supplements the teacher through enhancing his effectiveness in the classroom.
(d) It checks the provision of limited facilities like classroom, study halls, and library for learners.
(e) It provides learning guidance through individualized learning study package system thus removing the much dependence on teachers for learning their own without coming in contact with the teacher.

The objective of this paper therefore is to address the usage of ICTs in relation to primary education and relate it to sustainable development of education in Nigeria and Osun State in particular. In addition, to examine the problems and prospects associated with the usage of ICT in Osun State primary schools and to find out the effectiveness of ICT on Osun- State Primary school education.

2. Research Questions

For this study, the following research questions were put forward.
(i) How often is computer being used in teaching and learning in your school?
(ii) Are there problems with implementing the use of computer as a medium for effective teaching in Nigeria primary schools?
(iii) What are the factors that may hinder the implementation of the usage of computer in primary schools?
(iv) Can other aspects of information Technology like slide, clip art, etc be used apart from computer in the primary school?

3. Methodology

(i) Subjects.
The sample for the study consisted of one hundred primary school teachers. 20 teachers each were randomly selected from 5 primary schools making up One hundred (100) teachers altogether. The schools were all from Ife Central Local Government Area of Osun State, Nigeria.
(ii) Instrumentation
The instrument used for this study was questionnaire. The questionnaire was all about the usage of Information and Communication Technology (ICT) in Osun State primary schools. The questionnaire was divided into three sections. Section A focused on obtaining information on age, sex, position and years of service.
Section B focused on finding out the usage of Information Communication and Technology in primary school while section C was about the problems encountered while using computer.
100 copies of questionnaire were administered on the teachers. The validation of the instrument was established by applying content sampling technique.
(iii) Treatment
One hundred copies of questionnaire were administered to the teachers by the researcher. The respondents reacted to the items of the questionnaire as either Yes or No. The responses of the teachers were analyzed and converted to simple percentage.
(iv) Results
Research Question 1: How often is computer being used in your school?
Table 1: Presents results on the first research question

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>YES</th>
<th>%</th>
<th>NO</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you use computer in your school as complement to chalking and talking?</td>
<td>68</td>
<td>68%</td>
<td>32</td>
<td>32%</td>
</tr>
<tr>
<td>2</td>
<td>Is computer being used in teaching and learning in primary school?</td>
<td>72</td>
<td>72%</td>
<td>28</td>
<td>28%</td>
</tr>
<tr>
<td>3</td>
<td>Do you agree with the introduction of computer into primary school curriculum?</td>
<td>100</td>
<td>100%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 1 above showed that 68% of the respondents used computer in their school while 32% do not use computer in their school. It is also indicated that 72% of the respondents agreed that computer is used for teaching and learning in their schools while 28 which represents 28% of the respondents do not use computer for teaching and learning in their schools.

Lastly, 100% of the teachers agreed with the introduction of computer into the primary schools curriculum. From the above result, it is clear that computer package is not being used by majority of the teachers. Even though a very large number of them support the introduction into the school curriculum.

Research Question 2: Are there problems with the implementing the usage of computer as a medium for effective teaching in primary schools?

Table 2: Presents results on the second research question

<table>
<thead>
<tr>
<th>S/N</th>
<th>ITEMS</th>
<th>YES</th>
<th>%</th>
<th>NO</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Are there problems with implementing of usage of computer as a medium for effective teaching?</td>
<td>89</td>
<td>89%</td>
<td>11</td>
<td>11%</td>
</tr>
</tbody>
</table>

From the table 2 above, 89 teachers which represent 89% of the respondents agreed that there are problems while 11 teachers that is 20% disagreed that there were no problems in the implementation. This result is in line with Bada and Bamidele (2005) who were of the opinion that computer education is faced by a lot of problems in Osun State.

Research Question 3: What are the factors that may hinder the implementation of the usage of computer as a medium for effective teaching?

The factors are itemized below and the responses to choice were graded as agree, strongly agree, undecided, disagree and strongly disagree.

Table 3: Presents results on the third research question

<table>
<thead>
<tr>
<th>S/N</th>
<th>FACTORS</th>
<th>A</th>
<th>%</th>
<th>SA</th>
<th>%</th>
<th>U</th>
<th>%</th>
<th>D</th>
<th>%</th>
<th>SD</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power Failure</td>
<td>78</td>
<td>78%</td>
<td>22</td>
<td>22%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Disturbance from friends</td>
<td>66</td>
<td>66%</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td>10%</td>
<td>24</td>
<td>24%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Lack of computer skills by teachers</td>
<td>66</td>
<td>66%</td>
<td>34</td>
<td>34%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Lack of Funds</td>
<td>85</td>
<td>85%</td>
<td>10</td>
<td>10%</td>
<td>5</td>
<td>5%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Lack of information about the use/impact it may have on teaching and learning.</td>
<td>62</td>
<td>62%</td>
<td>38</td>
<td>38%</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
The above table reveals that there are lots of problems with implementation of computer usage as a medium for effective teaching in primary schools. The implication of the above results is that the above listed factors would have contributed to non-effective and utilization of computer in Osun-State primary schools. Although the teachers agreed that the package is available in their schools in addition they support the introduction of computer usage into the school curriculum.

Research Question 4: Can other areas of Information Technology like slides, clip arts etc be used in primary schools apart from the usage of computer?

Table 4. Presents results on the fourth research question

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Number of Respondents</th>
<th>Percentages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>85</td>
<td>85%</td>
</tr>
<tr>
<td>No</td>
<td>15</td>
<td>15%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

The table 4 above shows that 85% of the teachers agreed that other areas of information technology like slide, videos, clip art can be used in primary school apart from the use of computer while 15% disagreed.

4. Discussion

From the results obtained, it may be inferred that computer package is not being used by majority of the teacher in Osun State primary school even though a large number of teachers support the introduction of computer usage into the Primary schools' curriculum. It is also revealed that there are factors that have hindered the effective utilization of computer in Nigeria primary schools even though some of these schools have the package. Some of these factors include among others constant power failure, lack of funds, lack of computer skills on the part of teachers, and lack of information about the impact of ICT on teaching and learning.

5. Conclusion

The conclusion of this study based on the finding is that there is no doubt that teachers in primary schools in Osun State have incredible resources available if they have access to the internet. By integrating information and communication technology into primary school curriculum a fundamental shift in the way teacher teaches and students learn will evolve. However, to integrate computer into teaching and learning in primary school in Osun State, there must be proper and adequate funding of education. Nigeria and Osun state in particular need to invest heavily on the internet business by creating enable environment for primary school students to participate in downloading available and useful knowledge on internet.

Finally, constant training in form of seminars, lectures and workshops should be organized for the teachers to enhance their efficiency in the use of ICT.

References


308