ICT Usage for Primary School Administration in Nigeria: Challenges and Way Forward

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Abstract: The administration of primary school education in Nigeria is plagued with problems. One of the problems hindering the effective administration of primary school education is the poor usage of information communication and technology. This paper discussed the challenges of sing ICT for the administration of primary school education. Secondary data and primary school data were sourced from print materials and online publication. The paper identified: inadequate funding of ICT programme, inadequate ICT facilities, poor implementation of ICT policies, poor computer literacy of admin staff, unstable power supply, poor internet services and high cost of ICT facilities. To solve these problem, the paper hereby recommends that the government should provide the primary schools in the Country with adequate ICT facilities. The government should increase the funding of ICT programme in the public primary schools in Nigeria and the government should organize constant training and retraining programme for primary school administrative staff and school administrators etc.

Keywords: Administration, ICT, Primary school

Introduction

Primary education is the bedrock on which other levels of education are built. The National Policy on Education (2004) refers to it as "Education given in an institution for children" normally aged 6-11. This is the level that prepares pupils for Secondary Education. It is necessary that basic skills are inculcated into learners as specified in the objectives. The National Policy on Education (2004) cited in Aiyedun (2020) stated the objectives of primary education as follows:to inculcate of permanent literacy and numeracy and the ability to communicate effectively, to lay of a sound basis for scientific and reflective thinking;to ensue citizenship education as a basis for effective participation in and contribution to the life of the society, to develop goodcharacter and moral training and the development of sound attitudes;to develop in the child the ability to adapt to his changing environment;to give the child opportunity for developing manipulative skills that will enable him function effectively in the society within the limits of his capacity and;to provide basic tools for further educational advancement including preparation for trades and crafts of the locality.The realization of the primary school objectives hinges on effective administration, planning and adequate funding (Ogunode &Aiyedun, 2020).

REVIEW OF RELATED LITERATURE

Concept of School Administration

Administration is very germane to the realization of the school's objectives – indeed, the success of the

school system depends largely on the administration of the school is handled. The teachers, students, non-teaching staff and resources must be efficiently arranged, monitored and controlled, so that they would work harmoniously according to (educational plan). Even the National Policy on Education (2004) emphasizes the success of the entire educational system on proper planning, efficient administration and adequate funding. School administration is the process by which principles, methods and practices of administration are applied in educational institutions to establish, maintain and develop such institutions in line with the goals of the institutions.

Ogunode, Eyiolorunse-Aiyedun&Olatunde-Aiyedun (2021) define school administration as the scientific organisation of human and material resources and programmes available for education and using them systematically and meticulously to achieve educational goals. Educational administration implies the arrangement of the human and material resources and programme available for education and carefully using them systematically for the achievement of educational objectives. School administration is the application of school resources for the implementation of school programme with the aims of actualizing the objectives of the schools. School administration is the used of school human and materials resources of the schools to implement the school programme with the objective of actualizing the schools goals (Ogunode &Jegede2020).

The objective of school administration include: to ensure the objectives of the school is realize, to organize the human and materials resources for the actualization of the school objectives, to supervise the human resources and ensure effectiveness and efficient, to ensure implementation of school propgramme and planned, to ensure effective coordination of all the school resources, to ensure instructional resources are provided adequately for instruction, to ensure effective planning of curriculum for effective teaching, to ensure students' needs are provided, to ensure effective allocation of financial resources to implementation of school programme, to ensure accountability in the system

and to mobilize resources for the management of the school (Olatunde-Aiyedun&Ogunode,2021a; Ogunode, Olatunde-Aiyedun& Akin-Ibidiran, 2021).

School administration take two dimension. The external and internal school administration. The external school administration is handled by the Ministries of education, supervisory agencies and regulating agencies established by the government to administer the educational institutions. The external administration makes policies, allocate funds, employs teachers and plan for the development of the schools. The internal school administration take care of internal administration of the schools. The school administrators are the vice-chancellor, Rector, provost, principals, school managers, head of department etc. (Ogunode &Jegede 2020). Educational administrator, whether in the ministry of education, the schools board, or in a school is essentially the organiser, the implementer of plans, policies and programmes meant for achieving specific educational objectives. The school administrators employ the use of the school resources which include the human and material resources to actualize the objectives of the school. One of the material resources available in the school and use for all functions in the educational institutions is the Information and Communication Technologies. Information and Communication Technology is an educational resources that both the students, teachers and non-teaching staff are using to support the teaching and learning programme of the schools (Olatunde-Aiyedun,Eyiolorunse-Aiyedun& Ogunode, 2021; **Ojelade, Aregbesola, Ekele& Aiyedun, 2020**).

Concept of Information and Communication Technology

The introduction of information and communication technologies such as computers, digital libraries, e-mail, internet and so on where information are stored and disseminated, principals can do better in keeping records, and become effective and efficient in performing their prescribed roles as administrators (Ogunode, 2013).

Information and Communication Technologies in the educational institutions has help maintaining adequate and accurate records in the schools and make it available with ease for official use.

Information and Communication Technologies in the educational institutions have also leads to easy accessibility and dissemination of information on school records, will become available for national planning, financial budgeting, effective implementation of the educational programs and policies.School record keeping is all about information collection, storage, retrieval, use, transmission, manipulation and dissemination for the purpose of enriching communication, decision-making and problem solving ability in the school system. It is therefore necessary that this process be as accurate and accessible as possible. Using ICT in keeping school records will help to facilitate and enhance the administration of the school towards achieving the goals of the school (Olatunde-Aiyedun, Ogunode &Eyiolorunse-Aiyedun, 2021)

Information and Communication Technologies is playing three major functions. ICT is applicable for student administration, staff administration and school administration. Students function include: ICT is use foe students admissions; computers use for student registration / enrolment; plan time table / class schedule for students; computers use for student attendance in classes; ICT is use to communicate student academic details to their parents / guardians through e-media; Usage of e-media for notifications regarding hostel accommodation; and use of e-media for notifications regarding transportation.

Staff Administration: Usage of computers for recruitment and work allotment of staff in the institution; Automation of attendance and leave management of staff members in the institution; Usage of electronic media for performance appraisal; Communication with staff using e-media; e-circulars from the institution regarding official matters; e-kiosks are available in the institution.

General School Administration: Usage of e-media for scheduling / allocation of halls for examinations;

Dissemination of information in the institution through e-kiosks; Usage of e-media by students to apply for university examinations; Usage of e-media for the processing and display of results of students and Facility for students to make fee payments electronically.

Adebowale andOyinloye, (2008) cited Nurudeen (2008) who pointed out that an ICT driven system takes care of keeping mountain of files in offices as information in them can be processed, stored and retrieved within the university if the systems are networked. Presently, in some universities, students check their examination results on - line as opposed to the usual practice of queuing at the door of the lecturer to check their results. Information about each student can be made available on line for all purpose. It will guide against problems such as cheating, forgery, perjury. It can lead to instant assistance to students in time of problems. Parents would not have to risk their lives nor develop hypertension over the behaviour and performance of their wards if these information can be made available on the net.

In support of the above, Nnamdi (2008) states the relevance of the computer technology to academic work to include: Computer aided teaching; Audio – visual learning software and compact disk; Automation; Multimedia and hypermedia; Computerized grade books; Database management system; Simulation etc.

Challenges Preventing Effective Usage of ICT for Primary School Administration in Nigeria

The challenges preventing effective use of ICT for primary school administration in Nigeria include: inadequate funding of ICT programme, inadequate ICT facilities, poor implementation of ICT policies, poor computer literacy of admin staff, unstable power supply, poor internet services and high cost of ICT facilities.

1. Inadequate Funding of ICT Programme

Inadequate funding is a very big problem preventing the use of ICT facilities for the administration of primary school in Nigeria. The funds released for

the administration of primary school in Nigeria is inadequate. The inability of the primary school administrators to access adequate funds for the administration of primary schools in Nigeria is among the factors responsible for poor use of ICT facilities. Osakwe (2012) observed that the current level of funding in Nigeria with reduced budgetary allocation to the education sector is a major constraint in the provision of ICT equipment (computers and accessories, software packages and maintenance). Olatunde-Aiyedun and Ogunode (2021b) stated that inadequate funding is a major challenge that has negatively affected many areas of education in Nigeria. Areas it has affected include funding of ICT projects, training and retraining of teachers, provision of technological infrastructure, development and maintenance of software packages and electricity.

2. Inadequate ICT Facilities

Inadequate ICT facilities in many public primary schools is another big problem preventing effective use of ICT for the administration of public primary schools in Nigeria. Many public primary schools in Nigeria do not have basic ICT gadgets and technologies like computer, printers, faxing machines, photocopiers, binders, and projectorsnot even to talk of internet in most of the head master offices. Ogunode andJegede (2020) submitted that ICT facilities like Computer set, Laptops, Scanners, Printers, Fax machine, GSM Phone, Memory chips, Hard disks, Flash drives, Internet connectivity, DVD, Compact disks, Cables (power and data), Word processing packages, Database packages, spreadsheet packages, presentation packages, BASIC program Corel Draw are used for carrying out administrative functions such as typing, printing, calculation, sending mails etc. The availability of these ICT facilities will aid effective school administration and management and their absent will hidden smooth running of offices.The poor adaptation and application of the new technology especially in the public schools for administration and management function in Nigerian secondary schools is attributed to several factors which include inadequate ICT facilities in the schools, poor ICT

policies, limited information infrastructures, poor perceptions of using ICT in education among teachers, students and the school administrators. It has been observed that ICT such as satellite, VST, Internet service providers (ISP), Integrated Digital systems Network (ISDN), Computer and printing devices are in short supply in Nigerian public primary schools.

3. Poor Implementation of ICT Policies

Poor implementation of ICT policies in the Nigerian public primary school is another problem preventing the effective use of ICT for administrative purposes in the public primary schools in Nigeria. Many document and action plan designed for the implementation of ICT facilities and development is not implemented leaving the public primary schools to suffer inadequate ICT facilities. John (2015) observed that the Nigerian government have formulated and developed many policies on ICT programme in all the educational institutions across the country. Some of the policies include integrating ICT into all the teaching, learning and the administrative aspects of the educational institutions. The Nigerian government is good at formulating educational policies but lack the capacity to implement them. Many ICT educational policies that have been formulated have not been implemented due to lack of fund and political instability (Ogunode &Jegede 2020). Hennesy (2010) observes that one of the greatest challenges in implementation of ICT in schools is balancing educational goals with economic realities. This is so because implementation of ICT requires large capital investments, schools need to be prudent in making decisions about what models of ICT will be implemented and be conscious of maintaining economies of scale. Ultimately it is an issue of whether the value added by implementing ICT offsets the cost, relatives to the cost of alternatives. The challenges of ICT usage may not be fund nor the technology but rather the will on the part of government and/or the governors of education (Itegboje&Okubote, 2002)

4. Poor Computer Literacy of Admin Staff

Poor computer literacy among administrative staff and school administrators is a challenge slowing the use of ICT for the administration of public primary schools in Nigeria. Ogunode &Jegede 2020) defined Computer literacy as the ability and capacity of using Computer efficiently. Computer literacy is the ability to used computer to communicate and carry out others responsibilities. It is only computer literate administrators that can use Computer for office functions. It is unfortunate that many non-teaching staff in the Nigerian secondary schools are not hundred percent computer literate and this is preventing utilization of ICT for administrative purposes. Livinus, (2013) did a study and find out 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. The results of Livinus (2013) also 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 underutilize computer in their daily services. The poor ICT knowledge is limiting the use of computers for management and administrative functions in many secondary schools in Nigeria.

5. Unstable Power Supply

Nigeria is a developing nation and cannot boast of twenty four hours electricity supply to its citizens. The power generation in Nigeria is below 10, 000 megawatt. This implies that majorities of town and villages are underpowered with electricity. Many educational institutions in Nigeria are located in rural areas or developing areas this make it impossible for many of the schools to have access to stable power supply. The inability of the educational institutions to access stable power supply is affecting the utilization of ICT for administrative functions in those institutions (Ogunode &Jegede 2020). Computers cannot operate without electricity even if all the equipment required is present.Many schools are not yet connected to electricity especially in developing countries, Nigeria inclusive. In such countries the government has not been able to connect all parts of the country to the national electrical grid. Consequently those schools that fall under such areas are left handicapped and may not be able to offer computer studies (Mungai, 2011). Adebowale, &Oyinloye, (2008) submitted that it is not an understatement to say that poor electricity supply has been a clog in the wheel of growth of ICT in Nigeria. It is a major hindrance in carrying out researches in the nation universities. Only a trickle of daily electricity production dribbles eratically into the country's over 90 universities and other tertiary institutions, rendering systems dysfunctional, which resulted to diesel - propelled generators that are expensive and environmentally unfriendly (Olatunde-Aiyedun, 2021). Fatunde (2008) opined that attempts are being made to find alternative energy source such as solar energy to accelerate ICT provision.

6. Poor Internet Services

ICT facilities like the Computers and laptop need internet services to function. The poor internet services in the country is preventing effective used of ICT for administrative work and also many secondary school in Nigeria are not connected to the

world wide web due. Many school administrators cannot used the office computer to check their mails and even send memo online because of poor internet services (Ogunode &Jegede 2020). A study by Abdul-salaam (2012) observed that computer resources were not promptly accessible by the students from the institutions covered by his research. In addition, the study demonstrates that the vast majority of the Nigerian secondary schools are not associated with the web. Those with PCs don't have the important instructive programming required by their students in general cases. What's more, the PC accessible in these schools can't carter for the needs of the huge populace of learners in the affected institutions. The monthly internet rates are exorbitant and the charges for satellite television are unaffordable for most people in Africa. According to Southwood (2004) more than 40 percent of the population of Africa is in areas not covered by telecom services as a result schools located in such areas will experience ICT connectivity problems. Idowu and Esere (2013) also observe that most of the ICT infrastructures such as internet, telefax, e-mail are dependent on NITEL (Nigerian Telecommunications Limited), NIPOST (Nigerian Postal Agency) and PHCN (Power Holding Corporation of Nigeria) services. These services are epileptic in delivery and attract unbearably high bills and that Nigeria lacks the necessary infrastructural facilities to benefit from ICT.

7. High Cost of ICT Facilities

High cost of ICT facilities is a very big problem preventing the use of ICT for the administration of primary schools in Nigeria. School administrators do not have adequate funds to procure adequate ICT facilities due to high cost. Haruna, (2005) observed that ICT facilities are expensive and unaffordable to many individuals, private and some government establishments. Adomi (2006) also identify cost as one of the factors which influence provision and use of ICT services, indicating that cost of computers is too high for many to afford while Onyeadike (2009) observe that computer and e-learning facilities are expensive to purchase and as such not all secondary schools can afford them. High cost of ICT facilities

has made it difficult for Nigerian Secondary Schools to acquire and install ICT facilities for the use of teachers and students (Adomi and Kpangan, 2010). The high cost of internet data and electronic services, is basically the element of ICT usage and value and is one of the challenges of installing ICT in Nigerian tertiary institution (Tongia&Subrahmanian, 2006). Umar, &Rosnaini (2018) submitted this apparently affects the deployment and full utilization of ICT in these developing countries, of which Nigeria is inclusive. In Nigeria, the high cost of internet data and fast tariff set by internet providers, mostly international companies doing business in the country with the main interest of making profits is among the challenges of ICT deployment. The high cost of getting, replacing, lack of technical support for maintenance of systems, operating, maintaining, installing, and ICT systems, use of unlicensed software, outdated hardware and software systems, are among obstacles of ICT usage as it relates tothe higher institutions lecturers (Balasubramanian et al., 2009).

8. Lack of technical support for repairs and maintenance of ICT facilities:-

Another problem hindering effective use of ICT for primary school administration in Nigeria is the shortage of technical support in the various. This submission is supported by BECTA (2004) who stated that if there is lack of technical support available in a school, then it is likely that technical maintenance will not be carried out regularly, resulting in a higher risk of technical breakdowns. Technical problems according to Sicilia (2005) include waiting for websites to open, failing to connect to the internet, printers not printing, malfunctioning computers, and teachers having to work on old computers. Technical barriers according to Sicilia impede the smooth delivery of lesson or the natural flow of the classroom activity and argued that whatever kind of technical support and access teaching staff have and whether they have twenty years of experience or are novices to the profession, technical problems generate barriers to the smooth delivery of lesson by teachers.

Ways Forward

To address the problem hindering effective primary school administration in Nigeria. This paper hereby recommended the following. The government should increase the funding of public primary school, provide adequate ICT facilities, ensure constant training and retraining of administrative staff, ensure stable power supply, subsidize the cost of ICT and ensure stable internet services across the country.

A. The government should increase the funding of ICT programme in the public primary schools in Nigeria;

B. For effective primary internal school administration, the government should provide the primary schools in the Country with adequate ICT facilities like Computer system,internet, telefax, e-mail are dependent on NITEL (Nigerian Telecommunications Limited), NIPOST (Nigerian Postal Agency) and PHCN (Power Holding Corporation of Nigeria) services.

C. The government should organize constant training and retraining programme for primary school administrative staff and school administrators;

D. The government should ensure stable power supply in the country to enable the use of ICT facilities at the public primary schools;

E. The government should subsidize the cost of ICT facilities to enable schools acquire ICT facilities for administrative purposes;

F. The government should ensure constant internet services across the country.

Conclusion

The administration of primary school education in Nigeria is plagued with problems. One of the problems hindering the effective administration of primary school education is the poor use of information communication and technology. This paper discussed the challenges of sing ICT for the administration of primary school education.

Secondary data and primary school data were sourced from print materials and online publication. The paper identified: inadequate funding of ICT programme, inadequate ICT facilities, poor implementation of ICT policies, poor computer literacy of admin staff, unstable power supply, poor internet services and high cost of ICT facilities. To solve these problem, the paper hereby recommended that:

1. Government should provide the primary schools in the Country with adequate ICT facilities.

2. The government should increase the funding of ICT programme in the public primary schools in Nigeria

3. Government should organize constant training and retraining programme for primary school administrative staff and school administrators etc.

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