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## **PRINCIPALS USE OF ICT FOR EFFECTIVE ADMINISTRATION OF PUBLIC SECONDARY SCHOOLS IN RIVERS STATE, NIGERIA**

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### **ABSTRACT**

The paper examined Principals use of ICT for effective Administration of Public Secondary Schools in Rivers State and described Information Communication Technology (ICT) as electronic tools or technological resources that are used to gather, process, store, preserve, access, disseminate and retrieve information when required with ease and a veritable tool for the enhancement of the quality of Education. The paper took a cursory look at the use of ICT in school administration, the role of ICT in secondary school administration and the importance of ICT in school administration. The Paper highlighted some challenges facing ICT and the administration of secondary school as high cost of ICT facilities, illiteracy among Principals, incessant power failure, and resistance to change. The paper concluded that improved power supply, proper funding in providing ICT facilities and use of qualified personnel in managing of ICT software are instrumental in effective administration of Public Secondary Schools in Rivers State. The paper suggested installation of ICT facilities, timely workshop, seminars, in-services training, and recruitment of competence and provision of adequate power supply as ways to improve the use of ICT for effective administration.

**Keywords:** Principals, Information Communication Technology, ICT, Effective Administration.

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## INTRODUCTION

Education plays vital roles in the life of individual and the society as a whole. It is a tool for improving the quality of individuals and nation and as well inculcating in individual desirable skills, value and character necessary for the national development and society at large. Education has been acknowledged universally as an instrument for national development. Nigeria as a developing country has adopted education as instrument per excellence for national development (FRN, 2014). Consequently, Nigeria has for decades invested in education to enable her generate qualified and skilled manpower in order to compete and maintain an edge in the international community. In line with the preceding, the educational system in Nigeria has been delineated into different levels mainly pre-primary, primary, secondary and tertiary levels (FRN, 2014).

Secondary school education is the form of education students receive after primary school and before the tertiary stage. Udalla (2018) noted that the importance of secondary education lies in its position both as the bridge between primary and tertiary education and the agent for preparing individuals for useful living in the society. As indicated in the National Policy on Education (FRN, 2014), the broad goals of secondary education include preparing people for useful living in the society and for higher education. The secondary school principal is the administrative and management head of the school. The principal is the chief executive of the school and the key person in ensuring that the students receive quality education and school experiences. Hence, the principals are the administrators of the schools.

Peretomode (2001) defined administration as an act and a process of organizing human and material resources and implementing rules, plans, policies and programs in order to achieve specific objectives. Specifically school administration is concerned with systematically arranging available resources and prudently utilizing them and implanting rules, plans, programs and educational policies to achieve educational goals. The school administrator is often considered as the “administrative and professional leader” of the school with the greatest responsibility for the provision of high quality education for all the students of the school. They are directly responsible for the successful operation of the school and in developing effective instructional programs and providing a conducive and improved environment for teaching and learning. It is the responsibility of the school administrator to carry out and oversee the day-to-day activities of the school. They oversee the pupils/students, staff-teaching and non-teaching, including their promotion and discipline, instructional programs, school ground, school-community relations, and co-curricular activities.

The continuously changing educational and technological environment demands that the role of the school principal goes beyond the traditional task of supervision of staff and students in schools. These changes demand that the school administrator must be ICT literate in order to effectively carry out their school management and administration of work. Information and Communication Technology (ICT) can be defined as technologies used to communicate in order to create, manage, save, store, retrieve and disseminate information. According to Mueen et al. (2013), information and communication technology can be viewed as to include electronic network-embodiment complex hardware and software-linked by a vast array of technical protocol. The utilization of ICT in school administration can increase school efficiency and reduce unnecessary bureaucracy, reduction of stress and making school administration and management less cumbersome. Through this, much time is saved and utilized in other directions for effective school administration.

Oboegbulem and Ugwu (2014) observed that ICT can play a major part in reducing the work load of the principals and their staff especially in keeping daily records of students and staff, in analyzing students and staff attendance records, and in marking students' answer scripts and computation of results. In this sense, ICT can help the school principal to facilitate and effectively discharge their duties through the use of computers and internet in solving school administration problems and in carrying out their day-to-day administration of work. In order to take advantage of these, principals need ICT competency. ICT competence is the ability to retrieve, assess, store, produce, present and exchange information, and to communicate and participate in networks via the Internet (Aribisala, 2016).

Furthermore, Ololube (2006) postulated that ICT competency involves the possession of technical skills which include: ability to use ICT features and applications, ability to use ICT internet-based services by being able to create an account, compose e-mail, attach and download files, store and retrieve files, participate in discussion for social networking sites and create blogs and ability to collect and process electronic data for immediate or later use. The ability to use ICT features and applications is important and expected of a school principal. This involves the ability to use ICT tools like mobile phones, cameras, video recorders and players, voice recorders, music players and multimedia services among others in the administration of secondary schools in Rivers State. It appears that some secondary school principals have failed to effectively utilize ICT tools in carrying out their administrative duties. This situation occurs because principals in Nigeria and indeed Rivers State appear not to possess the necessary ICT skills needed for effective school administration. That is why Chime (2014) advocated that school principals not only need formal training, but also sustained and ongoing support from their colleagues to help them learn how best to integrate ICT technology in carrying out their school administrative functions. This study therefore, examined the extent of principals' utilization of Information and Communication Technology (ICT) for effective administration of secondary schools in Rivers State.

### **The Concept of Effective Administration/Administrative Effectiveness**

The success of any organization depends on effective administration. Administration has been defined as the careful, systematic arrangement and use of resources (human and material), situations and opportunities for the achievement of the specific objectives of a given organization (Nwagwu, 2005). Administrators are implementers of policies and decisions through coordinated activities which must have the capability of planning, organizing and controlling available resources to achieve results (Peretomode, 2001). They are responsible for the achievement of results through the specialized efforts of other people whether individually or collectively in an organization. Effectiveness means to bring about or to accomplish; thus before an action, or an institution or an individual is regarded as effective, there must be an accomplishment. An organization therefore may be termed effective if it accomplishes specific goals (Momoh & Obiweluozor, 2015).

Consequently, administrative effectiveness is the positive response to administrative efforts and actions with the intention to accomplish stated goals. These include administrative performance in decision making, delegation of duties and setting of examples. McCrimmon (2007)'s findings that effective administration entails efficiency, getting things done with least cost. Administrative effectiveness in organizations follows some leadership; not just about getting results, but "how" it entails efficiency which means reaching a destination with minimal

cost. An effective administrator is an asset to an organization or institution providing the link between organizations' various parts and ensures the smooth communication and transmission of information from one part to the other. However, the work of Blanchard (1997) affirmed that headship administrative effectiveness is a function of situational variables on the job, position power, leader-member relationship and knowledge.

### **Information and Communication Technology (ICT)**

According to Chigoziri and Ololube (2023), ICT refers to a diverse set of technological tools and resources used to communicate and create, disseminate, store and manage information. Also Ololube (2006) defined ICTs as the electronic tools or technological resources that are used to gather, process, store, preserve, access, disseminate and retrieve information when required with ease. To Chigoziri and Ololube (2023), information technology is the technology that supports activities involving the creation, storage, manipulation and communication of information together with their related methods, management and application. Communication technology consists of both physical devices and software's that are used to transfer data from one physical location to another. Computer and communication equipment can be connected to networks for handling voice, data, images, sound or even video. These information technology infrastructures provide the foundation or platform on which an organization can build its specific information system.

National Policy on Information Technology (NPIT) (2001) referred to Information Technology (IT) as any equipment that is used in automatic acquisition, storage, manipulation, management, movement, control, switching, interchange, transmission or reception of data or information. It includes the use of these technologies (computing, micro-electronics and telecommunication) and how these technologies are used to collect, store, process and distribute any form of information by electronic means. Information technology is one of the powerful forces that have been causing changes to lifestyles. It is very clear now that the development of information technology is rapidly revolutionizing social, economic and educational aspects of most countries in the world. From the foregoing, the researchers deduced that ICT is a modern innovation designed for use in organizations for the purpose of enhancing job performance and increase productivity among workers irrespective of the type of organizations.

### **Use of ICT in School Administration**

The advent of computers and other electronic media has offered a great deal of advantage in secondary school administration and management. A number of authors such as Newhouse (2002), Gama (2010), and Suryan (2010) have outlined the contribution of ICT to school's efficient record keeping and management to include:

- Ready availability of records and information;
- Ease of access and retrieval system;
- Fast and efficient communication;
- Availability of accurate data and processing;
- Administrative efficiency;
- Fast, rich decision-making and problem solving ability in the school system.

## **The Role of ICT in Secondary School Administration**

Some of the ways by which ICT can be used in communicating administrative information as highlighted by Durosaro (2002) and Copolla (2005) include:

- Use of computers or electronic media by students to apply for admissions, complete online registration, know class schedule or timetable, communicate academic details of students to their parents / guardians, allocate hostel accommodation, among others
- Use of computers or electronic media for staff recruitment, course or work allocation, automation of attendance in the institution, performance appraisal, e-circulars from the institution regarding official matters, communication with individual staff
- Use of computers or electronic media for general administrative purposes such as allocation of examination venues, processing and display of student results, e-payment platform, information dissemination between the institution and its environ.

Visualizing the increasing role of ICT into the future generation of school administration, Adonis (2006) described the use of technologies as the sure way to achieve efficiency in the educational objective of the secondary education through digital libraries, e-mail, internet and other forms of e-learning resources. In the same way, ICT makes it easier to maintain adequate and accurate records in schools and make them easily accessible. With the electronic media, educational programs and policies formulation, planning and implementation, evaluation and development, are made more efficient and effective.

Influence of ICT in Communication between School and Parents In secondary school administration, there should be regular contact between the school and parents/guardians. Information and Communication Technologies play a very vital role in this regard. According to Davies and Birmingham (2002); Moodiel (2007) and Moyle (2006), communication is required to inform parents about school activities and for developing awareness and understanding among them of their role in the learning and development of their children.

The school system depends heavily on ICT in improving parental involvement in school administration in such areas as:

- Pointing out the obligation of parents and families to provide safe, healthy home environments for their wards;
- Regularly informing parents and keeping them informed about school programs and their children's progress in school;
- Educating parents about opportunities to volunteer for the betterment of their children and the society;
- Keeping parents and community abreast of their involvement in the decision making process and governance of the school.

## **Importance of ICT in School Administration**

Importance of ICT in school administration will be discussed under three subheadings:

- Record keeping;

- Curriculum implementation
- School administrators

### **Importance of ICT In Record Keeping**

The importance of ICT in record keeping and administration, especially in secondary schools cannot be over emphasized. Achonye and Nwiyi (2010) listed the following as the usefulness of ICT in school record keeping:

**Availability of Information:** Information and communication Technologies helps to maintain adequate and accurate records in our schools. It increases the rate of dissemination of information to the students and teachers.

**Easy retrieval:** It also leads to easy accessibility and dissemination of information on school records which help in national planning, financial budgeting, effective implementation of the educational programs and policies.

**Administrative efficiency:** One major setback in achieving the educational objective of secondary education in Nigeria is inefficiency of the principals in keeping some records. Chigoziri and Ololube (2023) asserted that principals are not good in keeping records, but with the introduction of information and communication technologies such as computers, digital libraries, email, internet and so on where information are stored and disseminated, they can do better in keeping records and become effective and efficient in performing their prescribed functions as administrators.

Good record keeping also helps the principals for administrative convenience. Record keeping helps the principal to effectively administer the school, whether statutory and non-statutory records, all are geared towards smooth running of the school system.

### **Importance of ICT in Curriculum Implementation**

According to Adelokun and Eyengho (2010), the following are importance of ICT in curriculum implementation in secondary schools:

- It helps the teachers and students to get self-placed auto-instruction related to the curricular and on curricular areas of education. The precision, speed and accuracy in receiving, transforming and using information and communication is well acquired through ICT as they become acquainted and trained for handling well the sophisticated electronic appliances, software and techniques used for information and communication purposes.
- The knowledge of ICT would help school administrators, teachers and students to satisfy their urges or curiosity, inventiveness, construction and so on. They get acquainted with relevant sources of information, the ways and means of extracting required information, and methods of information processing. All these would enhance their teacher ability and skills in the implementation of the curriculum.

- Information and communication technology aids in the effective implementation of the curriculum. This is because it helps to speed up the rate of teaching and learning thereby enabling students to learn more in a less time. Not only has it taken over teachers' routine job of information transmission and heavy burden of administrative tasks such as marking and recording. Thus, the teacher will have more time for creative work with students for research and other gainful activities.
- ICT makes instruction more powerful and more meaningful. New forms and routine events (in compressed, expanded, or normal form) can be brought to the classroom via the use of motion A Critical View of the Availability of Information and Communication Technology (ICT) In the Management of Secondary Schools in Rivers State. Learning becomes more concrete, real, immediate and permanent, thereby bridging the gap between the outside world and the world inside the schools (Adelokun & Eyengho, 2010).
- ICT provides the teachers the means of arousing and sustaining the interest of learners as well as changing students' attitude. Introductory film, filmstrip, T.V. programs and demonstration help the teacher in stimulating learners' interest. It opens possibilities for further exploration; present meaningful information and open up avenues for the improvement of the students reading skills, and teaching are provided with opportunity to vary their pedagogy of instruction.

### **Importance of ICT to School Administrators**

Iyekowa and Obuah (2005) identified the following as the advantages of information communication technology (ICT) to school administrators:

- The school administrators have access to many libraries in the world. Internet is connected globally and as such information's in the world is contained in it, hence gives every school principal the opportunity to access the libraries in the world. This would enable the administrator update his knowledge on the current happenings in the world.
- It provides easy production, storage, retrieval and modification of course materials. When information are stored in the system, it becomes easier for its retrieval when necessary, unlike the traditional way of storing information in the book shelves that may be damaged by rain or termites. This means that such information cannot be easily retrieved, hence rendering the administration ineffective, but with the introduction of ICT in schools, information can easily be stored, and retrieved. It would also help the teacher modify course materials for effective teaching and learning.
- It increases interaction time among schools administrators to exchange ideas. It helps them to exchange ideas with their colleagues in the other parts of the world. Ideas could be inform of new methodology, in teaching and learning, new concept in education and instructional materials that promotes effective teaching, learning and administration of schools.
- The school administrators are provided with ready materials for teaching subjects in a given areas. ICT is a global issue and every relevant techniques and materials for teaching and learning are provided in the system by experts in various fields worldwide. School administrators could only use those materials in their various disciplines to improve their performance or skills in school.

- The teaching of the large class is less stress and more efficient. Teachers teach with less stress with ICT to so many students because less energy is applied and the students flows with the teacher, hence the facilities are been used by both the teachers and school administrators in every day teaching/learning and the administration of the school.
- It enables the teacher achieve his set objectives in the shortest possible time. Lessons are made more real and concrete when ICT facilities are been used. Using already made materials in the system makes the lesson more enjoyable and interesting, hence achievement of the set objectives in the shortest possible time. But when these ICTs are not provided in the school it hampers the effectiveness of both the teachers and the school administrators because both would use them for effective teaching/learning and administration of the schools.

### **ICT and its Challenges in the Administration of Secondary Schools**

High cost of ICT facilities: Itogboje and Okubote (2002) pointed to high cost of ICT equipment as a challenge to the available and accessibility of the materials. They also noted that the problems might not be the funds nor the technology but rather the will on the part of government to include it in the budget for education, in the country or state. The installation of internet, computer a critical view of the availability of Information and Communication Technology (ICT) in the management of secondary schools in Rivers State, other accessories and their maintenance require huge amount of money. The purchase and installation of computers may not be possible where huge capital is not available.

Illiteracy among the principals is a serious setback to effective management of the schools, even when ICT facilities are provided, they are unutilized by the principals because they lack basic knowledge of the computer system, and to maintain adequate and accurate records in the school becomes a problem. Poor record keeping by the principal due to poor level of computer literary impedes effective management of the school system.

The principals and teachers lack the inner driver on the usefulness and relevance of ICT in Secondary School setting. Most principals in secondary schools in Rivers State are ignorance of the usefulness of ICT in running the schools as they are computer illiterate and cannot support and manage the internet connectivity or application of computing in the teaching and administrative process. This explains why it is often said that it is the level of training given to the teachers in any nation that will determine the quality of education of that nation, as teachers cannot give what they do not have to their students.

Incessant power failure in Nigeria hampers effectiveness of the principals in the management of secondary schools. One of the major challenges that Nigerians are faced with is inadequate power supply, and Rivers State is no exception. The computer has to make use of electrical power to perform, because computers work effectively and efficiently on a very conducive atmosphere where there are air-conditioners. Since we do not have this electrical power always, using ICT without adequate arrangement for regular supply is a big mirage even when the computers are provided. Again the cost of running a generator to power the ICT facilities are too expensive to maintain in secondary schools, and the principals cannot provide such money hence its usage in the management of secondary school is therefore impeded.



Resistance to change: Ololube (2006) attributed the syndrome of resistance to change among the Nigerian teachers as an impediment to application of ICT in the classroom. Some teachers view the use of computer for education as a means of displacing them from their cherished job rather than as instructional materials to enrich teaching and learning. Also they regard the use of computer as an increase in their tasks in the classroom without adequate compensation; the same is applicable to school administrators who also believed that they can administer the school without any form of ICT equipment. They also see it as another work load in their day to day administration of the schools.

### **Ways to Improve the Use of ICT for Effective Administration**

For effective use of ICT in school administration, the following must be put in place:

- Government and non- governmental organizations at all level of governance should make available to school ICT gadget at subsidized rates or even for free.
- School administrators should partner or collaborate with non-governmental organizations (NGOs) and the government to make available to schools adequate power supply and other infrastructures such as furniture, goods atmosphere needed for a good ICT integration in school administration. Access to fast internet connections should be made available in schools to give room for seamless communication among staff, students, alumni and parent at any moment. This internet access should be made free for school administrators and students alike.
- School administrators should develop ICT skill in order to be effective in their new role as technology usage administrators. While these school administrators develop ICT skill; Government and those responsible for employment and recruitment of staff should make sure that those deployed to work in ICT department of schools are people who have acquired the adequate training.
- Software developers and publishers should come up with development of software and multimedia application that will have universal relevance and application which will not be specific and particular to any culture and religion while the government on their own should try to make these software available to schools that might need them.
- School administrators should enforce maintenance culture in their school and make sure that their ICT gadgets are properly taken care of and maintained at regular interval(routinely) and ensure that those to carry out these exercise are those that have the requisite and adequate skill to do so under proper supervision.
- Another way out in surmounting the challenges in the use of ICT in school management is to ensure that adequate security measures and policies are enforced, consequent punitive measures taken against various offenders of such policies. In addition, the ICT department of ministry of education should conduct ICT training programs, seminars, workshops and design various forums focusing on professional development of administrators in integrating ICT across school administrations to become ICT compliant.

## CONCLUSION

Conclusively, there is no doubt that use of ICT in the administration of public Secondary Schools in Rivers State will lead to academic proficiency within the educational system. Unfortunately Public Secondary Schools in Rivers State do not have ICT facilities and also there is low rate of utilization of ICT facilities to meet 21st century change in public secondary schools in Rivers state because of militating factors which include high cost of ICT facilities, illiteracy among the principals, and lack of inner drive, incessant power supply, and resistance to change. The paper revealed that improved power supply, proper funding as regards providing ICT resources, and the use of qualified personnel in managing ICT software, are strategies to mitigate the constraints of use of ICT in the administration of public Secondary Schools in Rivers State.

## Suggestions

Based on this qualitative reviewed and analysis of the related literature, the following suggestions were made:

- The Rivers State government should endeavor to provide, install and make Information Communication Technology (ICT) available to principals.
- Rivers State Ministry of Education in collaboration with Post Primary School Service Commission (PPSSC) should organize timely workshop, seminars, in-services training on Information and Communication Technology (ICT) for secondary school principals. Hence, this will help them to be acquainted with the use of Information and Communication Technology (ICT) and as well improve on Information and Communication Technology (ICT) utilization in the administration of secondary schools.
- Rivers State Government through the State Ministry of Education in collaboration with Post Primary School Service Commission (PPSSC) should use Information and Communication Technology (ICT) skills as pre-requisite in the appointment/selection of principals of secondary schools
- Competent hands should be recruited for the servicing and maintenance of the available ICT equipment's so that they can be used for a relatively long period of time.
- Provision of adequate and uninterrupted power. This will provide the needed power supply that can allow internets and E- libraries to work in our institutions of learning for the effectiveness of the school administrators.

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