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# THE APPLICATION OF INFORMATION AND COMMUNICATION TECHNOLOGY IN THE ADMINISTRATION OF SECONDARY SCHOOLS IN NIGERIA

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By

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## **Abstract**

*The paper examined the application of Information and Communication Technology in the administration of secondary schools in Nigeria. The work explained the concept of information and communication technology. The functions of the school heads were also highlighted. The information roles of the school administrators were discussed. The importance of the application of ICTs facilities such as computer, internet, E-library in the administration of secondary schools were included in this paper. The paper recommended that principal's officers should be provided with ICTs facilities for effective and efficient administration of secondary schools.*

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Information and communication technologies have fundamentally changed the way people think, communicate and do most of the things and the field of education is no exception. The use of information and communication technologies has a tremendous potentiality of serving its cause and helping the persons with the processes and product of education in many ways especially in the administration of educational system or sector. School administrators get sufficient help from information communication technology in their administrative process. They are expected to get the required opportunities and training for receiving and using information for self-improvement and effective administration of the schools.

The administration of the educational sector is really difficult due to inadequate funding, lack of infrastructural facilities, indiscipline among students and staff, especially the secondary school because of the complexity and the nature of students who are mostly adolescent with their unique characteristics. Therefore, the school administrators need this new technology to improve the principles, techniques, and styles of administrating the school for peaceful co-existence and effective administration of the schools.

In supporting this view, Efed and Moemeke (2010) opined that for any success to be achieved in the management and administration of any nation, state, local government, schools, churches, companies and so on, effective information and communication technology network must be put in place to enhance smooth flow of information and good record keeping through the use of storing and retrieval devices.

### **The Concept of Information and Communication Technology (ICT)**

Information can be seen as “idea conceived in the human mind” while communication is the transfer of that information from the original source to the destination where it is needed with the intention of producing a change in behaviour of the receiver (Afolabi & Adeyanju, 2005). According to them, ICT is the science and activity of processing, storing and sending information by using computer. They further defined communication technology as the use of hardware and software to enhance communication.

Iyehowa & Obueh (2005) saw information and communication technology as the handling and processing of information as in instructions, graphs, texts, and image for use by means of electronics and communication devices such as computer and telephone. Therefore, information and communication technology (ICT) is the means of accessing or receiving, storing, transferring, processing and sending feelings, ideas, perception or information through electronic gadgets or communication equipments.

### **The School Administrator or Head**

The school administrator or head is that man or woman who occupies the highest administrative position in a school. At the secondary school level, he/she is called principal. No matter the level of school, the administrators perform similar functions which include, policy implementation and programme planning, human resource management, student's personal management, school plant management, school finance management.

Hill & McShane (2008), identified the following functions of school managers: interpersonal roles, information roles, decision roles and managerial roles. However, the study will focus on the information roles of the school administrator using information and communication technology (ICT) in the administration of the school.

### **Information Roles of School Administrators and the Application of ICTs in the Management of Schools**

Informational roles are concerned with collecting, processing and disseminating information. Managers collect information from various sources both inside and outside the organization, process that information and distribute to others who need it. Hill and McShane (2008) in their findings discovered that managers or administrators spend 40 percent of their time on those tasks. They divided information role of the manager into three, namely: monitor, disseminator and spokesperson. The managers monitor the performance of the different units within the system, assessing for example, how well the windows, office and box business are performing against targets. According to Mintzberg (2001), managers rely on both formal and informal channels to collect the information required for effective monitoring. Formal channels include the organization's own internal accounting information systems and data provided by important external agencies e.g., ministry of education, schools board, internet managers. The personnel can access through the company's internet reports produced by external consulting companies and stock analysts that profile competitive trends.

In their dissemination role, managers regularly inform staff about the direction and sometimes about specific issues. At the supervisory level, disseminator role often takes the form of one-to-one informal conversations with specific employees about particular matter.

In their spokesperson role, managers deliver specific information to individuals and groups located within and outside their school or organization. In school as an organization, the head represents the school in the zonal schools board, post primary schools board and the ministry of education. He or she is supposed to be experienced in

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the use of information and communication technology in order to update the information that is being sent out.

Information is a vital tool in the socio-economic development of any human society. Information, carefully gathered, stored and transmitted through various media has helped in the sustenance of human society since the history of man (Akinwumiju & Agabi, 2008). It has helped in unifying conflicting organs of society, the restoration of peace and harmony between countries, and the establishment of better understanding between economic sectors. According to Akinwumiju & Agabi (2008), information roles of school principals include the following:

- i. **Information Collection:** This involves the gathering of information from various sources. Information can be collected from research activities, formal and informal interaction with people and public media such as radio, television, internet, etc. In terms of coverage or scope, school system information can be collected internally or externally. Internal sources include class examination, intra-school competition, extracurricular activities, social events, staff meeting, staff development programmes and so on. The quantity and quality of information brought into the school depends on the ability of the school heads in the exploration of those various sources of information. But it is disgusting that secondary school heads do not have access to internet facilities in this digital era, hence they lack vital information that can guarantee effective management of the school.
- ii. **Information Storage:** This involves storing or keeping information in a manner that makes it easily retrievable for administrative purposes. Information can be stored in electronic modes such as audio tapes, video tapes, compact discs (CDs), and computers. It is obvious that information should be stored in a manner that guarantees its safety from weather and from unauthorized persons. Most secondary schools in Rivers State lack electronic storage facilities which impede effective administration in the schools.
- iii. **Information Analysis:** This involves a critical review of all the bits of information that come into an educational institution. The purpose is to identify and separate useful information and details from the useless and unnecessary ones. Information analysis enables school heads to give greater attention to vital information necessary for effective administrative decision. Information analysis requires the calculation of data; hence more complex statistical analysis would be required. Therefore, it requires heads of institutions who are knowledgeable

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enough to analyze these data through information and communication technology facilities such as computers. It is assumed that most principals in the secondary schools are not computer literate and cannot use computers to analyze the data even when the facilities are provided.

- iv. **Information Dissemination:** In the secondary schools, all the statutory information gets to the school through the principal. It is also spreads to the entire school staff from the office of the principal. The principal decides on the appropriate medium of dissemination which is also dependent on the target audience. Information can be disseminated orally, through the use of notice board, official memo, use of public media and use of the internet. The use of internet in the dissemination of information is very important to the school principal, because its serves wider range of audience than any other media. Internet as a medium of information dissemination is meant for both local and international audience. Such important information that can be disseminated through the internet include, entrance examination date, sale of admission forms, result of examination, vacancies, academic programmes, academic calendar and so on. The question remains, do secondary schools in Nigeria have internet facilities? This is an unfortunate situation because internet facilities are not provided in the secondary schools hence; administrators are ineffective in performing their duties as expected.
- v. **Internet in Principal's Office:** The internet in the principal's office can be used by the school administrator as a source of information to enhance effective administration. Where the office has an internet connection, the school principal or administrator can incorporate content found on the net into the administrative process for effective and efficient performance.
- vi. **E-Library:** The internet, unlike encyclopedia and traditional libraries has enabled a sudden and extreme decentralization of information and data. It has further triggered an explosion in knowledge. The use of internet facilities will facilitate the administrative effectiveness of the school managers.

The internet presents so many possibilities for knowledge acquisition and dissemination. (Iredia & Udi, 2010). It equips the school administrator on the current management techniques for smooth running of the school.

### **Computer and Its Usage**

The use of computers in the office of the principal or the store keeper as they are called in the secondary schools helps in the effective administration of the school.

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Information can be stored or kept by the principal through electronic modes such as audio tapes, video tapes, compact discs (CDs) and computers.

The computers help to store and retrieve important information, when needed by the administrator in his day to day administration of the school without looking for documents, papers, letters in the shelves, cupboard, tables, etc, which may not be found as at when it is needed. Such situation is frustrating and demoralizing. But with the introduction of information and communication technology, these problems will be things of the past. Principals will therefore be more effective and efficient in the administration or management of the school with the application of information and communication technology.

### **Conclusion**

There is scarcely any aspect of human endeavour where ICT does not apply in contemporary time. Administration of secondary schools is not an exemption as principals are more effective and efficient in the management of the schools with the knowledge and the use of ICT facilities in the school.

### **Recommendations**

The paper made the following recommendations:

1. Government should connect internet to the office of the principals in all the secondary schools.
2. Computers should be provided and principals trained on its usage.
3. E-library should be provided in the secondary schools so that current information on the administration processes would enhance the effectiveness of the principals.
4. The government should be organizing leadership oriented workshops for all the principals in secondary schools.
5. Library attendants should be trained on how to use computer in the storage and retrieval of information for effective administration of the school.

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