

ICT and Effective School Management: Administrators' Perspective

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Abstract –The Study investigated administrators' perspective towards using ICT for effective school management. The sample used for the study consisted of 120 administrative staff randomly selected from different secondary schools in Ilesa Local Government area in Osun State. Questionnaires was prepared and administered, the responses were collected and analysed using Chi-square. The results indicated that school administrators have a positive perspective towards the use of ICT tools in effective school management by solving the problem of poor communication in schools and achieving effective planning. Based on the findings, recommendations were made towards making ICT tools adequately available for schools and students by government and parents respectively. Osun State government should ensure that both staff and students acquire the basic knowledge as far as the usage of ICT tools is concerned and schools should be adequately funded to aid internet connectivity maintenance.

Index Terms – Information and Communication Technology, Secondary School, Osun State, Administrator, Management

I. INTRODUCTION

School is an institution that is designed for teaching of students with directives from teachers. Its administration goes a long way to determine its success in both public and private schools hence is seen as critical by all stakeholders. School administrators manage the day to day activities and provide instructional leadership in pre-schools, day care centres, Colleges and Universities. [1] defined Educational Administration as the process by which principles, methods and practices are used in educational institutions (as organisation) to establish, maintain and develop such institutions in line with the goals.

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An effective administrator provides the link between an organization's various parts and ensures the smooth communication and transmission of information from one part to the other.

Therefore to achieve effective administration in a school, the following subsystems must operate on a set of rules or procedures that the staff follows when completing a certain kind of internal activities. They include:

1. Reporting Subsystem
2. Planning Subsystem
3. Document Processing Subsystem
4. Knowledge Management Subsystem
5. Communication Subsystem
6. Decision making Subsystem

II. ICT USE IN SECONDARY SCHOOL ADMINISTRATION

Secondary schools today require administrators or leaders order to ensure their effective job performance. As the world changes, information and knowledge changes rapidly, teaching and learning processes as well as the management of schools also have to change. The introduction of innovative technological applications in schools is connected with changes, not only at the level of teaching and learning, but also in carrying out administrative tasks in schools. The use of information communication and technology (ICT) can improve education quality, expand learning opportunities and make education accessible [2].

Information and communication technology (ICT) evolved from the quest for faster and easier management of enormous information available to users. Thus, ICT is very essential for the generation of quality information and management of that information is required for effective

decision making. ICT components include as identified by [3] prints media, electronic media, telephone, telex, e-mail, fax and computers.

[4] noted that ICT assists the school administrators to meet the task of school management in the areas of curriculum and instruction, school community relationship and school business operations. In support of this [5] argued that the introduction of ICT in schools enhances the daily school routine, programme, updating the evaluation of school programmes, solving individuals' or groups' as well as staff development. ICT in the word of [6] also encompasses the broad fields of information and communications by means of computer and telecommunication; tools that are being increasingly used for organization or personal information processing in all sectors of economy and the society as a whole. [7] and [8] agreed with [9] views and reported that administrative functions in schools are becoming increasingly complex in terms of enrolments, population mobility and social problems. This complexity requires the use of powerful administrative tools resulting in better communication, efficient operations and better personal services. One of such tools is the computer.

III. STATEMENT OF PROBLEM

Secondary school education has become more complex due to the increase in the number of students' enrolment as well as the number of programmes being offered. Hence, its management demands more from the managers to achieve the set goals. Due to this complexity, School administrators are sometimes faced with the challenge of managing schools in a meaningful and productive way. Some of the problems faced include poor communication within the staff and students and even with external governing bodies of the school and sometimes effective planning because most of the processes are still carried out manually. Hence, this paper looks at the administrators' perspective towards the use of ICT tools in effective school management.

IV. RESEARCH HYPOTHESES

The following alternate hypotheses were formulated for the purpose of this study:

1. The introduction of ICT tools in School administration will significantly solve the problem of poor communication in schools.
2. ICT can significantly influence effective planning in school administration.

V. METHODOLOGY

A. *Population*

Population of this study consisted of public secondary schools in Ilesa Local Government Area of Osun State.

B. *Sample and sampling Technique:*

The sample for the study consisted of 120 administrative staff comprising of 40 principals (28 male and 12 female) and 80 vice –principals (47 male and 33 female) from public Schools in Ilesa Local Government, Ilesa, Osun State. The Schools were randomly selected as well as the staff involved in the study.

VI. RESEARCH INSTRUMENT

The descriptive research design of the survey type was used for this study. The instrument was a four – point Likert rating scale of Strongly Agree, Agree, Disagree and Strongly Disagree.

VII. VALIDATION

The questionnaire was validated by experts in measurement and evaluation as well as colleagues in the department. Their comments were used in modifying the final copy of the instrument which was used to get the needed information from the respondents.

VIII. METHOD OF DATA COLLECTION

The instrument was administered and collected by the researcher. The completed copies were collected and analysed by the researcher. The two alternate hypotheses for

the study were tested using the Chi – square at 0.05 level of significance.

IX. PRESENTATION AND ANALYSIS OF DATA

A. Hypothesis 1

The introduction of ICT tools in School administration will significantly solve the problem of poor communication in schools.

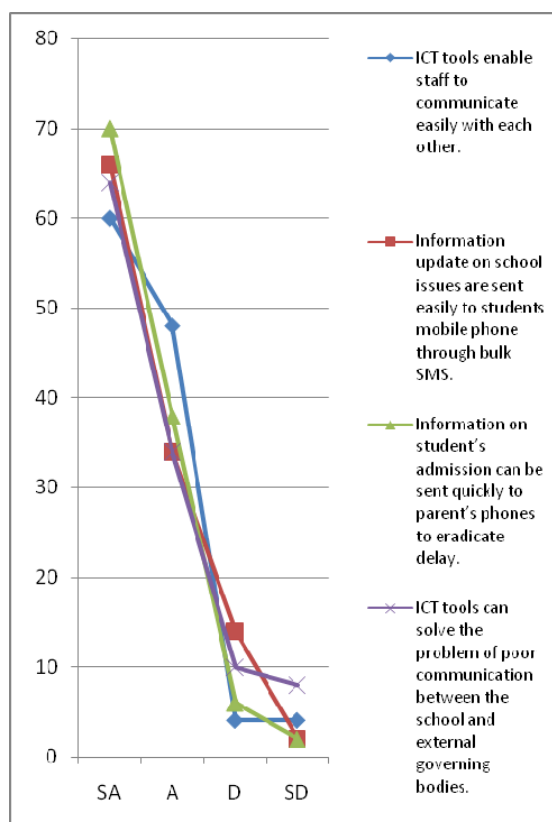


Fig. 1. A chart showing responses of respondents to hypothesis 1.

TABLE I
 THE ANALYSIS OF CHI- SQUARE (X^2) VALUES FOR HYPOTHESIS 1

X^2 calculated	X^2 table	Degree of freedom	Level of significance	Comment
23.589	17.132	9	0.05	Hypothesis Accepted

Figure 1 above shows the responses of respondents to the questions related to hypothesis 1. This was used to calculate the Chi-square values as shown in Table 1. The calculated value of 23.589 is higher than the table value of 17.132 at 9 degree of freedom and 0.05 level of significance.

Therefore, the hypothesis which states that the introduction of ICT tools in school administration will significantly solve the problem of poor communication is hereby accepted. This implies that the introduction of ICT tools in school administration will significantly solve the problem of poor communication in schools.

B. Hypothesis 2

ICT can significantly influence effective planning in school administration.

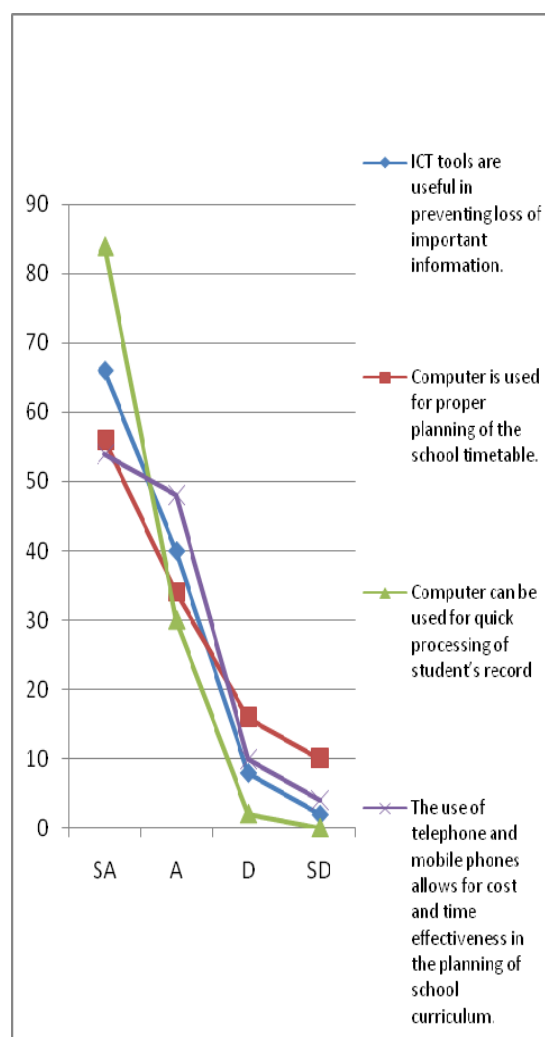


Fig. 2. A chart showing responses of respondents to hypothesis 2.

TABLE II
THE ANALYSIS OF CHI – SQUARE (X^2) VALUES FOR
HYPOTHESIS 2

X^2 calculated	X^2 table	Degree of freedom	Level of significance	Comment
36.939	23.589	9	0.05	Hypothesis Accepted

Figure 2 above shows the responses of respondents to the questions related to hypothesis 2. This was used to calculate the Chi-square values shown in Table 2. The calculated value of 36.939 is higher than the table value of 23.589 at 9 degree of freedom and 0.05 level of significance as shown in Table 2.

Therefore, the hypothesis which states that ICT can significantly influence effective planning in school administration is hereby accepted. This implies that ICT does influence effective planning in school administration.

X. CONCLUSION

It can be concluded from the result of the study that school administrators have a positive perspective towards the use of ICT tools as bringing effectiveness into school administration by solving the problem of poor communication. It also helps a great deal in effective planning thereby helping the managers of schools to achieve their set goals by reducing complexity in school administration.

XI. RECOMMENDATIONS

The following recommendations are hereby suggested based on the result got from the study:

- 1) ICT tools should be adequately provided for schools and students by government and parents respectively.
- 2) Osun State government should ensure that both staff and students acquire the basic knowledge as far as the usage of ICT tools is concerned.

- 3) Schools should be adequately funded to aid internet connectivity maintenance.
- 4) Alternative source of power supply should be provided for schools.
- 5) Maintenance culture should be imbibed so as to increase the life span of the ICT gadgets.

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REFERENCES

- [1] W. K. Hoy, and C. G. Miskel, "Educational Administration: Theory, Research and Practice (6th Ed), Singapore," MCGRAW-HILL, 2001.
- [2] H. K. Sam, et al., "Computers in School Administration: A Preliminary Study Among Secondary School Administrators In Rompin District, Pahang, Malaysia: Kota," 1999.
- [3] A. A. Ayeni , "Relevance of ICT to the Construction of Sports Courts and Pitches," West African Journal of Physical and Health Education. Vol. 8, July, 2004.
- [4] A. A. Nwosu, "Integrating ICT into STM classroom: Status and implications," Proceeding of the 44 Stan Conference, 2003, Pp 58 - 60.
- [5] Y. Mohammed, "Factor influencing the implementation of ICT in Jigawa States Schools, Nigeria," Unpublished M.Ed. Thesis, University of Ilorin, 2006. Samarahan.
- [6] O. S. Aboderin, "The status of Information and Communication Technology (ICT) in secondary schools in Ondo State," Ph.D. thesis University of Ado-Ekiti, 2006.
- [7] K. Ghaemian, "School administration on the fast-track," <http://www.govt.tech.net/magazine/gt/1998>.
- [8] P. Uys, "Managing tertiary education in a global virtual environment, Networked educational management," (Online) available www.globe-online.com.phillip.uys.cape.2000.htm.
- [9] O. Okebukola, "Management of Secondary Schools yesterday, today and tomorrow. Paper Presented at the Annual Conference of Nigeria Secondary Schools Principals", Lagos. 1996.