Principals' ICT Competency : An Imperative for Management of Information Systems in Public and Private Secondary Schools in Anambra State

Anyanwu Jude Azubuike, Amaefula Forgive Nkiru, Anyaeji Vivian Adaora
Department of Educational Management and Policy
Nnamdi Azikiwe University Awka

Abstract:- **The study ascertained the level of Principals' ICT competencies for management of information system in public and private secondary schools Anambra state. Two research questions and two null hypotheses guided this study. The design for the study is descriptive survey. The population was comprised of 682 principals of which 257 public secondary school and 426 private secondary school principals, corresponding to the total number of secondary schools in the state. The sample size consists of 417 respondents made up of 158 public and 259 private secondary school principals selected using proportionate stratified random technique. The instrument for data collection was Principals' ICT Competency Test (PICTCT). The instrument was validated by three experts from Educational Management and Policy and Measurement and Evaluation and Computer science department all in Nnamdi Azikwe University, Awka and reliability was established using Kuder-Richardson 21 formula which yielded a value of 0.71. Data collected were analyzed using frequency and converted to percentage and criterion level of competency is 50%. Chi-square was used to test the hypotheses at 0.05 level of significance. The findings of this study were that, in basic computer operations, private school principals were very competent while principals of public school were not, in technical competency, public school principals were not competent while private school principals were moderately competent. It was also found out that there was significant difference in mean competency scores of public and private secondary school principals in basic computer operations and technical competencies. Based on the findings, it was recommended that the educational management board in the state should organize seminars, workshops and in-service training for principals of public and private secondary schools in order to improve their ICT competencies for the management of their school information system.**

Keywords:- Principal, ICT Competency, management of information System (MIS), Secondary education.

I. INTRODUCTION

Education is a life time investment that provides the frame work for harnessing the inherent human and material resources for the development and civilization of the human society. In the world today, different countries practice an education system that ensures the realization of their national goals. The education system of Nigeria runs from basic to upper basic, senior secondary to tertiary levels. The focus of study is on the secondary education which is a combination of the upper basic to senior secondary. Therefore, secondary education as defined by the National policy on education (FGN, 2013) is education children receive after primary education and before tertiary stage. It is an education that runs for a period of (6) six years given in two stages of upper basic and senior secondary, each has a three year duration.

At all levels of educational system in Nigeria there are public and private partnership. Thus the National policy in education states that government welcomes the participation of voluntary agencies, communities and private individuals in the establishment and management of secondary schools, state governments shall prescribe conditions to be met by the communities and others wishing to establish secondary schools (FGN, 2013). Private secondary schools therefore, are those secondary schools established and funded by the private individuals, the missionaries, voluntary agencies according to the government approved standard while public secondary schools on the other hand are those schools that are owned, managed, controlled, financed and supervised by the Federal (Unity Schools) and State government through the ministry of education.

Every secondary school is led by an administrator who is also called the principal. The principal is a person in charge of a school or college for children aged between 11 and 18. He is the administrative head and leader of instruction in the school organization. In the line authority as defined by Ogunu (2000), the principal performs the following leadership roles among others: providing the overall leadership, co-ordination, supervision, control, organization, welfare, motivation and continuing evaluation that would encourage the improvement of educational programmes. These days the administrative functions of school principals are becoming much more demanding owing to the complex nature of the human society and the school expectations. These complexes are arising from numerous activities ranging from staff and students personnel administration in terms of enrolments, population mobility and social problems, academic procedures, conflict resolutions within and outside the school and other administrative functions. All these require the use of powerful administrative tools known as management information systems that will result in better management, faster communication, efficient operations, better personnel services and quick decision making.

Management Information System according to Azhar Susanto (2013), is a collection of sub-systems which are interconnected with each other to work together in harmony to achieve one goal of process data into information needed by management in decision making. This sub-systems are the technology and management techniques that will be applied to produce, analysis communicate and use information. The aim is to use formalized procedures to provide management with appropriate and timely information from all relevant sources so as to enable the manager make timely and effective decision. Ikediugwu and Anyanwu (2020) opine that, management of information system is a processing procedure developed within an organization and integrated for the purpose of providing timely and effective information to support decision making and other necessary management functions. The system is designed, focused design produces good quality information system that is easy to use, to produce the correct function for users, is quick to take the data and move between the views of data, reliable (reliable), secure and integrate well with other systems (Bocij, 2014).For Susilawat (2016) he observes that management information system of quality has the characteristics of Integration where the system can facilitate a wide range of information to support the needs of decision-makers, Flexibility, where the system can adapt to the needs of users in conditions that are changing, Accessibility, where the system is easy to use with low effort (ease of use), Reliable, that the system can be applied and relied upon adequately. Management of information system within an organization requires the computer system and its allied communication accessories and technologies (ICT).

When this is applied to education, education is said to be experiencing a shift from formal, centralized and segmented operations to increasingly complex, decentralized and integrated levels of organization (Uys, 2000). To buttress this, the National policy in education (FGN, 2014) states thus, 'in recognition of the prominent role of Information and Communication Technology in advancing knowledge and skills necessary for effective functioning in the modern world there is urgent need to integrate Information and Communication Technology into education in Nigeria. Schools use a diverse set of ICT tools to communicate, create, disseminate, store, and manage information. In some contexts, ICT has also become integral to the teaching-learning interaction, through such approaches as replacing chalkboards with interactive digital whiteboards, online, zoom and video conference classes where students watch lectures at home on the computer and smart phones. Also the overwhelm influence of ICT and social media in all facet of human life is so alarming. All life activities are connected to ICT and social media to the extent that whoever is not in the use of any type of ICT will appear (analogy) not to be living in the now of our time. Needless to say that the world today has become electronic, computerized and globalized with influences on world economy that today we talk about the digital economy and electronic system of life (E-mail, e-learning, e-money, e-library, e-ticket and so on).Information is power but requires a system and medium of communication (technologies).

Information communication technologies are those high-tech digital and electronic innovations and facilities that enable accessing, analyzing, processing, management and communication information over long distances without any kind of barriers. Information and communication technologies (ICT) is defined as a diverse set of technological tools and resources used to transmit, store, create, share or exchange information which include computers, internet (websites, blogs,), live broadcasting technologies (radio, television, webcasting), recorded broadcasting technologies (podcasting, audio and video players, storage devices) and telephone and satellite technologies. Nwite, (2007) sees it as a range of new technologies and their applications which include all aspects of the use of computers, micro-electronic devices, satellites and communication technology. ICT therefore, uses modern day technology software packages to store and retrieve information needed in management of organizations. It focuses on electronic generation, storage, retrieval, utilization and protection of information for future references. The introduction of MIS in education has come with a lot of challenges and phobia to many administrators in education.

Therefore, for an effective management of information system in a school organization certain level ICT competencies are required of the principals.The competence factor plays an important role in the implementation of management information systems, the competence of the user can be said to balance with the management information system applied by the organization. Competency is often defined as a combination of awareness, skills and attitudes that enables an individual to perform a job to the standard required for a successful performance. In order words competency deals with what is expected in the effective workplace. It designates learning outcomes such as skills, abilities, knowledge, and performance. Generally, the concept of competence as defined by Glava and Glava (2006) is an integrative set of knowledge, abilities, attitudes and the capacity to apply and transfer that creates the premises of successful accomplishment of certain complex activities or tasks and of effective functioning within a given context or role. Competencies are described to mean "know how to do and know to be". Therefore, the idea of competence means a switch of emphasis in training, from informative (what, "how much") to formative ("how to do") {Dolz and Ollagnier, 2002}. Lafortune, (2010) defined competencies as integrative units of knowledge, habits, motivations and attitudes that mediate professional behavior, and guarantee expert action in specific activity, fields and contexts. Competence corresponds to a complex capacity of action which is based on the activation and effective use of a variety of resources. Competency reflects the skillful application of specialized education, training and experience. This should be accompanied by a sense of responsibility and an acceptance of a recognized standards. Therefore competence is seen as knowledge, skills, attitude, value; motivations and beliefs people need in order to be successful in a job.

ICT competence therefore, involves skills, knowledge, creativity and attitudes which are necessary in order to cope

with teaching, learning, management and communication of information with digital media in a knowledge society. Akudolu (2006) asserted that ICT competencies involve knowledge of skills, knowledge of how and when to apply the skills as well as knowledge of reasons for using the particular ICT or the contributions of that ICT to the solution of a problem. For Okeke and Ifesi (2018), define ICT competency as the proficiency or dexterity that is required or developed through training or experience on the use of ICT. This means that for this kind of competency to be developed, it come with the practice of the system involved. Mbakwem and Okeke (2007) assert that it is the willingness to demonstrate the acquired ICT skills and use them effectively in accordance with the procedure that must be followed to ensure full practice and /or application of the system. Simply put, ICT competencies here refer to the skills and abilities of school principals for using computers to manage (store and retrieve) information needed. According to Edafiogho (2007), opine that, as administrators become increasingly information-literate, they develop skills in processing, interpretation, analyzing and conveying knowledge. Continuing,he remarked that ICT has the capacity for automatic processes and saves time thereby allowing school administrators to concentrate as well as improve the quality of contact time with staff and students. If administrative functions at schools and other levels of the educational system are to be managed efficiently and effectively, it is necessary that school administrators should be knowledgeable in ICT. Principals are expected to have acquired a number of competencies in ICT skills, during their trainings and workshops organized in the state in order to overcome the challenges of ICT utilization in administration. Therefore developing principals' ICT skills is then imperative. Competencies that need to be consider in this study will include basic computer operation competency and technical competency.

Basic Computer operation competencies: This is a focus on operational skills on how to use the computer to manage information rather than a meta-competency level. The basic operational knowledge and skill of computer is a core and pre-requisite for acquiring other ICT competencies needed of every ICT user. Building up of Confidence in operating a computer is the measure of competency in the midst of computer phobia. To be competent means to have the confidence to demonstrate or execute a task. This is true amidst the computer phobia among many administrators in organization. A computer has been described as a device that automatically performs operations with great speed, accuracy and reliability following a command given to it. It combines the efforts of hardware, software and personnel to operate. It makes use of some application packages that receives instruction from the user to display the intended action. Most of these application packages are displayed on the desk top of the computer. These packages form what is called the programs which are collectively called software. A program is defined as a series of instruction written in a particular language to enable the computer to execute instructions designed logically to solve a given problem. Software can be supplied either in a ROM (Read Only Memory) which is built-in mainly into Micros' Hardware

and serve as the computer disk Operating System or supplied on magnetic tapes or disk, DVD, CD which are loaded into the computer when they are needed. They can be used in general office administration such as pay-rolling, inventory control, students' admission and graduation records, examination results, transcripts records, word processing, graphic, desk top publishing, other software packages include supervisor, the Interpreters/Compilers and Utilities software among others is used for the information storage and retrieval. Other application packages which are included in this aspect are Microsoft word, Microsoft excel, Word processing, Spreadsheets, Power point and Corel draw. These software/application packages come with the computer or are stored in the system for various uses. Depending on the work it is designed for, an application can manipulate text, numbers, graphics, or a combination of these elements.

All these application packages are what every computer operator needs to work with. Therefore the ability and proficiency with which the principal is able to exhibit and use them in administration of the school management information shows the level of competency therein. Also it is the outcome of the ease and confidence of their uses and the enablement of them in managing information system that the measure of competency is shown.

Technical application Competencies: This is defined as the knowledge and ability to use computers and other related technologies efficiently with a range of skills covering levels from elementary use to programming and advanced problem solving. Technical skills refer to the specialized knowledge and expertise needed to accomplish complex actions, tasks, and processes relating to computational and physical technology as well as a diverse group of other enterprises. Those who possess technical skills are often referred to as "technicians''. The term can refer to the ability to perform tasks that require the use of certain tools, whether tangible or intangible, and the technology required to master their intended uses in a variety of scenarios. In this regard, the knowledge in a technical skills capacity is seen as practical in nature because it allows an individual to complete a designated task in a real world not theoretical. Another valuable content of computer technical competence is ability to know how a computer works and operates. This is the stage of proper application or practical competency of a principal in using computer facilities in the management of school information. This is also called the performance or manipulative competencies; it starts with the ability of a principal to set up the system and install the necessary computer accessories (the peripherals). The principal should be able to understand how the CPU, and monitor are handled and also be able to carrying out minor installations of programs and software, connection of different hard wares and input devices such as keyboard, mouse, scanner, printer, photocopier, camera, memory devices, modem, internet connection and multimedia projector. Copying of different files and burning disc and transferring of information from one source to the other. The actual use or performance competencies come about when he is able to use the system to work, present and sends out the output. This technical or technological competency also involves

the ability to carry out minor repairs and maintenance or fixing of certain parts or items needed for the functionality of the whole system. It is the technical expertise or know how of the principal in managing the computer system used in administration. They should also be able to understand how each component connects physically to the others and should be able to troubleshoot basic cord connection issues

For any school administrator to work very effectively and efficiently at this information age, the use of ICT must be employed in administration. This is so because the world of social media and digitalized administration have overtaken the analogy age. To this the government of Anambra state has made frantic effort in the computerization of all secondary schools in the state. This is followed with seminars and trainings organized by Post Primary School Service Commission (PPSSC) for principals and teachers in order to empower them in the use of ICT in school administration. It is very imperative for ascertain the level of their ICT competence of principals in management of information system in their schools.

II. STATEMENT OF THE PROBLEM

The development of ICT and use of social media in education in Nigeria and other parts of the world have transformed the education sector with strong impact in administration and in teaching and learning. During the outbreak of the corona virus (COVID-19) pandemic that brought the whole world and all institutions in total lockdown, the use of ICT was the only option to continue life activities including teaching and learning. It was expected that school principals and administrators should work with their computer systems to ensure that the gap created by the lockdown was filled with ICT and online administration but the reverse was the case. Despite the level of awareness and training given to the principals, there were perceived attitude of computer phobia and withdrawal approach in the use of computer in administration. It is common experience today among the principals of the continued use of paper and pencil in disseminating information on their school notice board. Also there are delay and waste of time in locating and processing lots of information needed to be submitted at different offices for decision making. Most at times official information are mutilated or misplaced. This is very embarrassing and sort of worry that this kind of issues are still being witnessed in public secondary schools in Anambra state, when all formal organization have left analogy system to e-administration.

But some people say that most private secondary schools in the state have since maximized the use of these ICT facilities in administration and it has added value to their system because most of their principals are young people who are computer literate. In line with this trend there an urgent need to compare the ICT competency of principals of public and private secondary schools in management of information system in Anambra state.

A. Purpose of Study:
The purpose of this study was to compare the ICT competencies of public and private secondary school

principals in Anambra state for management of information system.

Specifically, the study sought out the following.
- To compare public and private school principals' level of possession of basic computer operation competencies for management of information.
- To compare public and private school principals' level of possession of technical computer competencies for management of information.

B. Research Questions:
1. How comparable are public and private school principals' in the level of possession of basic computer operation competencies?
2. How comparable are public and private school principals' in the level of possession of technical computer competencies?

C. Hypotheses:
The following hypotheses were tested at 0.05 level of significance

1. There is no significant difference in the mean competency scores of public and private school Principals in basic computer applications.
2. There is no significant difference in the mean competency scores of public and private school Principal's ICT technical computer application.

III. METHOD

The design for this study is descriptive survey. The reason for choosing this method is that the researcher made use of information and data collected from a group of people that represented the entire population. The total population of study was 683 principals. This population was made up of 257 public secondary school principals and 426 private secondary school principals, corresponding to the total number of secondary schools in the state. The sample size consists of 417 respondents made up of 158 public and 259 private secondary school principals respectively. This sample was gotten through proportionate stratified random sampling technique 60% of the principals in each education zone were obtained from each of the strata.

The instrument that was used for data collection was achievement test titled Principals' ICT Competency Test (PICT). This test was developed by the researcher to elicit information on the ICT competency of principals in the state. Items of the instrument were generated from the literature and the previous experience of the researcher in the field of computer science. This instrument has two sections, Section A and Section B. Section A of the instrument sought information on demographic data and type of school, while section B comprised 20 test items organized in two clusters B1 and B2. Cluster B1 measured basic computer operation competency and Cluster B2 measured technical computer competency. The instrument was validated by three experts from the Department of Educational Management and Policy, Measurement and Evaluation and Computer Science Education department all in the Faculty of Education, Nnamdi Azikiwe University

Awka. Based on their constructive criticisms and suggestions, the instrument was finally reconstructed into achievement test instead of a questionnaire. To determine the reliability of the instrument, it was pilot tested in Owerri municipal secondary schools in Imo State. 21 principals used were randomly sampled. The data collected were analyzed and result of the pilot testing was used in calculating the internal consistency of the instrument using Kuder Richardson 21 formula and reliability value obtained was 0.71.

The researcher employed the direct delivery technique on the administration of the test with the help of three research assistants who were briefed on how to conveniently administer and collect the answer sheets on the spot. For the private secondary school, the principals were visited in their schools and the test was administered to them. A total number of 417 copies of the test items were distributed and collected. This approach ensured 100% rate of return of the instrument. The test was scored by awarding 1 point to each correct answer and 0 for a wrong answer.

The data collected were analyzed using frequency and converted to percentage. The criterion level of competency is 50%. It means that any item that the respondents' percentage was not up to 50% was considered not competent while those that get up to 50% were considered moderately competent and those above were considered as very competent.

It stands thus:
1-49 % NC = Not competent. (Low)
50-69 % MC =Moderately Competent. (Moderate)
70-100 % VC =Very competent. (High)

The hypothesis was tested using Chi-square at Alpha level of 0.05 level of significance to determine the significance difference between ICT competency scores of public and private secondary school principals in the Anambra state.

IV. RESULTS

A. Research question 1
To compare public and private school principals' level of possession of basic computer operation competencies.

S/N	Public (158)					Private (257)				
	Pass		Failed			Pass		Failed		
	Freq	%	Freq	%	Remark	Freq	%	Freq	%	Remark
• The first step in starting your computer is called	63	39.9%	95	60.1%	DNP	155	59.8%	104	40.2%	PSS
• The default page setup that printsa document vertically is called	54	34.2%	104	65.8%	DNP	170	65.6%	89	34.4%	PSS
• The blinking line, box or arrow on the computer screen is called	67	42.4%	91	57.6%	DNP	175	67.6%	84	32.4%	PSS
• How many words can you type in one minute	95	60.1%	63	39.9%	PSS	183	70.7%	76	29.3%	PSS
• To change from Time New Romans to Arial you must change the----	98	62.0%	60	38.0%	PSS	146	56.4%	113	43.6%	PSS
• word processing is used to display what information	80	50.6%	78	49.4%	PSS	137	52.9%	122	47.1%	PSS
• Saving a document from webpage to your computer is known as	59	37.3%	99	62.7%	DNP	172	66.4%	87	33.6%	PSS
• Word processing feature that allows information to be organized in rows and columns is called	62	39.2%	96	60.8%	DNP	162	62.5%	97	37.5%	PSS
• The part of the computer that controls the flow of information and manages tasks is called	88	55.7%	70	44.3%	PSS	163	62.9%	96	37.1%	PSS
• The package designed for typing, editing and formatting documents is	94	59.5%	64	40.5%	PSS	108	41.7%	151	58.3%	DNP

Table 1: Frequency and Percentage responses on principals' level of possession of basic computer operation competencies by school type.
PSS= Possessed
DNP= do not possess

From the analysis in table 1 above, it shows that public school principals do not possess basic computer operation competency as indicated in items 1, 2, 3, 7 while private school principals showed high level of competency in all the items except in item 10. This means that public school principals were moderately competent while private school principals were very competent. Summarily, public secondary school principals were moderately competent while private secondary school principals werevery competent in basic computer operations for management of information systems.

B. Research question 2

To compare public and private school principals' level of possession of technical computer competencies for management of information

	Public (158)					Private (257)				
	Pass		Failed			Pass		Failed		
	Freq	%	Freq	%	Remark	Freq	%	Freq	%	Remark
• How do you install a printer to your computer	54	34.4%	103	65.6%	DNP	176	68.0%	83	32.0%	PSS
• Your document failed to come out of the printer which of these you should not do	38	24.1%	120	75.9%	DNP	171	66.0%	88	34.0%	PSS
• An uninstaller is a program that does what	69	43.7%	89	56.3%	DNP	68	26.3%	191	73.7%	DNP
• Connecting all computers in various offices to a central printer is known as	59	37.3%	99	62.7%	DNP	81	31.3%	178	68.7%	DNP
• When your computer failed to shut down what else can you do	65	41.1%	93	58.9%	DNP	79	30.5%	180	69.5%	DNP
• In printing your computer reads "printer is offline" what should you do	58	36.7%	100	63.3%	DNP	184	71.0%	75	29.0%	PSS
• To run power hungry program like video software the computer needs a lot of	78	49.4%	80	50.6%	DNP	103	39.8%	156	60.2%	DNP
• Which of the following is always Illegal when you burn a CD	49	31.0%	109	69.0%	DNP	173	66.8%	86	33.2%	PSS
• When you transfer pictures from phone to the computer system is	46	29.1%	112	70.9%	DNP	72	27.8%	187	72.2%	DNP
• To scan a document you need to do all except	79	50.0%	79	50.0%	DNP	205	79.2%	54	20.8%	PSS

Table 2: Frequency and Percentage on principals' level of possession technical computer competencies by school type

The analysis in table 2, indicates that public secondary school principals did not possess any technical computer competency in all items, while private secondary school principals were not competent in Items 13, 14, 15, 17 and 19 but are competent in the rest of the items. This means that public secondary school principals were not competent technically while private secondary school principals were moderately.

• **Hypothesis one:**
There is no significant difference in the scores of public and private secondary school principals' on their level of possession basic computer operation competencies.

Source of Variation	N		R	p-value	Remark
Public sec. school	417		0.513		
Private sec. school				0.00	Sig

Table 3: Chi-square analysis of principals' level of possession basic computer operation competencies by school type

The analysis in table 3 shows that there is a significant difference in the scores of public and private school principals on their level of possession of basic computer operation competencies as calculated value r=0.513 had p-value less than the stipulated 0.05 level of significance. The null hypothesis of no significant difference was therefore rejected.

• **Hypothesis two:**
There is no significant difference in the scores of public and private secondary school principals' on their level of possession technical computer competencies

Source of Variation	N	R	p-value	Remark
Public sec. school	417	0.644		
Private sec. school			0.00	Sig

Table 4: Chi-square analysis of principals' level of possession technical computer competencies by school type

The analysis in table 4 shows that there is a significant difference in the scores of public and private school principals on their level of possession of basic computer operation competencies as calculated value r=0.644 had p-value less than the stipulated 0.05 level of significance. The

null hypothesis of no significant difference was therefore rejected.

V. DISCUSSION OF FINDINGS

A. *Level of competency possessed by public and private secondary school principals by in basic*
- computer operation.

The analysis of findings from data presented in table one revealed that public school principals were moderately competent while private school principals were very competent in basic computer operations for management of information systems. This may be because of the fact that many schools in the state both public and private secondary benefitted from the provision of computer systems donated by the state government coupled with the series of workshops and seminars organized by PPSSC Awka for the principals in the state. This finding is in consonant with Obi (2010) in a study "utilization of ICT in enhancing the quality of guidance and counselling programs in the state secondary schools' he was of the view that the provision of computers and ICT equipment in secondary schools have impacted on administration and helped in meeting up with the current trend in ICT in education. Ogbo, Nkoli and Adali (2012) supported this finding in a study "An assessment of teacher perceptions of principals' technological leadership skills' by saying that principals now act as facilitators of change who pursue new technological advancements and innovations that benefit learning and administration. This new technologies are the use of computer system and other related applications in teaching and learning. Thus the principals' role becomes crucial in efforts to acquire and implement new technologies within public school setting. Nnamani (2012) supporting this, reported in a study that it is not quite surprisingly given the prevalence and use of computer and mobile phone applications through the internet connection in all sphere of life such as banking, education, marketing and other sectors for solving problems, computer literacy cannot be over emphasized. But on the contrary, Ughamadu (2008) in his study says that evidence has shown that majority of principals are not computer literate and cannot even operate a computer and do not have personal computers therefore cannot be ICT competent. Omeje (2013) in her study collaborated the views of Ughamadu when he said that even though computers and workshop have been organized for teachers, it does not necessarily make them competent in the use of computer in office duties because evidences a bound that prove otherwise especially among the public schools. It is the private schools that have more interest in the use of computer in their schools than the public schools.

From the above discussions and the analysis they shows that public secondary school principals possess moderate level of competency while private secondary school possess high level of competency in basic computer operation as a result of much effort and demand of their office.Also the result on test of significance indicates that significant difference in competency level of public and private secondary school principals.

B. *Level of competency possessed by public and private secondary school principals' in computer technical applications.*

The result of the analysis in research question two reveals that public secondary principals are not competent which private secondary principals are moderately competency in the computer technical applications. This competency is measuring the technical know-how of a principal in using a computer system. The present study have found out that carrying out minor regular repairs and replacement of ICT peripherals, software packages and other facilities were not possible for the public secondary principals. Okoli (2012) in a study supported this finding by saying that the impact of computer and information technology has been insignificant in Anambra state secondary school and lack of technical skills has very much affected their continued use of the computer system. Therefore suggested that principals should be equipped with the technical competence to be compliant. This is not surprising since computer operational skills are pre-requisite to acquiring other ICT competencies. This finding is in support of the findings of Almas and Nilsen (2006) they observed that technical skills were the first step to acquiring knowledge about ICT. Gulbahar and Guven (2008) found that the main barrier to technology implementation is insufficiency of teachers' technical knowledge to prepare materials base on this technology. But on the other hand the study of Saud (2005) identified computer technical skills as the lowest computer technology educational needs of Malaysia vocational and technical teachers. Possibly, because technical teachers in Malaysia possess these skills already and need more advanced skills in ICT. Ugo (2009) in his study says whereas many principals in Nigeria secondary school are yet to get acquainted with the rudiments of ICT but most of their counterparts in the private sectors who are young and computer literate are able to carry out minor technical works in their system. This result is very unfortunate as every computer user ought to know the little technical rudiments of computer maintenance. Such as how to install some programs, copy or burn disk or be able to solve little shut down problems when the computer starts trouble shooting. Anyaocha (2009) supports this finding by saying that knowing is by doing and practice makes perfect. Many people who work with computer at least should know how to fix little technical issues with the systems they work with. Iwunna (2010) in his study disagreed with this finding by saying that the level of most of those who work with computers in offices are still at a minimal level of operation that does not require technical skills but are only interested in typesetting.

From these discussions, and the findings of this study it is not misleading to say that the private secondary school principals possess moderate level of competency while the public school principals possess any competence in technical application of a computer. The test of significance indicates that there is significant difference in the competency scores of public and private secondary school principals in the computer technical application.

VI. CONCLUSION

Management Information System which is a collection of sub-systems which are interconnected with each other to work together in order to process data into information needed by management in decision making. These sub-systems are the technologies and management techniques applied to produce, analysis, communicate and make information available as at when and where it is required.ICT therefore, uses modern day technology software packages to store, process and retrieve information needed in management of organizations. It focuses on electronic generation, storage, retrieval, utilization and protection of information for future references. Acquiring basic computer operational skills is the bed rock to acquiring other ICT competencies.

Therefore, for an effective management of information system in a school organization certain levels of ICT competencies are required of the principals. The competence factor plays an important role in the implementation of management information systems, the competence of the user can be said to balance with the management information system applied by the organization. Competency here is known as a combination of awareness, skills and attitudes that enables an individual to perform a job to the standard required for a successful performance in information management system. There is an urgent for all secondary school principals in the state to acquire and embrace the use of ICT of an efficient and effective administration as this digital age.

VII. RECOMMENDATION

The following recommendations have been made based on the findings and conclusions made in this study.

- Principals of secondary schools should liaise with computer professionals and organize in- house computer seminars and workshops in their schools. This will enhance their knowledge, skills and competencies in the use computer thus diffuse their computer phobia.
- Again all teacher education preparatory programs must, as a matter of urgency be reviewed to incorporate ICT pedagogy so as to meet the needs and interest of all category of teachers. Since type of institution does not affect the ICT competency need.
- The management of secondary education in the state (PPSSC) should as a matter of necessity mount in-service trainings, seminars, workshops and other programs that will enhance the ICT competencies of the principals in the state.
- Laptop or desktop computers should be made available to the principals at a reduced price or in of form of loan to be gradually deduced from their salary to enable them, learn to use them in administration.

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