
PERCEPTION OF SCHOOL ADMINISTRATORS ON THE ROLE OF ICT IN MANAGEMENT OF TECHNICAL COLLEGES IN ADAMAWA STATE

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ABSTRACT

The main purpose of the study is to investigate the perception of school administrators on the role of ICT in management of technical colleges in Adamawa State. Three research questions were formulated to guide the study. Descriptive survey research design was adopted for the study. The population of the study consisted of 42 school administrators and managers of technical colleges. There was no sampling for the study because the population was manageable. The instrument used for data collection was a structured questionnaire of 46 items. The instrument was based on Likert-type scale of strongly Agree (SA), Agree (A), Undecided (UD), Disagree (D) and strongly Disagree (SD). The instrument was validated by two specialists in Technology Education Department, Modibbo Adama University of Technology (MAUTECH) Yola. The reliability of the instrument was determined by using the test-retest techniques; which yielded reliability coefficient of 0.87 was obtained using the Pearson product moment correlation formula. The instrument was administered to school administrators and managers of the three state owned technical colleges and collected back by the researcher and research assistants after completion. Statistical Package for Social Science (SPSS) was used to analyze the data for the study. The findings of the study revealed that Adamawa State technical colleges require adequate ICT facilities as identified in the study for effective administration and management, ICT plays major role in administration and management and there are benefits of using ICT in administration and management of technical colleges. Based on the findings of the study, the following recommendations were made: - Adamawa State government should provide state owned technical colleges with available ICT facilities, and secondly, school administrators should integrate few ICT facilities in administration and management of Technical Colleges in Adamawa State.

INTRODUCTION

Management refers to the extent to which both human and material resources are effectively coordinated for the attainment of specific goals (Abdullah, Olokoba and Omosidi, 2014). It can also be described as the art of getting things done through and with people in formally organized groups to accomplish desired goals and objectives using available resources efficiently and effectively (Odo, 2012). According to Bello (2017) management is an inevitable practice of every human society that guarantees qualitative mode of life and peaceful coexistence among dwellers. Abdulkareem (2016) explained the term management as art and science which is concerned with organization and controlling of resources to achieve organizational goals and objectives maximally with minimum efforts. Abhdullahi, Olokoba and

Omosidi(2014) described management as a comprehensive effort to direct, guide and integrate human striving, which is focused towards specific goals that involves coordination, planning organization and evaluation. School management centers on promoting, utilizing and sustaining an enabling environment that will ensure effective teaching and learning process (manga, 2016). School management is a term used to describe the techniques and expertise of efficient organization, planning, direction and control of human and material resources in order to attain goals of teaching and learning (Abdullahi, Olokaba and Omosidi, 2014). Bakwa, Oduwaiye and Yisa (2016) identified eight main objectives of implementing school management techniques. These include:-

- i. Enhancing School governance for effective education service delivery.
- ii. Promoting Mechanism for accountability in school system
- iii. Encouraging harmonious relationship between the school and immediate community
- iv. Promoting active participation in planning, monitoring and evaluation of school progress.
- v. Promoting and supporting schools to achieve their set objectives within limited time
- vi. Creating greater awareness and feedback to the target community.
- vii. Supporting effective information transmission and management.
- viii. Promoting personnel records and ease of retrieval

In view of the above objectives of school management, technical college was considered for this study. According to Danjuma (2014) Technical College was specifically designed to prepare individual to acquire manipulative skills, basic scientific knowledge and attitude required of a craftsman and technician at sub-professional level. Technical college is an institutional setting where facilities such as workshops, equipment, laboratory, machine tools and consumable materials need adequate management because they are being used from time to time. Therefore, there is need to restructure the administration and management of technical colleges in the north-eastern Nigeria, considering the prevailing lost of records, fire outbreak and insurgency activities experienced over the years. To achieve the above goal, there is need for ICT integration in school administration and management, in order to bridge the existing technology gap.

ICT stands for information and communication Technology. Idowu and Esere(2013) described ICT as a computer based technology for the storage, accessing and communication of information. Shambirna'ah (2016) defined ICT as electronic devices and sophisticated technologies used for sending, retrieval, storage, updating and dissemination of text, graphic and verbal information through computer,

internet, smart phone, radio, and television among others. The emergence of Information and Communication Technology (ICT) has changed the school management system in developed countries such as China, India, U.S.A, among others (Chaudhari, 2013). ICT facilities plays an important role in improving data collection, communication, recording, teaching and learning process, computation of results, retrieval of information, sharing of ideas, assessment of examination, among others (Adegbemile,2012). Furthermore, successful use of ICT facilities in schools can have an immediate positive impact, by creating more dynamic information among students, teachers, parents, school administrators, and stakeholders (Mustafa and Summak, 2011). Having recognized the role of ICT in school management, it is necessary that ICT facilities should be properly utilized in the management of technical colleges. Thus, this study intends to investigate the perception of school administrators on the role of ICT in management of technical colleges in Adamawa State.

STATEMENT OF THE PROBLEM

School administrators and managers are finding difficulties in maintenance of statutory records considering the increase in students' enrolment, fire out break and insurgency activities. The upsurge of the insurgency has destroyed the school record system and imposed negative effects on school management in the North-Eastern Nigeria (Umaru and Mohammed, 2017). The most significant of these challenges includes lose of financial records, miscalculation of marks, Omission of exam records, missing of staff and students records documented over the years. However, the rapid growth of modern technology has brought remarkable changes in educational institution. Therefore, the emphasis on ICT in education called for the integration of ICT in school administration and management.

PURPOSE OF THE STUDY

The main purpose of the study is to investigate the perception of school administrators on the role of ICT in management of technical colleges in Adamawa State. Specifically, this study intends to:-

1. Identify the opinions of the administrators and managers on the ICT facilities that could be used for school administration and management.
2. Identify the opinions of the administrators and managers on role of ICT facilities in school administration and management.
3. Identify the opinions of the administrators and managers on benefits of ICT facilities in school administration and management.

RESEARCH QUESTIONS

The following research questions were formulated to guide the study.

1. What are the perceptions of the administrators and managers on ICT facilities that could be used for school administration and management?
2. What are the perceptions of the administrators and managers on the role of ICT facilities in school administration and management?
3. What are the perceptions of the administrators and managers on the benefits of ICT facilities in school administration and management?

METHODOLOGY

A descriptive survey research design was adopted for the study. The survey covered all the three state owned Technical colleges in Adamawa State. A total of 42 respondents which comprised of principals, vice principals, exam officers, bursars, among others were used for the study. There was no sampling for this study because the population was manageable. The instrument used for data collection was structured questionnaire of 46 items based on five points rating scale of strongly Agree (SA), Agree (A), Undecided (UD) Disagree (D) and Strongly Disagree (SD). The instrument was validate by two specialists in technology education department, Modibbo Adama University of Technology (MAUTECH), Yola .The instrument contain section A, B and C. Section A elicited information on ICT facilities that could be use for school administration and management, section B elicited information on the role of ICT in school administration and management and section C elicited information on the benefits of ICT in school administration and management. The instrument was administered to the respondents and was collected back after completion by three research assistants. Data collected for the study was analyzed using Statistical Package for Social Science (SPSS) to compute mean for each research question. All items with mean rating of 3.50 and above were agreed, while items below 3.50 were disagreed.

RESULTS AND ANALYSIS

The results were presented in accordance with the research questions as shown below.

Research question 1

What are the perceptions of the administrators and managers on ICT facilities that could be used for school administration and management?

Perception of School Administrators on the Role of ICT in Management of Technical Colleges in Adamawa State

Table 1: mean response of school administrators and managers on the ICT facilities that could be use for administration and management of technical colleges in Adamawa state

S/N	ITEM	Mean Remarks
1	Internet connectivity	3.54 Agree
2	Power paint package	3.61 Agree
3	Closed circuit television	3.50 Agree
4	Microphones	3.03 Disagree
5	Computers	4.86 Agree
6	Printers	3.90 Agree
7	Scanner	3.51 Agree
8	Photocopier	4.00 Agree
9	Website /e-mail	3.56 Agree
10	Data base system	3.67 Agree
11	Digital camera	3.72 Agree
12	Videoconferencing Technology	3.44 disagree
13	Handset	3.93 Agree
14	Auto-CAD	4.05 Agree
15	DVD disc	3.04 disagree
16	Over-head projector	3.55 Agree
17	Grand mean	3.68 Agree

Data in table one revealed that respondents disagreed with item 4, 12 and 15 with mean rating of 3.03, 3.44 and 3.04 respectively. Other items under ICT facilities that could be used for school administration and management were agreed with mean rating ranged from 3.50 to 4.86. The grand mean 3.68 implies that the above ICT facilities are needed for enhancing administration and management of technical colleges in Adamawa State.

Research question 2

What are the perceptions of the administrators and managers on the role of ICT facilities in school administration and management?

Table 2: Table 1: mean response of school administrators and managers on the role of ICT in the administration and management of technical colleges in Adamawa state

S/N	Item	Mean Remarks
17	Online registration of external exams	4.00 Agree
18	Classroom instruction delivery	3.54 Agree
19	Information transmission	3.67 Agree
20	Data documentation	3.51 Agree
21	In house training	3.45 Disagree
22	Monitoring and control	3.52 Agree
23	Displaying of information	3.86 Agree
24	Reproducing of document	4.20 Agree

25	Typing of document	4.16 Agree
26	Data analysis	3.94 Agree
27	Data capturing	4.33 Agree
28	Computation of examination	4.55 Agree
29	Budget planning	3.48 Disagree
30	Decision making	3.60 Agree
31	Easy designing of structures	4.03 Agree
	Grand Mean	3.86 Agree

Table 2 revealed that respondents disagreed with item 21 and 29 with mean rating of 3.45 and 3.48 respectively. The rest of the items under role of ICT in school administration and management were agreed with mean rating ranged from 3.51 to 4.55. The grand mean 3.86 means that ICT has major role to play in administration and management of technical colleges in Adamawa State.

Research question 3

What are the perceptions of the administrators and managers on the benefits of ICT facilities in school administration and management of technical colleges?

Table3: Mean response of school administrators and managers on the benefits of ICT in school administration and management of technical colleges in Adamawa State.

S/N	Item	Mean Remark
32	Fast transmission of information	4.90 Agree
33	Easy access to information	3.86 Agree
34	Accuracy in data analysis	3.73 Agree
35	Updating of school records	3.54 Agree
36	Easy checking and sorting of files	4.06 Agree
37	Complement instruction	3.52 Agree
38	Assist in time management	3.53 Agree
39	Enhance quality delivery	3.74 Agree
40	Encourage critical thinking	3.60 Agree
41	Offers unlimited means of achieving goals	3.54 Agree
42	Minimize long queues of registration	3.64 Agree
43	Minimize losses of revenue	2.56 Disagree
44	Minimize frequent missing students' results	3.53 Agree
45	Minimize frequent missing of files	3.56 Agree
46	Minimize omission of exam results	3.52 Agree
	Total	3.59 Agree

Table 3 reveal that respondents disagreed with item 43 with mean rating of 2.56. Other 15 items under benefits of ICT in school administration and management agreed with mean rating ranged from 3.52 to 4.06. The grand mean 3.59 implies that school administration and management drives benefits of ICT.

SUMMARY OF THE MAJOR FINDINGS

The findings of the study were presented in accordance with the research questions:

1. All the ICT facilities identified in the study are needed for effective administration and management, except item 4 and 12.
2. Respondents agreed with 13 out of the 15 items identified on the role of ICT in administration and management of Adamawa state technical colleges.
3. Respondents agreed with 14 out of 15 items identified on the benefits of ICT in administration and management of Adamawa State technical colleges.

DISCUSSION OF FINDINGS

The findings of this study were discussed based on the research questions of the study. The findings with regards to research question one revealed that technical colleges in Adamawa State require all the ICT facilities as identified in the study for effective administration and management. This finding agrees with those of Odeh and Ogwuche (2015) who conducted similar study on ICT facilities in management of colleges of education in Nigeria and found that ICT facilities such as computer, internet, printer, scanner, photocopy machine, close-circuit television and microphones are used in management of colleges of education. This study also agrees with the findings of Mojgan, Kalaivani, Saedah and Simin (2013). These findings imply that technical colleges need ICT facilities for effective administration and management. The finding with respect to research question two revealed that respondents agreed with the role of ICT in school administration and management as identified in the study. These findings concur with that of Nwankwo and Unachukwu (2012) who revealed that the role of ICT in school administration and management include Pay roll and financial accountability, inventory records, personnel records, maintenance, among others. Adegbanile (2012) also pointed out that ICT plays major role in improving data collection, access to information, planning and management, staff documentation, among others. This finding therefore means that ICT plays major role in school administration and management.

The findings with respect to research question three reveal that respondents agreed that ICT has benefits in school administration and management as identified in the study. These findings agree with Abdullahi, Olakoba and Omosidi (2014) who revealed that ICT benefits include time management, accurate data analysis, complementing instruction, among others. They further emphasized that ICT aid in equipping school administrators with critical thinking that will enable them to face and cope with the challenges of utilization of limited school resources for the purpose

of achieving educational goals. This finding implies that those school administrators' benefits from ICT in terms of administration and management.

CONCLUSION

Based on the findings of the study, it is concluded that most of the ICT facilities identified by the study are required for the effective administration and management. The respondents also agreed that ICT facilities play major role in the administration and management of technical colleges. Finally, there are benefits of using ICT facilities in administration and management of technical colleges in Adamawa State.

RECOMMENDATIONS

The following recommendations were made based on the findings of this study:

1. Adamawa State government should provide State owned technical colleges with available ICT facilities.
2. School administrators should integrate few ICT facilities available in the school for effective administration and management.

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