THE IMPACT OF ADMINISTRATORS' USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES (ICTs) ON EFFECTIVE ADMINISTRATION IN PUBLIC SECONDARY SCHOOLS IN MOMO DIVISION

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Abstract

This study sought to examine the impact of administrators' use of ICTs On effective administration in public secondary schools in Momo Division in the North West Region of Cameroon. To achieve the objectives, four research questions were used to guide the study. The survey research design was used for the study. The purposive sampling technique was used to select the schools for the study. A sample of 100 respondents (50 principals and 50 vice-principals) was drawn by simple random sampling technique. A structured questionnaire designed using the 5-point Likert Scale was used to collect data. Provisions were made for respondents' personal views and opinions. Descriptive statistics were used precisely observed frequencies, mean scores and standard deviations to answer the research questions. The findings revealed that most administrators of public secondary schools in Momo Division use ICT tools like computers, phones, printers, internet, photocopy machines and television in executing administrative duties. They have a positive attitude towards the use of technologies in administration with most of them commending its use for speed, time saving, effective storage and retrieval of administrative documents irrespective of the volume, accuracy, legibility, record checks, and comparative statements for more efficiency in administrative work. Administrators have some challenges amongst them are frequent power cuts, cost of purchase and maintenance of ICT tools and inadequate ICT training, seminars and workshops. It was recommendation that the government and other stake holders should exploit the possibility of

providing ICTs to the schools even at lower costs. Also, the government should institute computer training in all teacher training colleges and other higher learning institutions.

Key words: Administrators' Use, Information and Communication Technologies (ICTs), Effective Administration, Public Secondary Schools, Momo Division.

Introduction

Information and Communication Technology (ICT) is an extensional term for Information Technology (IT) which stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary enterprise software, middle ware, storage and audio-visual systems, which enable users to access, store, transmit and manipulate information. The term ICT is also used to refer to the convergence of audio-visual and telephone networks with computer networks through a signal cabling or link system. There are economic incentives (huge cost saving due to elimination of the telephone network) to merge the telephone network with the computer network system using a single unified system of cabling signals distribution and management (Urama, Onwuka & Ngozi, 2013).

Nowadays, ICT is ever-present, with over three billion people having access to the internet. With approximately 8 out of 10 internet users owning Smartphone, information and data are increasing by leaps and bounds. This rapid growth, especially in developing countries has led ICT to become a keystone of everyday life in which life without some facets of technology renders most of the clerical work and routine tasks dysfunctional. ICTs play a role in facilitating accelerated pluralism in new social movements today. The internet is accelerating the process of issue group formation and action. ICTs are tools for enabling social movement leaders and empowering dictators in effect promoting social change. ICTs can be used to gamer grassroots support for a cause due to the internet allowing for political discourse and direct interventions with state policy as well as change the way complaints from the populace are handled by government (Urama, Onwuka & Ngozi, 2013).

Many communities in the world today look up to schools for the nurturing of those innovative ideas which transform the technological, economic, political and socio-economical dimensions of peoples' lives, towards development. With rapid changes within society and radical transformation in the way people acquire knowledge, new teaching paradigms are required. They tune educational systems to modern times and ensure quality training for large number of persons (UNESCO, 2005).

Administrators' Functions and Use of ICTs

Becker (1993) opined that leadership is more important for the successful integration of ICT in schools today than it was before. According to Becker, there are three roles played by the school administrator namely: the role model, instructional leader and visionary role. Administrators function as role models when computer technology is applied to administrative and managerial tasks. As instructional leaders, they facilitate teachers' integration of computer in teaching and learning. In the form of a visionary role, they envisage a context for technology in school and are able to comprehend how learning can be restructured to empower teachers.

Over the years, administrative work has been print-based. Most documents were kept in the form of records. These records provided information on the past, present and anticipated future activities of the school. This included relevant information from the external environment, which aided decision-making. The information kept were in the areas of instructional programs and activities, staff and students, personnel services, physical facilities,

finance, supervision and interaction with stakeholders outside the school. The administrators could not perform their duties with accurate, timely, sufficient and relevant information. The deficiencies associated with storage, preservation and presentation of large volumes of information in paper form made managerial processes very cumbersome. Consequently, alternative methods provided by ICTs became very imperative. ICT is technology-based, knowledge-driven and indispensable in the present age. As such, school administrators have enormous responsibility to initiate and implement changes through the use of ICT (Schiller, 2003).

Molindo (2007) found that school administrators who see the usefulness of ICT in their daily tasks are more likely to support and encourage the use of computer technologies in their schools and classrooms. Students are becoming more computer-inclined than their teachers and administrators. As such, school teachers, counselors and administrators have to redouble their efforts in mastering the use of modern educational technologies if they have to remain relevant, productive and effective in this 21st century school system. According to Molindo, if we do not train school administrators to be computer literate, how can we expect the principal to manage computer literate students and teachers?

Aduwa-Ogiegbaen and Lyamu (2005) posited that in a rapidly changing world of global market competition, computerization and increasing democratization, education is necessary for individuals to have the capacity and capability to access and apply information. This must find bearing in ICT in the global village. Maki (2008) stated that ICT enables managers and administrators to update and record changes in the school environment, produce documents regarding operational activities of the school, support decision and decision-making. ICT systems present reality, and communicate data by exchanging messages and data between schools, staff and other schools or organizations.

Visscher (2003) also stated that computers can help school managers in finding creative solutions for complex allocation, timetable construction and supporting them in carefully monitoring how the school operates. School information systems (SISs) can provide managers with information required for effective administration through informed planning, policy-making and evaluation. In addition, SISs can assist in improving the efficiency and effectiveness of schools. Secondary school administration entails working with and through teachers, non-teaching staff and students to get things done effectively. It is more concerned with the institution, its goals, policies and execution of these policies. In school administration, according to Jaiyeoba (2006), the primary aim has to do with the improvement of teaching-learning and all the activities of the school, which are performed by the administrators in secondary schools. ICT facilities are well suited for information processing tasks because of their speed, accuracy and ability to store large data in an accessible form. According to Osuagwu (2009), school systems have grown in size and in scope of their activities. Computer technology has provided mechanism for administrators to keep abreast of increasing demands for current and documented information. Grades assigned to students must be recorded in some fashion and these records must be easily and readily accessible to appropriate individuals.

The place of ICT in secondary school administration therefore cannot be over emphasized considering the problems of over-enrollment of students, shortage of instructional materials and human resources, inadequate infrastructure coupled with poor funding of secondary education.

Administrators' Attitudes towards the Use of ICTs in Secondary Schools

The personal willingness of school administrators to integrate ICT in administration is crucial for a school to be developed technologically. The rapidly changing nature of ICT and the continual bombardment of new games, software, faster processors, wider screens, iPods and advances in mobile technology have meant that schools,

especially secondary school administrators more than ever before, plan for future use of ICTs. School administrators as leaders must be able to articulate an institutional organizational vision that assumes widespread access to information and services through networks (Katz, 2002).

School administrators are reluctant to use ICTs, especially computers and internet. Rakes and Dawson (2003), identified some of the reasons for this reluctance: poor software design, skepticism about the effectiveness of computers in improving learning outcomes, lack of administrative support, increased time and effort needed to learn the technology, how to use it for teaching and the fear of losing their authority in the classroom as it becomes more learner-centered. These are all issues that must be addressed by both pre-service teacher education and in-service teacher professional development programs, if schools and other educational institutions are to fully exploit the potential of computers and the internet as educational tools.

Serhan (2007) observed that when school administrators feel comfortable using the technologies and realize their possible applications in education, then they can help facilitate their implementation into the curriculum. A positive attitude, starting from school administrators, can spread to teachers in the school, hence the classrooms. Training workshops help raise school leaders' awareness and build their confidence in abilities to use technology. It therefore facilitates its adoption as a complementary part in the curriculum.

During the past two decades, there has also been a tremendous improvement in ICTs in Momo Division, with the advent of social media like face book, internet affordable and other friendly computers. Thus, ICT becomes very essential for the generation of quality information. Its management is required for effective decision-making in educational administration amongst others. The application of ICTs may help in increasing the success of the school system in Momo Division. This implies that the administrators of Momo are the key players in maintaining and coordinating other parts of the educational system. ICT is formulated to ease work. Therefore by just a click of a button, administrators of Momo Division can play their role effectively (Fonkeng & Tamajong 2009; Tah, 2017).

Statement of the Problem

It has been observed with dismay, the ineffective use of ICTs by most administrators. Although many institutions make announcements for meetings and other administrative issues through letter writing, they sometimes reach the members late or never reach at all because of the delays in typing, printing or by the distributor. Most documents are left in the care of the secretaries, as most school principals rely heavily on them to offer these vital technological skills and assignments. The rapid increase in population of students and staff, make administrators' duties more challenging especially when they fail to make effective use of ICTs at their disposal. Some administrators use the television to watch news, film slots and other social programs while at work. Some, who possess computers, have little knowledge on how to operate them for administrative purposes. Most of them instead use the computers to play music and games in their offices.

Administrators should competent in the use of ICTs in executing their functions. They should have skills to use ICTs in reporting, monitoring and tracking, curriculum planning, registration and admission, school calendar, library, database timetabling, student and personnel management, financial control and examination administration. In fact, they ought to use technology to help them to deal with some challenges they face such as to work together and share information to promote school-community relationship. Few studies have been carried out on administrators' use of ICTs for effective administration but none in Momo Division. This discrepancy probed the researchers to investigate the impact of administrators' use of ICTs on effective administration in Momo Division of North-West Region of Cameroon.

Research Questions

The following research questions guided the study:

1. What are the various ICT tools used by school administrators in public secondary schools in Momo?
2. What is the attitude of administrators towards the use of ICTs in administration?
3. How does the use of ICTs affect administrators' functioning with regard to pedagogic, financial, administrative and social functions?
4. What are the challenges faced by administrators in using ICTs in administration?

Research Design

The survey research design was used for the study because data from a few members of the group considered to be a representative of the entire group were collected and analyzed. The researcher used the quantitative and qualitative research design strategy for the study. It entailed low cost, convenient data gathering and was ideal for scientific research since it provided all the participants with a standardized stimulus.

Area of the Study

This study was carried out in Momo Division in North-West Region of Cameroon. The North-West Region is divided into seven Divisions which are: Mezam Division, Momo Division, Bui Division, Boyo Division, Ngoketunjia Division, Menchum Division, and Dunga-mantung Division.

Momo Division is made up of five sub-divisions which are: Mbengwi central sub- division as the head quarter, Njikwa sub-division, Widikum sub-division, Batibo sub-division and Ngie sub-division. Momo division is divided into four clans which are: the Menemo, the Widikum, the Ngembas and the Moghamo. They all originated from Widikum.

Momo division has 54 public secondary schools with 54 principals and 52 vice-principals. There are 11 Government Technical Colleges and 33 Secondary Schools with no vice-principals. The most important is the Government Bilingual High School (GBHS) Mbengwi with 5 vice-principals, created in 1973. There are also many technical secondary schools with the outstanding Government Technical High School Njindom in Mbengwi with 5 vice-principals, created in the year 2002. Batibo sub-division has 19 secondary schools as the highest with Government High School (GHS) Guzang having 5 vice-principals, (see appendix for details). There is also the Mbengwi Council Library. The researcher as a teacher, had opportunity to work in most of the sub-divisions, like Batibo, Ngie and Mbengwi thus, she had opportunity to notice the ineffective use ICTs by the administrators of this area.

Population of the Study

The target population was 106 principals (54 principals and 52 vice-principals) of public secondary schools in Momo division. This population was chosen because the principals and their assistants are the gatekeepers (overseers) of all what operates in the schools, especially in the administration. They are responsible for effective administration and the use of ICT tools was identified as one of the means to achieve this objective in the schools in Momo division.

Sample Size and Sampling Technique

The sample for this study was made up of 50 principals and 50 vice-principals who were randomly drawn from the list of secondary schools in Momo Division. The purposive sampling technique was used to select 52 principals and 52 vice-principals to form the accessible population of 104 participants. The purposive sampling technique was used at this level because only public secondary schools which had administrators who use ICTs in

administrative work were sorted from the various secondary schools in Momo. This was also to ensure that all the sub-divisions were included in the study especially as some sub-divisions had very few public secondary schools as compared to others. From the 52 schools that were selected, the simple random sampling technique to select 50 schools which became the sample schools of the study. For convenience, the 50 vice-principals of those schools automatically became the sample size for vice-principals.

Table 1: Distribution of Target, Accessible, Sample population

No.	Sub division	Principals			Vice-principals		
		Target	Accessible	Sample size	Target	Accessible	Sample size
1	Batibo	19	19	19	28	28	28
2	Mbengwi	14	14	14	15	15	15
3	Njikwa	6	5	4	2	2	2
4	Ngie	8	8	8	1	1	1
5	Widikum	7	6	5	6	6	4
	Total	**54**	**52**	**50**	**52**	**52**	**50**

Data Collection Instrument

A questionnaire was used for data collection consisting of items relating to the purpose of the study. The respondents were required to answer by writing their responses or ticking on corresponding options of their choices. The questionnaire was used because the study needed factual information and it is the most widely used instrument for data collection in the social sciences. It was the most appropriate for the respondents considering the busy schedule nature of administrative work and it could be answered within a short time. The instrument yielded both quantitative and qualitative data. The questionnaire was a 5-point Likert scale which consisted of closed and open-ended items, and was divided into sections. Section A, consisting of demographic information. Section B, carries information about various ICT tools used by school administrators. Sections C to E consist of attitude scale constructed to measure attitudes of administrators towards the use of ICTs in effective administration.

Validation and Reliability of Instrument

In order to ascertain validity the questionnaire was given to experts to read through and make the necessary corrections and suggestions on grammar, organization of questions and closeness of the items to the objectives. Coefficient of validity Index (CVI) was computed as 0.75 and the rule is that CVI ≥ 0.7, this implies that the instrument was accepted valid. Coefficient of validity Index.

To ensure reliability of the instrument, the test-retest procedure was used. A pilot test with administrators who are part of the population and not of the sample was done and repeated after two weeks using same administrators. The results obtained at the different periods were compiled and computed using the Crombach Alpha formula to measure the internal consistency of the instrument. The internal consistency reliability was $\alpha = 0.80$, high enough for the instrument to be used for the study.

Procedure for the Administration of Instrument

The researcher visited the Divisional Delegation for Secondary Education Momo and booked for audience to see the delegate. The delegate then gave the date and time for the researcher to attend the meeting with principals and vice-principals during which copies of the questionnaire were given out. The respondents filled the questionnaires on-the-spot and returned them.

Method of Data Analysis

The descriptive statistics was used to analyze data collected. The returned questionnaires were coded statistically. The coded data was input into the computer and the analysis carried out accordingly using the mean scores which is the most indicated measure of central tendency when accuracy and further statistical analysis are required. Measure of variability of data was done using the standard deviation which is the most commonly used and reliable estimate of variability as it is employed in numerous other statistical calculations.

Decision Rule

The study used a 5-point Likert scale labeled; Undecided (U) = 0, Strongly Disagree (SD) = 1, Disagree (D) = 2, Agree (A) = 3 and Strongly Agree (SA) = 4. The scale value for the decision rule was calculated as thus:

Decision value = $\dfrac{0+1+2+3+4}{5} = \dfrac{10}{5} = 2$

Therefore, the decision rule for the test is 2; meaning that the mean of a survey statement is accepted if it is equal to or greater than 2 and less than 2 is rejected.

Presentation of Findings and Discussions Based on Research Questions

Research Question One: What are the various ICT tools used by school administrators in public secondary schools in Momo Division?

Table 2: Distribution of availability of computer laboratory, ICTs frequency of usage, level of training and tools in schools of Momo Division

No.	Description of Item	Analyses		
I	**Availability of computer laboratory and usage**	**Yes**	**No**	**Total**
a	Availability of a computer laboratory	39	61	100
b	Use of a computer in executing administrative duties	68	32	100
II	**Frequency of use of ICT tool for administrative purposes**	**Yes**	**No**	**Total**
c	Once	38	62	100
d	Twice	19	81	100
e	Thrice or more	24	76	100
f	Daily	19	81	100
III	**level of ICT training**	**Yes**	**No**	**Total**
g	Not trained at all	25	75	100
h	Informal training	67	33	100
i	Diploma in computer	5	95	100
No.	**Description of Item**	**Yes**	**No**	**Total**
j	In addition to your administrative work, do you teach some classes	100	0	100
IV	**ICT tools available in schools:**	**Yes**	**No**	**Total**
a	Telephones	100	00	100
b	Internet facilities	85	15	100
c	Printers	20	80	100
d	Scanners	20	80	100
e	Radios	100	00	100
f	Projectors	10	90	100

g	Televisions	100	00	100
h	Cameras	100	00	100
i	Photocopy machines	20	80	100
j	Bell	95	05	100
k	Notice board	100	00	100
l	Suggestions boxes	100	00	100
m	Bill boards	100	00	100

For better understanding and interpretation of the analyses, the data are presented on figures below.
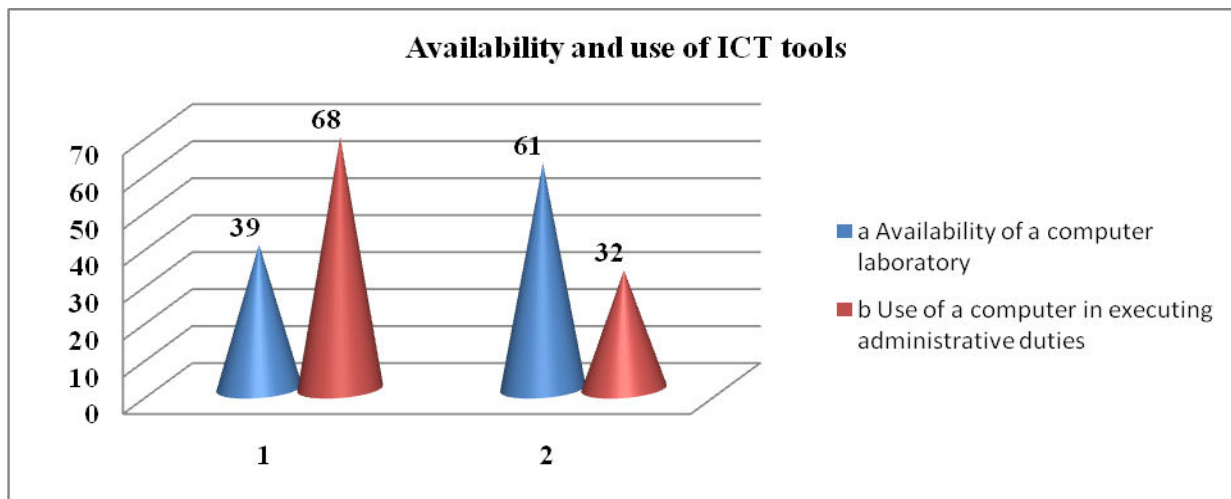

Figure 1: Bar chart showing the distribution of availability of computer laboratory and use of computer in administration

Figure 1 shows that 39 schools had computer laboratories while 61 did not have at all. Meanwhile, 68 principals and vice-principals used computers for administrative purpose while 32 did not. This implies that most administrators in Momo use computers, although few schools have computer laboratories.
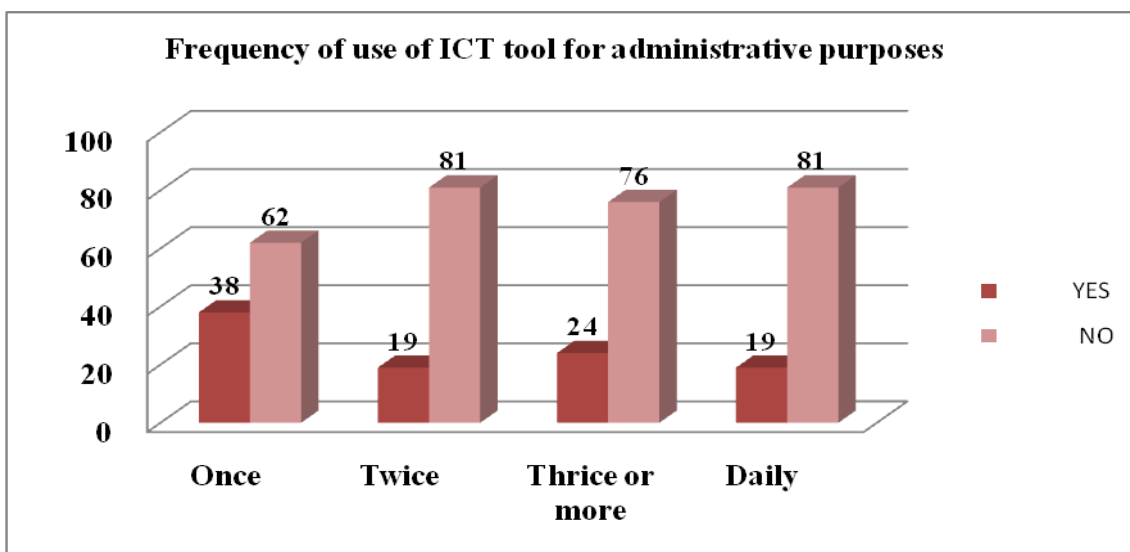

Figure 2: Bar chart showing frequency of usage of ICT tools for adminisrtation

Figure 2 shows that 38 administrators use computers only once a week, 19 use twice, 24 use thrice or more and only 19 use daily. A good number of administrators do not use computers at all. Therefore, many administrators actually use computers in Momo Division for administrative purpose but the frequency of usage is comparatively low.
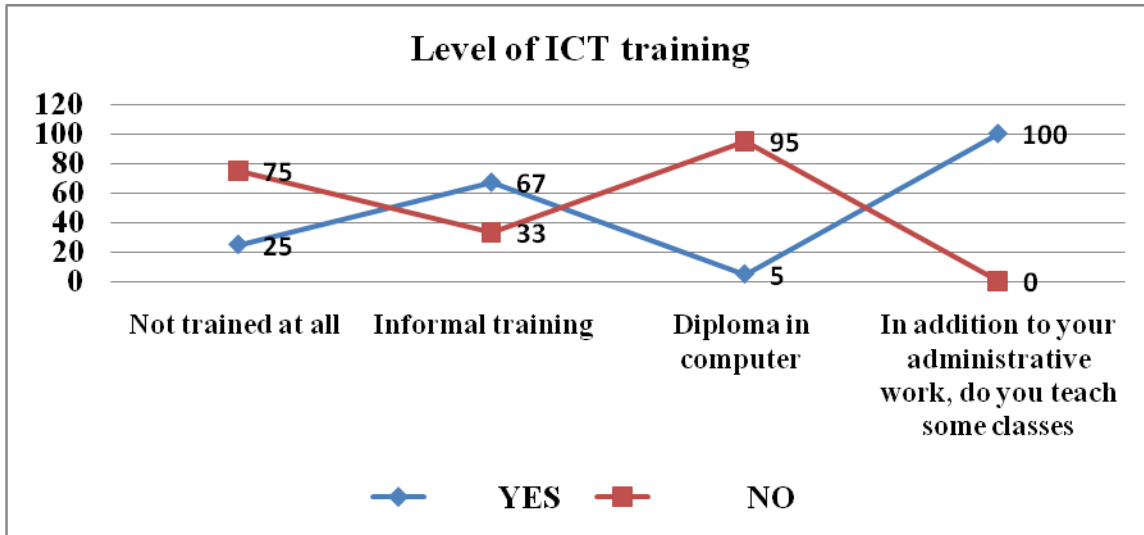

Figure 3: Graph showing level of ICT training of administrators

Figure 3 shows that 25 administrators were trained and 75 were not trained in computer studies, 67 had informal training and 33 did not, 5 had diploma in computer and 95 did not. In addition to their administrative duties, all of them (100) teach subjects some classes.

Pertaining to the various ICT tools available in their schools for administrative use, all respondents accepted that they make use of the telephones (fixed and mobile), radios, televisions and cameras. 80 schools did not have the printer, scanner and photocopy machine. 90 schools did not have the projector. Internet facilities were absent in 15 schools. 95 administrators used the bell to control and monitor changes in periods, breaks and assembling. All of administrators (100) used the notice board in their schools to put information for teachers and students. Suggestions boxes and bill boards were also available in all the schools.

The administrators of Momo Division are willing to upgrade themselves in the use of ICTs in performing their duties in order to move abreast with the technological innovations in education. This is in line with the findings of Molindo (2007) that school principals who see the usefulness of ICT in their daily tasks are more likely to support and encourage the use of computer technologies in their schools and classrooms.

Research Question Two: What is the attitude of administrators towards the use of ICTs in administration?

Decision level: $\bar{x} = \dfrac{0+1+2+3+4}{5} = \dfrac{10}{5} = 2$

Respondents accept or agree with the opinion expressed in the item if the mean score is 2 and above. Otherwise, they reject or disagree.

Table 3: Administrators' attitudes towards the use of ICT tools in administration

No.	Survey statement	U	SD	D	A	SA	TOTAL	$\bar{x}$	S	Dec.
a.	ICTs like computers are very difficult to use	00	69	27	04	00	135	1.35	.56	R
b.	I find it time consuming using ICT in executing administrative duties	02	60	14	06	18	178	1.78	1.19	R
c.	I think that ICTs are good but they don't help in administration	03	77	10	02	08	135	1.35	.90	R
d.	I don't like ICTs like internet because they are very distracting	13	58	16	11	02	131	1.31	.91	R
e.	I feel comfortable using the ICTs and think it's important for all administrators to know	04	00	06	22	68	350	3.50	.93	A
f.	ICTs don't only help in administration but I use it to relax and release stress	00	11	04	24	61	335	3.35	.99	A
g.	I enjoy using ICTs but they are costly to purchase and maintain in school	15	03	21	45	16	244	2.44	1.24	A
h.	ICTs are good but need much technical training and skills to use	00	06	14	20	60	334	3.34	.93	A
	TOTAL/AVERAGE	37	284	112	134	233	1842	**18.42 / 2.303**	**7.653 0.957**	**A**

$\bar{x}$ = Mean attitude score   s = standard deviation   Dec. = Decision

The research found out that the administrators of public secondary schools in Momo Division generally have a positive attitude towards the use of ICTs in administration. Many of them feel comfortable using ICTs and think that it is important for all administrators to be ICT oriented. Most of them agreed that in addition to making work easy, ICTs is a source of relaxation and relieve of stress although they lamented that most of them lack adequate knowledge on how to use computers. As such, there is need for technical training and skills to use ICTs in administration. Most of them rejected the opinion that computers are very difficult to use, consume time for administrative work or that internet is very distracting but they confirmed that even though using ICTs in administration is enjoyable, it is very costly to purchase and maintain in schools.

The administrators had a positive attitude towards the use of ICTs in administration ($\bar{x}$ = 2.303 ± 0.957). Other attitudes towards the use of ICTs in administration suggested by the respondents were: ICTs are good but they promote lies telling within communication between administrators and their subordinates. ICTs have exposed administrators to WhatsApp, facebook, imo, twitter, messenger and so on, which has brought lots of evil like scamming, attracting thieves, bribery and corruption to name a few. Most of them said ICTs make work easy.

From interviews most principals and assistants said that the internet to some extent is distractive than facilitating administrative work. They further explained that internet is characterized by social sites like face book, websites, twitters, mailing, Google and others which sometimes distract users. To them, internet browsing takes much of their time because they tend to do all these activities alongside with checking school mails and researching online. This shows that some principals and their assistants of public secondary schools in Momo Division shun using the internet because it is difficult and to avoid the distractions it brings.

These findings agree with Molindo's (2007) opinion that even though principals value the importance of ICT in the teaching and learning process and its fulfillment in their managerial and administrative purposes, they still need tailor-made in-service training and incentives to transfer their theoretical enthusiasm into practice as any hindrance turns to discourage them.

Research Question Three: How does the use of ICTs affect administrators' functioning with regards to administrative, pedagogic, financial and social duties?

Table 4: Administrators' use of ICTs in executing administrative duties

No.	Survey statement	U	SD	D	A	SA	TOTAL	$\bar{x}$	S	Dec.
a.	I keep most of the school records in the computer because it is the most reliable and can be retrieved at any time	00	03	03	43	51	342	3.42	.699	A
b.	I store most important administrative documents in the email of the school which is secured and can be accessed anytime any where	09	07	22	31	31	268	2.68	1.24	A
c.	I communicate with students and parents using notices typed and printed in the computer	05	05	00	41	49	324	3.24	1.05	A
d.	In urgent situations, I always communicate with my teachers and close collaborators using the mobile phone and emails	02	08	00	75	15	293	2.93	.81	A
e.	I find it easier to send and circulate information concerning the school through radio announcements and phone calls	05	09	08	54	24	283	2.83	1.05	A
f.	I use ICT tools like internet to do my research which is easier compared to other sources of information	06	11	08	43	32	284	2.84	1.17	A
g.	It enhances efficiency, effectiveness and productivity in administrative activities	02	02	08	52	36	318	3.18	.82	A
h.	Rules and regulations governing school activities are printed and pasted on notice	01	02	08	67	22	307	3.07	.69	A

	boards to ensure that the targeted people have access to them								
i.	Cameras are positioned in strategic places to ensure that there is strict monitoring of school activities	39	22	16	10	13	136	1.36	1.42	R
	TOTAL / AVERAGE	**69**	**69**	**73**	**416**	**273**	**2555**	**25.5/ 2.839**	**8.93/ 0.993**	**A**

$\overline{x}$ = Mean attitude score   s = standard deviation   Dec. = Decision

Most respondents said that they store school records in the computer because it is easy to retrieve them any time and that the computer is the most reliable means to store information. Most school administrators make use of e-mail because it is more secured and can be accessed anytime anywhere by those who have the e-mail address. All the administrators accepted that they communicate with students, teachers, parents and entire community using the notice board by pasting information typed and printed with the use of computers and printers. For urgent situations all of them use the mobile phones, e-mail, radio and sometimes letters to make public information from their offices. All of them said that the easiest means to send and circulated information about their schools is through phone calls and radio announcements. Most of them said that they use the internet source for research more than other sources. Majority said that the use of ICTs enhance efficiency, effectiveness and productivity in administrative activities in their schools. Only few of them have positioned surveillance cameras at strategic places in their schools to monitor activities.

The analyses shows that administrators use ICT tools in executing administrative duties ($\overline{x}$ = 2.839 ± 0.993). For the pedagogic functions most of them said that they use ICTs to store information to monitor and evaluate students' progress performance. They also use ICTs for supervision and evaluation of teachers' coverage of syllabus and keeping of inventory of the teaching and learning materials. For the financial functions, they use ICTs to monitor the collection of fees, PTA levy, and payment of the part-time teachers and support staff of the school. For social functions, most of them said they use ICTs to monitor activities like staff socials, graduations, music theater arts, open days, sports and games.

This confirms the findings of Maki (2008) that ICT enables managers and administrators to update and record changes in the school environment, to produce document regarding operational activities of the school and to support and make decisions due to the fact that ICT systems present reality at the moment to communicate data. That is, exchange messages and data between school staff and other schools or organizations. Some of them have post box for exchange of information.

Research Question Four: What are the challenges faced by administrators in Using ICTs in administration?

Table 5: Challenges faced by administrators in using ICTs in Administration

No	Survey statement	U	SD	D	A	SA	TOTAL	$\overline{x}$	S	Dec.
a.	Insufficient funds to afford the desired ICT tool good for administration	06	00	04	66	24	302	3.02	.91	A

							$\bar{x}$	s	Dec.
b.	Lack of IT knowledge and how to use ICTs like internet in researching	00	12	13	34	41	304	3.04	1.01	A
c.	Poor internet network connectivity and frequent power failure	05	05	10	50	30	295	2.95	1.03	A
d.	Costly nature of maintaining ICT tools like computer, projectors and printers	06	12	12	48	22	268	2.68	1.13	A
e.	Lack of training workshops on the use of ICTs in administration	06	02	12	48	32	298	2.98	1.03	A
f.	Fear of being noticed by subordinates of the limited ICT knowledge	19	28	12	14	27	202	2.02	1.51	A
g.	Obsolete ICT tools provided by the authority or administration	10	16	24	19	31	245	2.45	2.45	A
	TOTAL / AVERAGE	**52**	**75**	**87**	**279**	**207**	**1914**	**19.14 / 2.734**	**9.051/ 1.297**	**A**

$\bar{x}$ = Mean attitude score   s = standard deviation   Dec. = Decision

It was discovered that administrators of Momo Division encounter many difficulties in their efforts to use ICTs in administration. All of them indicated that they suffer from insufficient funds to afford the desired ICT tools required for effective administration. They lack IT knowledge and how to use internet for research, poor internet network connection and frequent power failure contributed to their problems. ICTs are costly to maintain or repair when they get bad. Most of them complained that there are limited number of seminars, training work-shops and refresher courses on how to use ICTs in administration. The obsolete nature of most ICT tools provided by the authority for the schools was also a hindrance.

From their personal views, most of them expressed the worry of the computer acting just like a Robot, "garbage in, garbage out". Sometimes their secretaries input information into the computer wrongly and the computer produces wrong documents. For instance errors introduced in students' report cards, tests and examination papers, agenda for meetings, calendar of activities for the school year, timetable and others. Some administrators said that they have problems presenting statistical information using the computer like working on excel sheet and spread sheet for income expenditure and balance for the financial statement of the school. Others said the variation in the brands of ICTs in the market makes adaptation difficult as the authority would not supply same brand all the time, especially as there is continuous innovations in the invention and production of ICT tools.

Most of them said that they have difficulties in exploring most software programs in the computers in their offices so they are forced to rely on the school secretary for most administrative documents to be produced. As such, some documents come out with errors not created by them. Others said that sudden failure in the machines

disappoints them most often in their administrative duties. From the analyses on table 5, administrators accepted that they face challenges in using ICTs ($\bar{x}$ = 2.734 ± 1.297). Lack of adequate Information Technology (IT) training appeared paramount hindrance to ICT usage in these schools. This could be justified by the fact that most appointments of principals and vice principals in Cameroon secondary schools are not based on IT competency. Most of them are classroom teachers who are promoted to the level of principalship. So they know little or nothing about IT and worst of all in relation to administration.

It was also found that almost all the principals and assistants of public secondary schools in Momo Division actually have difficulties using ICTs in administration although they have positive attitude towards its use and make great efforts in using most of the tools. This tie with the findings of Howell and Lundall (2000) who studied the key factors blocking educational institutions from using ICTs as an administrative tool in Indonesia. They identified major challenges like lack of electricity, lack of funds, insecurity, very little of the equipment available, insufficient number of computers, lack of teachers with its skills, teachers' inability to integrate the computer into the different subject areas and lack of appropriated microcomputer teaching programs as the major challenges facing the introduction of ICT in school administration.

Conclusion

The advent of technology has changed the traditional function of principals and vice-principals in the contemporary society. Educational administration and education in general, is dynamic, complex and innovative in nature. This implies that the administrators themselves have to move abreast with these changes if their functions have to be effective in the educational system. Most administrators of public secondary schools in Momo make use of ICTs like phones, computers, printers, internet, radio, television and photocopy machines. Many of them do not use cameras and projectors. It was then concluded that ICTs use in these schools was not adequate to ensure effective administration since most administrators were not trained to use ICTs in educational administration.

Administrators' attitude towards the use of ICT tools in administration was generally positive with most of them commending its use for speed and time saving. Despite the challenge of inadequate facilities, administrators are enthusiastic and eager to use ICTs in administration, though they feel that they require further training and technical support skills. They desire seminars, refresher courses, workshops and in-service training on IT use in administration.

Principals and assistants in public secondary schools of Momo Division use ICT equipment to prepare and maintain information system, student database, schedule of activities and timetable, type and store administrative documents for effective storage and retrieval irrespective of the volume. ICTs assist them to effectively monitor and supervise the pedagogic process, financial dealings and social activities of the schools. The role of ICTs in educational administration is indispensible with the increasing rate of enrolment of students and the teaching staff in the secondary schools today. The principals and vice-principals need these ICTs tools to assist them in their dynamic and complex administrative activities.

Recommendations

After the findings were presented and conclusions drawn, the following recommendations were necessary.

1. To address the problem of high cost of purchasing ICT tools, the government and other stakeholders should exploit the possibility of investing in these devices so that they can provide them to their schools even at lower costs.

2. To overcome the problem of poor or lack of ICT training, the government should institute computer training in all teacher training colleges and other higher learning institutions. Teachers could be encouraged to have more access to ICT tools in order to increase their skills and expertise so that when they are promoted to principals or vice-principals, they would not be found wanting in the use of ICTs.

3. Policy makers could create an ICT policy and master plan for all teacher training colleges which include a component to train users, for considerable knowledge and skills. A policy on effective use of ICT services and systems with specification on design and implementation of its use, awareness of the shared responsibility for the equipment, software and data. This may reduce the social ills that come with the use of ICTs.

4. The authority in place may find it worthwhile to plan to provide multiple incentives such as workload reduction, recognition and rewards in faculty evaluations, increased research allocation and grants so as to encourage use of ICTs in administration. Compensation for those who provide educational or technological assistance to others could be of help. On the other hand, appointing ICT coordinators or heads of ICT department in each institution can help ensure administrative and pedagogical support to teachers in preparation for future promotions to the level of principals and vice-principals.

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