

UNIVERSITY OF CAPE COAST

AN ASSESSMENT OF THE USE OF TELEPHONES IN THE
ADMINISTRATIVE FUNCTIONS OF SUNYANI MUNICIPAL
DIRECTORATE OF THE GHANA EDUCATION SERVICE

BY

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CHAPTER ONE

INTRODUCTION

Background to the study

It is difficult to imagine how life would be if we were not receiving or giving out information. Human existence is said to depend on the receiving and giving out of information generally referred to as communication (Sekyi-Baidoo, 2000). Communication could also be defined as the process of transmitting information from a sender to a receiver and the receiver responding appropriately to the message. In inference, communication requires all parties to understand the common language that is exchanged (Baumeister & Leary, 1995). One technology that has been invented to support communication in organisations is the telephone.

The first telegraph line in Ghana (formerly Gold Coast) was a 16 kilometre link installed in 1881 between the castle of the colony's then governor in Cape Coast and Elmina. The line was then extended to Christiansburg near Accra, now the seat of government. In 1886, telegraph lines were extended to the middle and northern parts of Ghana into the territory of the Ashantis. Between 1900 and 1901, this new communication technology was used to subdue the Ashantis in the Yaa Asantewaa war. Ashanti State was one of the strongest states in Africa and this made it difficult for the British to rule them so they used this technology during the war to arrest most of their powerful leaders like the queen

mother of Ejisu, Yaa Asantewaa. Ghana's telegraph lines were often cut down by local people who had superstitious beliefs that the cables were "magic" lines being used by the Europeans to win wars (Allotey & Akorli, n.d).

In order to improve communications in the southern part of Ghana, the first manual telephone exchange (70 lines) was installed in Accra in 1892. Twelve years later, in 1904, a second manual exchange consisting of 13 lines was installed in Cape Coast. Before the beginning of World War I in 1914, 170 telephone subscribers had been served in Ghana, but it was between World War I and 1920 that main trunk telephone routes: Accra-Takoradi, Accra-Kumasi, Kumasi-Takoradi, and Kumasi-Tamale were built using unshielded copper wires. By 1930, the number of telephone exchange lines in Ghana had grown to 1,560, linking the coastal region with the central and northern parts of the country. In 1953, the first automatic telephone exchange with 200 lines was installed in Accra to replace the manual one erected 63 years earlier. Three years later, in 1956, the trunk lines connecting Accra, Kumasi, Takoradi, and Tamale were upgraded through the installation of a 48- and 12-channel VHF network.

The attainment of independence by Ghana in 1957 brought new dynamism to the country's telecommunications development. A seven-year development plan launched just after independence hastened the completion of a second new automatic exchange in Accra in 1957. By the end of 1963, over 16,000 telephone subscribers and 32,000 rotary-type telephones were in use in Ghana.

Due to the rapid growth in commercial activities in mining, timber, cocoa, shear butter, and the like in other parts of the country, new manual exchanges

were installed at Cantonments, Accra, Swedru, Koforidua, Ho, Tamale, Sunyani and Kumasi during the post-independence years. The installed exchanges were Strowger (step-by-step) and Philip UR 49 switch exchanges. The management of Ghana's telecommunication institutions was initially assigned to the Public Works Department but was transferred to the post office following the enactment of the Post Office Ordinance in 1886. Telecommunication was later administered by the government's Post and Telecommunications Department (P&T) until the early 1970s (Allotey & Akorli, n.d).

A new chapter in the development of Ghana's Telecommunications system was opened in November 1974, when the Post and Telecommunications Department was declared a public corporation by the government of the National Redemption Council (NRC) Decree No. 311 and placed it under the authority of the then Ministry of Transport and Communication.

The National Communication Authority (NCA) was created in 1996 after coming into force Act 524 to regulate the activities of the telecommunication industry. The enactment of the Act also nullified the monopoly enjoyed by the then Post and Telecommunication Corporation to pave way for the establishment of other telecommunication companies such as Scancom (MTN) and Millicom Company Limited (Tigo) (Allotey & Akorli, n.d).

The first cellular phone service in Ghana was initiated by Mobitel in 1992. In that year alone, 19,000 Ghanaians owned mobile phones. In 1998, the number of mobile phone users in the country increased to forty three thousands (43,000) and by the middle of 1999 the number increased to sixty eight thousands (68,000). Other companies such as Spacefon now called MTN, ONEtouch now called

Vodafone GH, Zain now called Airtel and Kasapa also called Expresso are the current operators of cellular phone networks in Ghana while Vodafone GH is a current operator of almost all fixed or land-line telephones in Ghana.

According to Boah-Mensah (2008), the number of people using mobile phones in Ghana has hit the 10 million mark at the end of August, 2008. He gave the breakdown as MTN (5,539,065), Tigo (2,668,316), ONEtouch/Vodafone (1,648,544) and Kasapa (386,991) subscribers.

Today, MTN, which is an international giant in the telecommunications industry, has managed to establish itself as the leader in the telephone sector in the country. Millicom has also taken the new global name, Tigo. Kasapa also belongs to one of the giants in the telephone sector, known as the Hutchinson International. Ghana Telecom, operators of ONEtouch and almost all fixed line telephones in Ghana, has recently partnered Vodafone, one of the leading telephone operators in United Kingdom. There are also new entrants Globacom, which are renowned international telecommunication giants to boost telephone system in the country (Okine, 2008).

The Ghana Education Service (GES) was established as part of the Public Service of Ghana in 1974 by National Redemption Council Decree (NRCD) 247 and subsequently amended by NRCD 252, 357 and Supreme Military Council Decree (SMCD) 63. The Vision of Ghana Education Service is to create an enabling environment in all educational institutions and management positions that will sustain effective teaching and learning in pre-tertiary schools and promote management efficiency within the Service.

The Ghana Education Service is charged with the responsibility of implementing pre-tertiary education policies of government. This is to ensure that all Ghanaian children of school-going age are provided with quality formal education and training through effective and efficient resource management that will facilitate the making of education delivery relevant to the manpower and social needs of the nation.

The mandate of the Ghana Education Service include the supervision of basic, secondary, technical and special education in Ghana; registration, supervision and inspection of private pre-tertiary educational institutions; registration of teachers and keeping an up-to-date register of all teachers in the public pre-tertiary institutions and the maintenance of professional standards and the conduct of its personnel (Republic of Ghana, 1974). Ghana Education Service is headed by a Director-General who is assisted by two Deputy Director-Generals. The functions of the service are performed through its directorates at the Headquarters, Regions and Districts throughout Ghana.

Statement of the Problem

The use of telephones is expected to reduce the cost of transportation and business transaction as well as hasten the speed of getting both private and administrative duties done. In spite of the increasing number of telephones in GES offices, concerns have been raised about delays in communication within the service. It is assumed that telephones installed in GES offices are hardly used to promote official correspondence. It is further assumed that, officers use

telephones to promote personal interests rather than official interests. The problem however is the lack of research evidence to examine the extent to which these assumptions are real. It is this gap that necessitated this research which sought to explore the utilisation of telephones within the Ghana Education Service in the Sunyani Municipality.

Purpose of the Study

The overall objective of this study was to evaluate the use of telephones in the administrative functions of Sunyani Municipal Directorate of the Ghana Education Service. Specifically, the study sought to:

1. Examine the current mode of communication for the administrative functions of the GES in Sunyani Municipality;
2. Examine the effects of telephones on the administrative functions of the GES in the Sunyani Municipality; and
3. Recommend, where necessary, measures that could be adopted to ensure effective use of telephones in administrative functions in Ghana.

Research Questions

This study seeks to answer the following questions:

1. What are the current modes of communication for administrative functions in Sunyani Municipality of GES?
2. How do telephones facilitate the administrative functions of the GES in the Sunyani Municipality?

3. What are the barriers, if any, to the effective utilisation of telephones to support the administrative functions of the GES in the Sunyani Municipality?

4. In what ways can telephones be used to improve administrative functions in the GES of the Sunyani Municipality?

Significance of the study

The findings will assist administrators of Ghana Education Service to identify effective use of telephones in the administrative functions of the GES. The knowledge about the use of telephones in administrative functions will be a guide for other organizations to use this medium in their daily activities. The research will serve as ‘well-cooked’ information for National Communication Authority to scrutinise the activities of operators and to offer the required service in the operation for national development. The work will also serve as a source of information for future research.

Delimitation

A study of this nature should have been designed to cover the use of telephones in the administrative functions of the Ghana Education Service in order to undertake a comprehensive assessment of the situation. However, this study was delimited to the use of telephones in the performance of administrative duties in the Sunyani Municipality of the Ghana Education Service to serve as a baseline for further studies.

Limitation to the study

The Brong Ahafo Regional as well as the Sunyani Municipal Directors of Education, who were considered as two key informants, could not be reached for their responses. It was anticipated that data gathered from these two personalities would have had substantial impact on policy direction and programming as far as telephone application in educational administration was concerned. After several attempts by the respondent to contact them failed, the responses obtained from their respective Public Relation Officers (PROs) were used for this study. Although their responses were detailed and candid enough, probing for further clarification on some issues raised could not be done since they lacked the administrative capacity to comment on such issues in detail.

Organisation of the Study

The study was be organised in five chapters. The first chapter focuses on introductory issues such as the statement of the problem, purpose of the study, and research questions. Chapter two concentrates on a review of some related literature in the subject area while the third chapter concentrates on methodological aspects of the study. The fourth chapter presents results of the study as well as discusses the key findings derived from the results. The study ends with a fifth chapter which provided the summary of key findings of the study, conclusions made and recommendations for further consideration.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

Literature on the subject, especially on telephones, is limited. The review therefore draws largely on internet source of information. The following areas are covered in the chapter: Medium of Communication, Cycle and Types of Communication, Effective Communication, Barriers to Communication, Use of Telephones, and Concept of administration and organisational structure of the Sunyani Municipal Education.

The Communication Cycle

The process or cycle of communication involves six stages as described by Nyan and Sefenu (2000) and Evans (1993). The first stage involves the conception of the idea by the sender. This involves the sender initiating the communication with an idea or conceiving the idea for which communication would be required while the second stage comprises of encoding the idea to be transmitted. Here, the idea is converted into the spoken or written words, figures, pictures, or diagrams that convey meaning. According to Hoy & Miskel (2007) the mental set of the sender involving his or her particular psychological characteristics also limits the encoding process. Communication skills, knowledge of the subject, and personality factors such as attitudes, values, interests and

motivational needs are traits or mental conditions that combine to limit what is encoded and the quality of the message.

The third stage is the selection of the medium or channel. At this stage, the encoded message has to be sent through a medium such as letter, telephone, telex or e-mail for the right responses to be obtained. The next stage is decoding where the message reaches the receiver in an understandable language or mode to enable him to take action. To enhance proper understanding of the message, the receiver has to decode the message or reduce it to signs, language, terms and other specialist vocabulary. The fifth stage described by Nyan et al, 2000 as interpretation demands that the message received is interpreted correctly in order to get the true meaning by the receiver. The sixth stage is feedback where the receiver responds back to the sender to complete the cycle.

This feedback provides two benefits. First, it supplies a clue to how successful the communication process was and second, it forms the basis for correcting or modifying future communication. Feedback, once again, involves the process of encoding, choice of medium, decoding and interpretation. Figure 1 shows the process of communication from conceiving the message to feedback.

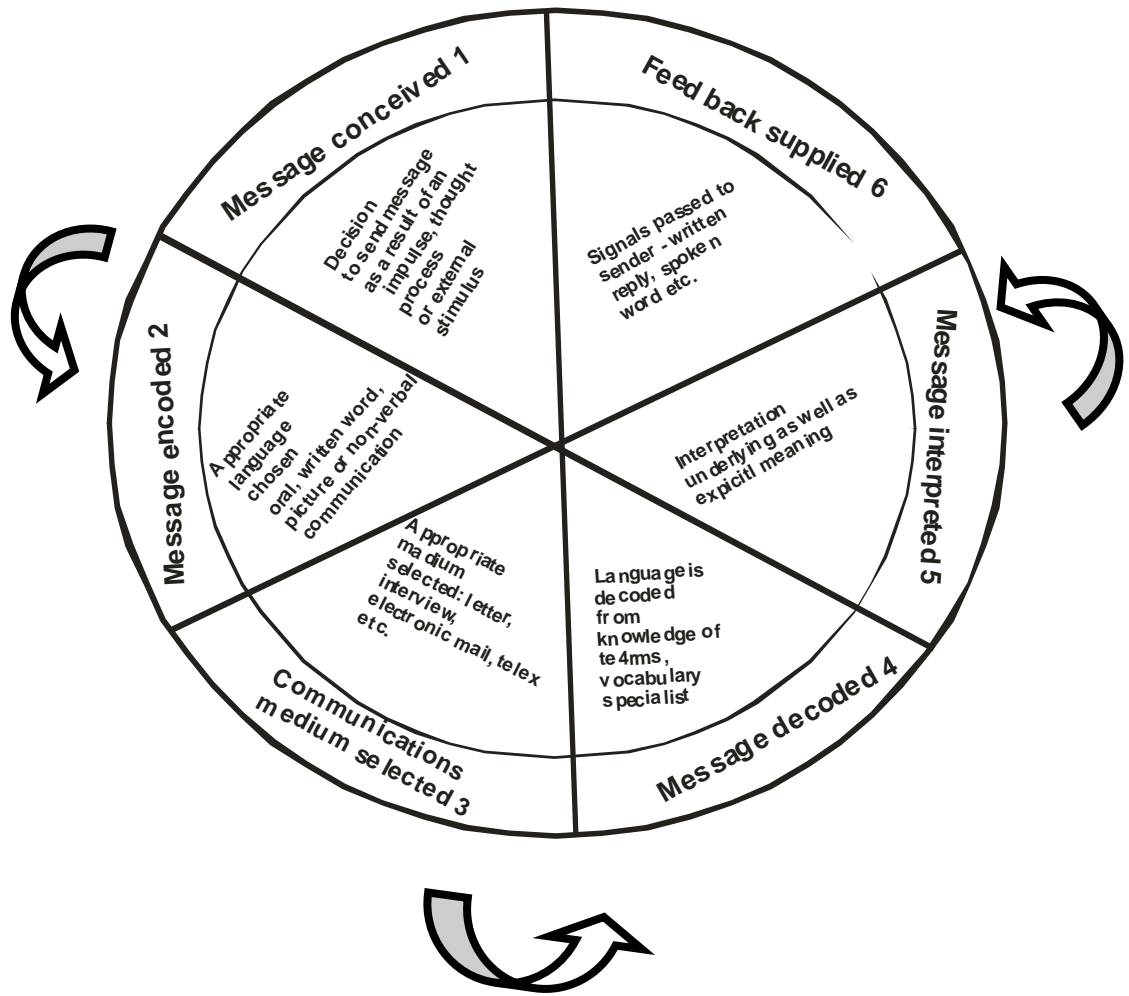


Figure 1: Communication Cycle

Source: Evans, 1993

Communication can either be written such as letters, memoranda, books, articles, notices, posters, reports or circulars; oral or verbal which is a reciprocal conversation between two or more entities. It comprises the use of spoken word including meetings, telephone calls, interviews and lectures. While oral communication has the ability to provide instant feedback or opportunity for immediate discussion. It is sometimes costly to arrange in both time and money and frequently no permanent records are kept; non-verbal which is the process of

communicating through sending and receiving wordless messages. Such messages can be communicated through gestures, postures and facial expressions or visual communication which involves drawing, photograph, diagram, chart etc. (Nyan et al 2000). The written communication has the following advantages over oral or verbal communication; it serves as documentary evidence for future reference such as certificate, testimonials, and agreements. Written communication promotes distance learning through easy accesses to information from the internet, libraries or archives.

Types of Communication

Communication can be categorized into intrapersonal, interpersonal or public. Intrapersonal communication is described as communication within or with oneself. The person talks to himself or herself in words and images and creates meaning within him/herself. Intrapersonal communication involves interpreting non-linguistic stimulus such as sound, heat, and light. With the view of common sense, one can come to the realization that the twitch in your tummy means hunger, then, you have engaged in intrapersonal communication. Again, if you interpret the dark atmosphere as the approach of night, then, you have engaged in intrapersonal communication.

Interpersonal communication is referred to as the concrete act of transferring or processing information between two or more people. Example is a meeting between management and union executives. Another type is public communication which takes place among more than two people. Example is the teacher and students dichotomy. Students can be asked questions and can also be

asked to answer questions or contribute to the topic. Thus, it is not only the teacher who speaks. The students also speak and the teacher listens. Again, at meetings or convocations, one cannot divide people into speakers and listeners. People may speak and be spoken to collectively or individually (Sekyi-Baidoo, 2000).

Both human beings and animals have relied on this tool to interact with their kinds. Different modes of communication have been used from generation to generation including the use of drums, objects, letters and currently, the reliance on sending signals, images and messages over long distances and through the medium of radio (the use of wireless signal to convey message), television (system of transmitting moving images), internet (means of transmitting data), telegraph (systems which could convey message only letter by letter) and telephones (system to carry speech and other sounds over long distance).

Medium of Communication

In communication, media (singular medium) are the storage and transmission channels or tools used to store and deliver information or data. The communication is through analogues, communication in the form of using voice that are telephony, radio and TV broadcasts and digital that is telegraphy and computer networks. Media through which messages are transmitted include letter writing, electronic mail (e-mail), messenger, fax and telephone.

Letter Writing

Letter writing is time tested and dependable medium of communication. It is one of the means in which important and secret information are passed through between two persons, parties, departments and governments. Letters are used to express thoughts and feelings, joys and sorrows and it is needed particularly when one cannot talk to a person. It has a sender's address, date, salutation, body and subscription.

Letter becomes a record of what one has said or committed and also reflects the writer's own taste or interest. It does not use any electronic means so it is cheaper and also enables long distance communication to take place.

On the other hand, letter writing can take time before delivered. It can get lost and not 100% sure of security i.e. it can easily be opened and read or may be sent to the wrong hand. Letters take time to produce and no guarantee or assurance that the message has been received unless feedback has been give and if recipient does not understand any information, the sender will not be there to explain it to him/her.

Electronic Mail (E-mail)

Electronic Mail (E-mail) is one of the media used in communication. It is a system of creating, sending and sorting textual data in digital form over a network. E-mail frees people from tedious of managing data of daily use. The data sends through e-mail is delivered instantly, anywhere across the globe. E-mail has subject line so it is easy to prioritize them and ignore unwanted mails. It is reliable and secure. Additionally, the language used in e-mails is simple and

makes communication informal. It is also easier for reference because there is a provision in the mailing system to attach the previous mails as references.

Despite numerous benefits of e-mail, computer programme used for e-mail activity can be infected with viruses and can affect the information expected like letter writing, if the recipient does not understand any information, the sender will not be there to explain it to him/her. The e-mail box may be crowded with mails and thus difficult for the user to manage such a huge chunk of mails. Mails need to be checked regularly to update one's inbox.

Fax

Fax is a method of encoding data, transmitting it over a telephone line or radio broadcast, and receiving a hard copy of the text, line drawings, or photographs at a 'remote' location. This technology was invented a long time, however, fax machines did not become popular with consumers until the 1980s. The first fax machine was invented by Scottish mechanic and inventor Alexander Bain in 1843 (Bellis, n.d).

To send or communication to someone else, both the sender and the receiver must have access to fax machines. This fax machine needs to set up with tips on correct settings, toner and paper. Using fax to communicate is very convenient because one can receive an important document as quickly as possible. Fax machines are great options if it is a paper work that cannot be sent easily through email. Again, using fax is much faster than sending a piece of information through the Postal Service. It puts one at the mercy of the reliability of phone lines, or Internet connections in the case of using e-fax software

(software on your computer that allows you to use it as a fax machine). If there is an outage for other network making it difficult to communicate, fax is not that. It is very reliable (Kirk, 2006).

Some of the difficulties one encounters when using fax to communicate are it needs a telephone line and power/electricity. It also requires paper for receiving and sending faxes. The machine needs to be on always to receive faxes. If the machine is off, one may lose the faxes. Additionally, storage and archival of these Printed Paper Faxes are very cumbersome and aging of papers could lead to difficulties in managing records.

Effective Communication

Evans (1993) defines effective communication as the result of a careful selection of the appropriate medium, or combination of media available. He continued by saying that before one can communicate effectively, he or she has to plan beforehand; explore opposing points of view; check out the location of the contact to be familiar with surroundings; exclude interruptions and distractions; consider the person or people around and select the mode which is most appropriate to suit the situation.

Effective communication, according to Sekyi-Badiou (2000), is that which ends in the achievement of desired goals. Knowing the various levels of communication and being mindful of their role in the realisation of your communication goals cannot be compromised. He further explains that, in each communicative event, you are decidedly or inadvertently communicating yourself –your knowledge, experience, expectations and attitude to the receiver. He further

indicates that to communicate effectively, the communicator is expected to show adequate knowledge of subject and use the accepted mode of communication.

Sefenu and Nyan (2000) also observed that to communicate effectively, there must be clarity of propose to assist the initiator of the communication leaving out all irrelevant materials or content from the communication. They further proposed that the message to be transmitted should be precise, intelligible and effective. They also urged communicators to listen intelligently, select the appropriate medium or media for the communication, bearing in mind the finances involved, distance, time and urgency of the message. Effective communication also involves the use of words which are simple, devoid of jargons, relevant to the topic and easily understood by the recipient.

Timing also plays a major role in ensuring effective communication. A thorough consideration should be given to length of the communication as well as the creation of a harmonious relationship between the initiator of the communication and the recipient of the message. Brevity is also a vital component of effective communication as well as receiving the appropriate feedback from the recipient of the message. Rouse and Rouse (2002) sees effective communication as when the content of the information is received accurately with the intended meaning by the sender.

Thill and Bovee (2008) also indicated that successful communicators have some unique traits which make them good communicators. Some of the traits, according to them, are their ability to predict how their messages would be received by the intended recipients. To them, good communicators are able to anticipate the reaction of their recipients and are able to shape their message(s) to

suit the reaction. Again, good communicators have good precision which helps them to create a “meeting of the minds” when they finish expressing themselves. They described such people as credible and believable. They are able to appeal to their listeners to the extent that the latter may have faith in the substance of their message(s).

Successful communicators have good control of the emotions of their audience due to their ability to make them laugh, cry, clam down, change their decisions or take action. Finally, they are able to maintain friendly and pleasant relations with individuals or groups. Regardless of whether one agrees with them or not, good communicators command respect and goodwill to the extent that one would be willing to work with them again despite their differences.

Atta, Agyenim-Boateng and Baafi-Frimpong (2000) identified some commandments that are expected to guide the process of achieving effective communication. To them credibility plays a vital role in ensuring effective communication. Credibility in communication was explained as the receiver having confidence in the sender to the point that the receiver would have high regard for the source’s competence on the subject. Atta and his colleagues also identified the context, content, clarity, continuity, consistency, channels and the capability of the audience as some of the important ingredients of ensuring effective communication.

Marfo-Yiadom (2005) on his part advised that communicators must clarify their ideas before communicating, examine the true purpose of the communication, consider the setting in which the communication takes place and consult others, when appropriate, in planning to communicate. Additionally,

communicators must clarify all ideas on the subject before seeking to communicate to others. He further indicated that communicators must be prepared to send message (s) through formal or informal channels. This very diversity of the alternatives makes planning essential for good communication. He indicated that for effective communication, the communicator must include brevity and clarity and should develop a natural style of delivering which involve the use of simple and straightforward language whenever possible.

In summary, effective communication is the one which ends in the achievement of desired goal. It behoves good communicators to listen intelligently, select the appropriate medium or media for communication bearing in mind the finances involved, distance, time and urgency of the message. An effective communication must contain useful information which is accurate, timely, complete and relevant.

Barriers to Communication

Sefenu and Nyan (2000) have observed that barriers in communication are caused by both the sender and the receiver. Some barriers to communication include the inability of both the sender and the receiver to have a clear idea of what the communication aims to achieve before encoding the message. Similarly if the information, which forms the basis of the message, is not clear and accurate, the outcome may be a breakdown of the communication. The use of wrong medium which may be oral, written, visual or audio-visual can be a barrier to communication. An unsuitable medium can act as an impediment to effective communication. They identified both physical and semantic barriers to

communication as including all kinds of physical interference such as illegible handwriting, poor telephone connections, poor appearance, mechanical breakdowns, noise and the use of technical jargons. However, because of difference in their educational, cultural, social, political and economic backgrounds people interpret words differently, leading to miscommunication. Pre-judgment of information already known, the background knowledge and experience of both the sender and the recipient can be a barrier to effective communication. They also indicated that the flow of communication could be hampered from insecurity, fear, anger, nervousness and worry of either the sender or recipient.

They observed that the absence of a well defined procedure for transmitting and receiving information in an organization could also adversely affect the flow of communication due to the lack of trust, unclear definition of responsibilities, restrictions on who may communicate with and who has authority to take particular decisions, as well as lack of formal or informal opportunities for subordinates to communicate upward are some of the organisational barriers. They added that status difference impedes effective communication since some superiors tend to listen less carefully to their subordinates. Superiors may refuse to discuss issues that they think would undermine their power and authority in the organization. Subordinates, on the other hand, may be too cautious when communicating with their superiors and all of these bring about status difference. Consequently, information flowing down the organization is given too much interpretation while information going up the organization may not be heard or heeded to.

Rouse and Rouse (2002) also said that barriers of communication include anything that prevents a message from being received or understood. Barriers are, therefore, synonymous in many ways with noise thought technological noise. A technological problem does not usually stop communication, though it may block it temporarily. They further said barriers are usually of human rather than technological origin. Human barriers are often less visible but generally more consequential. Again, barriers of communication can be grouped as socio-cultural, psychological and organisational.

When communication occurs across cultural boundaries, the potential for misunderstanding is magnified. Cultural and social norms are so ingrained that people act upon them without being consciously aware of doing so. When cross-cultural business ventures fail, the participants are often unable to understand why. It is usually a communication failure stemming from a lack of knowledge about each other's basic values and norms. Stereotyping is an attempt to predict people's behaviour based on their membership of a particular group. Stereotyping tends to be associated with superficial behaviour and inaccurate information rather than deeply held beliefs and norms. Stereotyping is a barrier to communication because it prevents people from being seen as individuals and their messages being heard. This leads to prejudice, discrimination and racism. Rose concluded that emotional interference can be a barrier to communication both in sending and receiving message. When people are angry, fearful or sad, their communication skills can be impaired.

Most of the barriers to communication are attributed by the sender or receiver through culture, poorly defined channels of communication, using wrong

medium, communicating at the wrong time and place. Physical, semantic, social-psychological, emotional and organisational barriers could also affect effective communication.

The Use of Telephones

Telephones were invented over 130 years ago. The name comes from the Greek words 'far' (tele) and 'voice' (phone). Their designs have changed significantly over time but their usage remains the same that is to carry speech and other sounds over long distance. Alexander Graham Bell, a native of Scotland, is credited with inventing telephone in 1876 in the United States. His invention was originally described as “Bell’s Magnetic Telephone” which relied on electro-magnetism to convert sounds into electrical signals. The main parts of Bell’s Magnetic Telephone were a metal disc, a magnet and a coil of electrical wire. He worked out that the sound of someone’s voice made the metal disc vibrate and produce electric signal and then changed to exact voice of the sender to the receiver and vice versa.

Most telephones have handset and base. The handset contains the transmitter (where we speak into) and receiver (where we put to ear) and sometimes the dial. Many phones have wires that connect the handset to the base. A variety of raw materials are used for making telephones. Materials range from glasses, ceramics, papers, metals, rubbers and plastics. The primary components on the circuit board are made from silicon. The outer housing of the phone is typically made of a strong, high-impact resistant polymer. To modify the characteristics of this polymer, various fillers and colorants are used.

A modern telephone converts the voice vibrations into electrical signals in a different way but the principle is the same. When a person speaks, the phone converts the voice into an electrical current through magnet. The telephone at the other end then converts the electrical current back into vibrations to produce an exact copy of the caller's voice.

Telephone is a medium used to communicate between two parties. It helps to contact any person at any time and because of this it is much faster than the old methods like letter writing. A call can resolve uncertainties, doubts or anxieties and give greater assurance; even if the news told is bad, the truth can be made known. It is cost effective and message(s) sent get across in time: modern telephones are durable and portable because you can carry to anywhere and can make or receive call irrespective of time and place.

Telephones usage has some difficulties and these include that: using telephones for long time are definitely bad for health. The radiations caused by telephones are of concern and experts believe that it's bad for human health. Most of the modern telephones are mobile and are always connected to the world, so one is always responsible for answering a phone call even if you are roaming and at times one loses his/her privacy, your freedom to be free from your daily routine work when you are telephone is connected.

According to Nyan and Sefenu (2000) using the telephone for business purposes demands that you endeavour to convey a good impression to your listener, avoid misunderstanding and achieve the most effective exchange of information at the lowest cost. The following principles worth following for both communicator and recipient when using telephones, the caller should establish

identity by making it clear who he/she is by giving name, position and department, be cautious, polite and considerate, be brief - go straight to the point; avoid irrelevant topics and idle chat; avoid jargon or slang which the other person might not understand; plan call carefully and speak distinctly. Use your normal voice; speak at reasonable pace; spell out unusual names or technical terms; take particular care over numbers; always repeat numbers or difficult names; hold the receiver close to your mouth throughout the call; as much as possible, use clear, everyday language; speak in simple and brief sentences.

Evans (1993) also agreed that an effective user of the telephone requires the acquisition of special skills ranging from distinct articulation of the spoken word to expertise in handling sophisticated telephone equipment. Such skills are particularly important in view of the dehumanising effect which using the telephone may have on people who cannot see the person they are talking to.

He concluded that a caller should make sure to jot down the key points of the in-coming message and secure essential names, dates, numbers, and addresses. Once again a caller is never being an anonymous call-taker-supply but the name of the caller and job title from the outset because no one likes to deal with furtive people who try to conceal their identity so as to avoid responsibility for follow-up action the in-coming call demands. Telephone callers are expected to be brief, courteous, time saving and cost effective.

Communication and Administrative Functions of the Ghana Education Service

The GES, as a human organisation, engages in very complex communication activities, especially in the performance of its administrative functions. Administration, according to Mussazi (1995) be viewed as a social process concerned with identifying, maintaining, motivating, controlling and unifying formally and informally organised human and material resources within an integrated system designed specifically to achieve predetermined objectives. Mussazi maintains that, administration is an integral part of any organisation. It is crucial for maintaining and expanding the relevance, effectiveness and productivity of complex institutions such as government departments, prisons, school systems, colleges, universities and the like.

The survival, for instance, of all our organisations like schools and colleges is dependent largely on the quality of administrative services available. Administration therefore influences the results to be achieved, the direction to be pursued, and the priorities to be recognised within the organisation. The administrator uses a body of knowledge as a basis for deriving answers or approaches to specific situations.

According to him, administration exists to implement the decisions of an organisation; influences the results to be achieved, the direction to be pursued, and the various priorities to be recognised within the organisation; determines, in large measure, the organisational climate and working relationship; can help to make employees more productive; helps to assemble and to ensure effective use of resources; unifies and co-ordinates the human and material resources available

for use in the organisation; evaluates the quality and quantity of outcomes actually accomplished; shapes, to a large extent, the image and prestige of the organisation; tries to build into the organisation provisions for innovations; for change, and for development.

Gulick and Urwick (1937) defined administration as 'POSDCORO'. The letters representing various types of administration functions namely, Planning- which involves working out in broad outline the things that need to be done and the methods for doing them to accomplish the purpose set for the enterprise; Organizing - the establishment of a formal structure of authority through which work subdivisions are arranged, defined and co-ordinated for defined objectives; Staffing - the whole personnel functions of bringing in and training the staff and maintaining favourable conditions of work; Directing - the continuous task of making decisions and embodying them in specific and general orders and instructions and serving as the leader of the enterprise; Co-ordinating – the overall important study of interrelating the various parts of the work; Reporting – keeping those to whom the executive is responsible informed as to what is going on, which thus includes keeping himself and his subordinates informed through records, research and inspection; Budgeting – with all that goes with budgeting in the form of fiscal planning, accounting and control.

According to Sekyere (2006), face to face as a medium of communication includes morning assembly or devotion, school durbars, staff meetings, and others. Morning assembly which is one of the official gatherings for both teachers and students is one of the modes that schools use to communicate. The day's activities begin with the morning assembly. The assembly essentially "warms up"

or prepares both staff and students the day's academic work. Official announcements for the day are made at the assembly. It checks lateness to school/classes particularly the first period, by both staff and students. Morning assembly, in fact sets the tone for school activities (Sekyere, 2006).

School Durbar is an assembly or meeting of the school community, students or pupils, teaching and non-teaching staff and the head of the school use the mode to discuss and exchange ideas on all matters concerning the smooth running of the school. It may be organised once or twice in a school term. Some of its benefits are that; it affords opportunity for students to ask questions on staff decisions to clear any doubts in their minds. It also offers the school authorities an opportunity to explain clearly the policies and decisions of Ghana Education Service and the School to both students and staff. The school durbar also helps to foster understanding and trust among the school authorities, staff and students. Furthermore, it breaks communication barrier between the school authorities and the rest of the school community. It also enables the school authorities and staff to evaluate or assess their performances. To conclude with, school durbar prevents any potential student or staff disturbances and ensures good governance and conducive tone for academic work.

A staff meeting is another way through which information flows from school authority to staff and to students. It is a formal assembly of all teachers in the school to plan school activities and to deliberate on issues affecting the running of the school. The head of the school summons and chairs staff meetings. Staff meetings are generally held at the beginning and the end of the school term. However, in the course of school term, staff meetings may be called when the

need arises. Staff meetings are held to plan the terms activities, both academics and co-curricula. This takes place at the beginning of the term's staff meeting. Other issue discussed during staff meeting is examination results and also new strategies for improving upon performance. Also, directives from Ghana Education Service, Headquarters, Regional and District Offices and other official correspondence are discussed. Furthermore, welfare matters affecting or concerning both students or pupils and staff are discussed as well as exchange or share of ideas of interest.

According to Sekyere (2006), Ghana Education Service is one of the bodies under Ministry of Education Science and Sports to implement formulated national education policies and programmes for the consideration of cabinet and approved by parliament. Ghana Education Service council is the governing body of the service. In Ghana Education Service, Director-General is the head who is assisted by two Deputy Director-Generals. The functions of the service are performed through its directorates at headquarters, regions and districts. The divisions at headquarters are: Basic, Secondary, Technical and Vocational, Special, Teacher Education, Curriculum Research and Development, Monitoring and Data Collection, Supplies and Logistics, Administration and Finance. In the service, information must pass through the District, before Regional and to National and the reverse is also the same. As a way of facilitating communication among GES staff, telephones have been installed in all offices at the National Headquarters and Regional Education offices.

Organisational Structure of Sunyani Municipal Education

Sunyani Municipal Education is headed by Municipal Director. He sees to the implementation of all the government programmes in education at pre-tertiary level in the Municipality. He is assisted by four frontline assistant directors. These directors are at par and Municipal Director can ask any of them to act in his behalf. There are four units under Sunyani Municipal Education and each of the four assistant directors is in-charge for one unit. The units are: Human Resources Management and Development. This unit is responsible for posting of newly trained teachers in consultation with the municipal director. Other duties performed by this unit are organizing in- service training and workshops for teachers, ensuring staff welfare, responsible for peripatetic matters, handling promotion below principal superintendent and handling of matters concerning second cycle institution in the municipality. The following are officers under his jurisdiction; administrative staff comprising administrative assistant, senior clerk, drivers and watchmen, secretarial also made up of senior typist stenographer and labourers.

Another unit which is headed by assistant director is Supervision and Management of teaching and learning. The unit is responsible for conducting intensive and follow-up school inspections to ensure effective teaching and learning, conducting specific assessment tests, marking and analysing results of the test and organising District Teachers Support Team (DTST) to ensure effective and efficient teaching of topics that teachers may encounter difficulties. Circuit supervisors and examination officers fall under this unit. Others are Guidance and Counselling coordinator, Sports Organiser and Culture Coordinator.

The third unit is Budget and Finance, Administration and Control. The assistant director heading this unit is responsible for ensuring that salaries and wages paid to workers and teachers are earned, preparing monthly, quarterly and yearly financial reports of the directorate. This unit also keeps a database on budget and administration for monitoring, evaluation and reports. He chairs the budget and procurement committees of the directorate and also supervises on-going rehabilitations and new construction projects. The following personnel help the assistant director in performing his duty. The internal auditor, principal accountant, budget officer, the public protocol officer (PRO), logistic officer and store keepers.

The last unit is Planning and Monitoring, Data Collection, and Research and Records. Those assisting the director to perform his duty are planning, monitoring and data collection, research and records officers. This unit is responsible for collecting and collating of figures on enrolment of pupils by sex, class and schools, compile list of teaching and non-teaching staff particulars, distribute textbooks and other teaching and learning materials to the schools and use data collected and analysed to plan for the effective and efficient running of the schools.

For communication purposes, as noted in the organisational structure of the service (Appendices 1), the four front-line assistant directors, report to the municipal director. In addition, the four front line assistant directors; Budget and Finance, Administrative, Planning and Monitoring, Human Resources and Management Development of Personnel and Schools and Supervision and Managements report to the Municipal Director. He also reports to them. Assistant

Director for budget and financial administration then reports to internal auditor, principal accountant and budget and financial administrator, logistic officer and public relation officer (PRO) and vice versa. Similarly, there is an up-ward and down-ward communication between the Payroll monitor and the internal auditor, the Accounts Officers and the principal accountant. Finally, the Supply Officer and storekeepers also report to the logistics officer and vice versa.

Planning, Monitoring and Data Collection, Research and Records officers report to assistant director in-charge of Planning and Monitoring. They also receive instruction(s) from him.

Administrative staff such as Clerks, Drivers, Watchmen, Secretarial including Typists and Stenographer, Labourers, Welfare Officer and officers in charge of Basic and Second Cycle Educations, and Peripatetic officer report to Assistant Director in-charge of Human Resource and Management Development.

Assistant Director for Supervision and Management of Teaching and Learning issues instructions to Circuit Supervisors (CS) and Examination Officers, Guidance and Counselling coordinator, Officers in-charge of sports, culture, technical and vocational education and agriculture. These officers also report to him.

Summary

The literature has been reviewed on the barriers to effective communication which includes physical, socio-psychological, emotional and cultural barriers. The concepts of Administration in the Ghana Education Service as well as the use of telephones and organisational structure of Sunyani Municipal

have all been reviewed in the literature. The Sunyani Municipality and its environs receive telephone network coverage for which many of the residents are subscribers. However, little is known on the use of telephones in the administrative functions in Ghana Education Service in the municipality. It has therefore become necessary for the researcher to conduct a study on the use of telephones in the administrative functions of Sunyani Municipal Directorate of the Ghana Education Service in order to have a better understanding of how telephones contribute to effective communication in the administrative functions of the Directorate under study.

CHAPTER THREE

METHODOLOGY

Introduction

This chapter outlines the various approaches that were followed to obtain data for the study and how the data was analysed. It comprises the research design, the targeted population, sources of data, sampling procedures, the methods of data collection and analysis. .

Profile of the Sunyani Municipality

The Sunyani Municipality is located in the southern part of Brong Ahafo Region in the Republic of Ghana. The municipality shares boundaries in the North and West with Sunyani West District, the east with Asunafo District and south with Tano North District. Sunyani Municipality is the most urbanized district in Brong Ahafo region of Ghana. In 2000 the population of Sunyani municipality was 101,145. With a growth rate of 3.8 percent, the population of the municipality is estimated is 147,301 as at December, 2010. Again, the municipality has the lowest dependency ratio of 73.3% in the Brong Ahafo Region. Sunyani, the administrative capital of the municipality is also the administrative headquarters of Brong Ahafo Region.

In Sunyani Municipality, there are five circuits namely Abesim, Atronie, Sunyani 'A', Sunyani 'B' and Sunyani 'C'. There are 43 public and 50 private

kindergartens, 48 public and 42 private basic schools, 44 public and 24 private Junior High Schools and 3 public and 4 private Senior High Schools.

Most towns and communities in the municipality are connected to the networks of all the mobile telephony companies presently operating in Ghana (Ministry of Local Government and Rural Development & Moks Publications and Media Services, 2006).

Research Design

This was a descriptive survey on the use of telephones in the administrative functions of the Sunyani Municipal Directorate of the Ghana Education Service. This design helps to determine the extent of telephone usage in the administrative functions in Ghana Education Service in the Municipality. Neuman (2000) asserts that the descriptive survey involves collecting data in order to test hypothesis or to answer questions concerning the current status of the subject of the study. He concludes that descriptive surveys present a picture of the specific details of a situation, social setting or relationship. In view of the above, a questionnaire and In-Depth Interview Guide were used to gather information as an instrument in descriptive research was used to collect data from the sample in order to answer the research questions posed.

Sources of Data

Both primary and secondary data were sourced for the study. The primary data was generated from questionnaires and in-depth interviews. In addition to the primary data, other secondary sources of data on telephones were also

gathered from areas such as on the internet, published and un-published documents on telephones in both Ghana and other countries.

Target Population

The target population for the study comprise all headmasters, teachers, circuit supervisors, senior high school students' representative council, the Brong Ahafo regional director of education or his representative and the Sunyani Municipal Director of Ghana Education Service. In addition, all telephonists in Senior High Schools, the municipal telephonist of Ghana Education Service, regional telephonist of Ghana Education Service and other supporting staff such as school secretary, bursar were targeted for primary data for this study.

Sample Size and Sampling Techniques

The researcher used both random sampling method that ensures that every member, element or unit of the population has equal and independent chance of being selected or included in the sampling to avoid bias by the use of table of random numbers, and purposive sampling techniques which is one that is drawn based on available information of the units that is judged to be representative of the total population. In all 119 respondents were sampled for the study. They comprised 10 headmasters, 60 teachers, 35 students, 5 Circuit Supervisors, 5 supporting staff (Matron, Bursar and Secretary), the Regional and Municipal Directors as well as the Regional and Municipal Telephonists.

The simple random technique was used to select teachers and headmasters because teachers and headmasters communicate and interact mostly with Ghana

Education Service officials. The Purposive sampling technique was used to select the circuit supervisors, the Municipal and Regional Directors, the regional and municipal telephonists and SRC representatives.

Data collection instruments

A single data collection procedure was not sufficient to collect comprehensive data for a study of this nature. Both quantitative and qualitative data collection instruments were developed and used for the data collection. The instruments included questionnaires and In-Depth Interview (IDI) guide. The instruments were focused on the key issues proposed in the study.

The researcher, with the assistance of his supervisor, designed an individual questionnaires and an IDI guide for the study. The questionnaire was included open and close ended questions, to collect both demographic and other quantitative data. It was divided into four sections. The first section solicited data on the background characteristics of the respondents followed by section two that was focused on current mode of communication for administrative functions as performed in the Ghana Education Service. The third section of the instrument was to gather data on the uses of telephones in the administrative functions of the Ghana Education Service. The fourth part gathered information on the barriers in using telephones in discharging administrative functions and ends with the last segment of what should be done in order that telephones could be efficiently used to enhance administrative activities in Ghana Education Service.

Data Collection Procedure

The questionnaire was administered to the sampled teachers, circuit supervisors, Student Representation Council members, headmasters and supporting staff. The IDI guide was used to gather qualitative data that might not be captured to support the study. It concentrated on some key informants such as the Municipal and Regional Directors in Sunyani Municipal Directorate of the Ghana Education Service. Each respondent was assured of his/her confidentiality.

Data Analysis Procedure

Statistical tools such as frequency counts and percentages were employed to interpret the data. Responses were compared to find out those that reflected the same opinion and vice versa. Again, Statistical Package for Social Solutions (SPSS) software was used to analyse the quantitative data collected. The Microsoft Office Excel Programme was used to draw all the Bar and Pie Charts. The responses to the In-Depth Interviews were categorised and similar responses analysed manually.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents analysis of the data collected from respondents. It focuses on a brief background of the respondents, an analysis of their usage of telephones and how telephones can be effectively used to improve communication in the Ghana Education Service.

Status of respondents

The status of personnel in the Ghana Education Service, to a large extent, determines the flow of communication in the service and usage of telephones in the communication process. Table 1 presents the status of the respondents.

Table 1

Status of respondents

Status	Frequency	(%)
Teachers	56	54.1
Students	34	31.2
Headmasters	9	8.3
Circuit Supervisors	6	5.4
Support Staff	4	4.6
Total	109	100.0

Source: Fieldwork, 2009.

Teachers formed the majority (54.1%) of the respondents. Students were also strongly represented as they formed a little above a third of the respondents. Circuit Supervisors and other supporting staff such as bursars and matrons formed less than 10% of the respondents.

Length of Teaching Experience

Communication plays an important role in ensuring the success of personnel in any work environment. The number of years in the service could be affected by the medium/media through which a person transmits information in the Ghana Education Service. Table 2 illustrates the number of years the respondents, excluding students, have served as teachers or administrators.

Table 2

Length of Teaching Experience

Length of service (in years)	Frequency	(%)
1-10	38	54.3
11-20	21	30.0
21-30	9	12.9
Above 30 years	2	2.9
Total	70	100

Source: Fieldwork, 2009

It emerged that 54.3% of the respondents had work for about ten years in the service. It was also observed that the proportion of the respondents decreased with increasing length of service. For instance, the proportion with highest length

of service (above 30 years) was the lowest (2.9%) comparable with the highest proportion (54.3%) with least length of service (1-10 years).

Receipt of incoming messages

Effective communication according to Sekyi-Baidoo (2000) is the communication which ends in the achievement of desired goals. Initiators of communication are expected to select appropriate medium of communication to put their messages across. Within the administrative set up of the Ghana Education Service, like other public and private institutions, messages are communicated through varied media such as letters, electronic mails (E-mails), faxes and telephones. The choice of a medium depends on a number of factors including cost, confidentiality, time and record keeping. In this study, respondents were asked to indicate the various media through which messages are transmitted to them. Letters, telephones, face to face interactions, e-mails and faxes were most cited by the respondents.

Receipt of messages by letter

Letters could be used either internally or externally to communicate. Internally, letters could be written and circulated within the organisation to transmit information such as circulars and memos. Letters could also be sent from outside the organisation to communicate to personnel either as individuals or as a corporate body. Table 3 illustrates a cross tabulation of the categories of the respondents and their receipt of messages by letters in the study area.

Table 3**Use of letters**

Category	Use of letters					Total
	Non-use	Least usage	Infrequent usage	Frequent usage	Most frequent usage	
Teachers	6 (10.7%)	13 (23.2%)	7 (12.5%)	19 (33.9%)	11 (19.6%)	56 (100.0%)
Students	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	34 (100.0)	34 (100.0)
Headmasters	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	9 (100.0)	9 (100.0)
Circuit supervisors.	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	6 (100.0)	6 (100.0)
Support staff	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (100.0)	4 (100.0)
Total	6 (5.5%)	13 (11.9%)	7 (6.4%)	19 (17.4%)	64 (58.7%)	109 (100.0)

Source: Fieldwork, 2009

All the individual respondents, excluding teachers, had ever received messages through letters. Overall, more than half (58.7%) of the respondents most frequently receives messages by letters. Only 5.5% of the respondents indicated that they had never received administrative messages by letters. The high proportion of the respondents (76.1%) who either frequently or most frequently receive messages by letters seem to suggest the popularity of letters as a medium of communication in the administrative functions of the Ghana Education Service.

Sending of messages by letters

Table 4 illustrates respondents' use of letters in sending messages. Two-thirds of the respondents most frequently send messages by letters. About one in ten of the respondents least sends messages by letters. Indeed, letters seem to be the most preferred medium of sending messages in the administrative functions of the GES in the Sunyani municipality. About a third of the teachers neither uses or least send messages by letters.

Table 4**Sending messages by letters**

Category	Sending messages by letters					Total
	Non-use	Least usage	Infrequent usage	Frequent usage	Most frequent usage	
Teachers	7 (12.5%)	11 (19.6%)	3 (5.4%)	15 (26.8%)	20 (35.7%)	56 (100.0%)
Students	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	34 (100.0)	34 (100.0)
Headmasters	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	9 (100.0)	9 (100.0)
Circuit supervisors.	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	6 (100.0)	6 (100.0)
Support staff	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (100.0)	4 (100.0)
Total	7 (6.4%)	11 (10.1%)	3 (2.8%)	15 (13.8%)	73 (67.0%)	109 (100.0)

Source: Fieldwork, 2009

Receipt of messages by face-to –face

Face-to-face interactions are commonly used to send messages. People usually meet to issue directives, discuss issues or give feedback. In the school setting, face-to-face communication mostly takes place during morning assemblies and devotions, staff meetings and classroom announcements. These avenues are used to communicate messages to the people concerned. In administrative circles, face-to-face communication is usually in the form of general meetings, durbars, seminars and workshops. The proportion of the respondents who have received administrative messages through face-to-face interactions are illustrated in Figure 2.

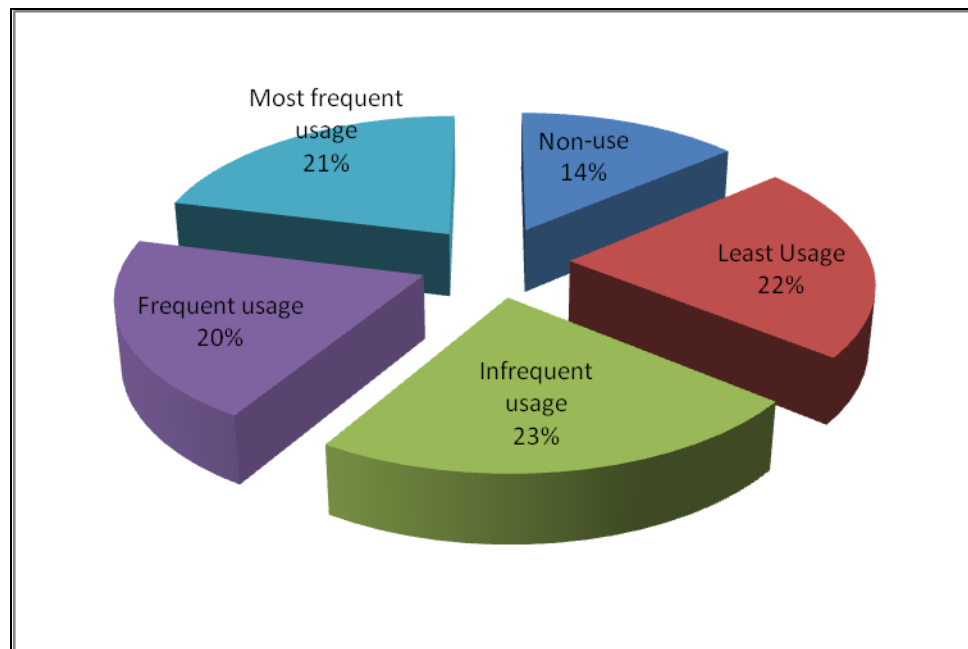


Figure 2: Face-to-face communication

Source: Fieldwork, 2009

As evident in the figure, 14% of the respondents indicated that they had never received administrative messages directly from the senders of the messages. While 21.2% of the respondents agreed that they mostly receive face-to-face messages, a similar proportion of (22%) reported least using this medium of communication. A further analysis of the receipt of messages by face-to-face is provided in Table 5.

It could be observed from Table 5 that almost all the teachers infrequently or least receives messages through this medium. On the contrary, majority of the students (64.7%) and all the heads, supervisors and other supporting staff who participated in the study most frequently uses this medium. It could be explained in part that the infrequent staff meetings held by teachers might account for this.

Table 5**Receipt of messages by face-to-face**

Category	Use of face-to-face					Total
	Non-use	Least usage	Infrequent usage	Frequent usage	Most frequent usage	
Teachers	15(26.8%)	24(42.9%)	17 (30.4%)	0 (0.0%)	0 (0.0%)	56 (100.0%)
Students	0 (0.0%)	0 (0.0%)	8 (23.5%)	22 (64.7%)	4 (11.8%)	34 (100.0)
Headmasters	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	9 (100.0)	9 (100.0)
Circuit supervisors.	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	6 (100.0)	6 (100.0)
Support staff	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (100.0)	4 (100.0)
Total	15(13.8%)	24 (22.0%)	25(20.0%)	22(20.0%)	23(21.1%)	109 (100.0)

Source: Fieldwork, 2009

Receipt of messages by telephones

Telephones enable both the sender and receiver of messages to hear each other directly, promptly and clearly. Messages sent by telephones receive immediate feedback and action. In most instances, the right recipients are reached with the right messages. Telephone messages could be transmitted by voice (telephone calls) or text (fax messages and electronic mails). Table 6 shows the proportion of the respondents who usually receive voice telephone messages as part of GES administrative communication in the study area.

Nearly a fourth of the respondents indicated that they had never received administrative messages by telephones. While all the respondents who may be described as administrators (Headmasters, Circuit Supervisors and the supporting staff) most frequently receive messages by phone call, a high proportion of the teachers had never or least receives messages by telephones. Overall, 21.1% of the respondents mostly receive phone calls as part of administrative communication while 12.8% infrequently receives messages by telephones.

Table 6**Receipt of messages by telephones**

Category	Use of telephones					Total
	Non-use	Least usage	Infrequent Usage	Frequent usage	Most frequent usage	
Teachers	26(46.4%)	24(42.9%)	6 (10.7%)	0 (0.0%)	0 (0.0%)	56 (100.0%)
Students	0 (0.0%)	0 (0.0%)	8 (23.5%)	22 (64.7%)	4 (11.8%)	34 (100.0)
Headmasters	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	9 (100.0)	9 (100.0)
Circuit supervisors.	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	6 (100.0)	6 (100.0)
Support staff	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (100.0)	4 (100.0)
Total	26(13.8%)	24 (22.0%)	14(20.0%)	22(20.0%)	23(21.1%)	109 (100.0)

Source: Fieldwork, 2009

Table 7**Receipt of messages by electronic mails**

Category	Use of electronic mails					Total
	Non-use	Least usage	Infrequent Usage	Frequent usage	Most frequent usage	
Teachers	56(100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	56 (100.0%)
Students	21(61.8%)	13 (38.2%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	34 (100.0)
Headmasters	0 (0.0%)	6(66.7%)	3 (33.7%)	0 (0.0%)	0 (0.0%)	9 (100.0)
Circuit supervisors.	0 (0.0%)	0 (0.0%)	4(66.7%)	2(33.3%)	0 (0.0%)	6 (100.0)
Support staff	0 (0.0%)	0 (0.0%)	0 (0.0%)	3 (75.0%)	1(25.0)	4 (100.0)
Total	77(70.6%)	19(17.4%)	7(6.4%)	5(4.6%)	1(0.9%)	109 (100.0)

Source: Fieldwork, 2009

Receipt of messages by electronic mails

The Internet is a confederation of thousands of computers from various sectors of society such as education, business, government and the military. It is a network of thousands of computer networks (Lewis, 1994). The internet allows for the exchange information through some media such as the electronic mail. Electronic mail enables computer users to send messages and data quickly through a local area network or beyond through the net. Beginning the 1990s, electronic mails had been widely used in business and private communications. Table 7 provides the category of the respondents and how they have been sent information for administrative purposes by electronic mails.

Electronic mailing appears not to be popular with the respondents. For, instance, majority of them (70.6%) had never used this medium to communicate officially compared to the only 0.9% who most frequently use this medium.

Sending information through electronic mails

Respondents also indicated that they send electronic mails to other officers as well. As illustrated in Table 8. As evident from Table 8, all the teachers had never used the electronic mail medium to send official information. More than half of the headmasters infrequently communicate by electronic mails. More than two thirds of the respondents had never used this medium compared to just 2.8% (all support staff in the education offices) who most frequently uses this medium.

Table 8**Sending of messages by electronic mails**

Category	Use of electronic mails					Total
	Non-use	Least usage	Infrequent Usage	Frequent usage	Most frequent usage	
Teachers	56(100.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	56 (100.0%)
Students	16(47.1%)	18 (52.9%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	34 (100.0)
Headmasters	0 (0.0%)	4(44.4%)	5 (55.6%)	0 (0.0%)	0 (0.0%)	9 (100.0)
Circuit supervisors.	0 (0.0%)	0 (0.0%)	0(0.0%)	6(100.0%)	0 (0.0%)	6 (100.0)
Support staff	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	3(100.0%)	4 (100.0)
Total	72(66.7%)	22(20.4%)	5(4.6%)	6(5.6%)	3(2.8%)	109 (100.0)

Source: Fieldwork, 2009

Communication by fax

Respondents again rarely receive administrative correspondences by fax. As illustrated in Figure 3, majority of them (79.8%) had never received fax messages and part of administrative correspondence.

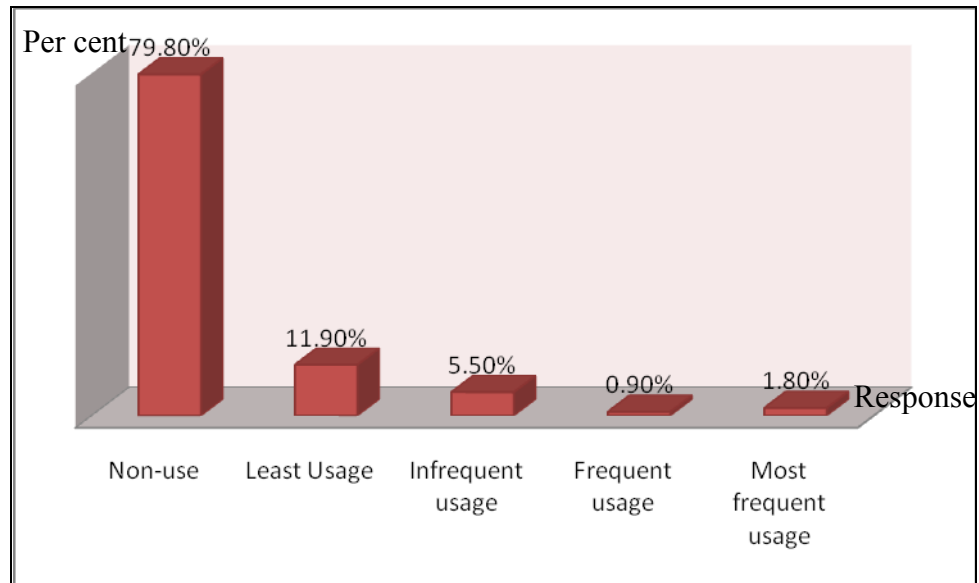


Figure 3: Receipt of fax messages

Source: Fieldwork, 2009

Analysis of the responses on the receipt of administrative messages by telephones (voice, fax and electronic mails) suggest that apart from voice telephony, fax and electronic messages are rarely used in the Ghana Education Service offices in the study area as part of administrative communication. Most of the respondents either never use or least use these facilities.

Sending messages by telephones

Messages communicated by the respondents through voice telephones are presented in Figure 4.

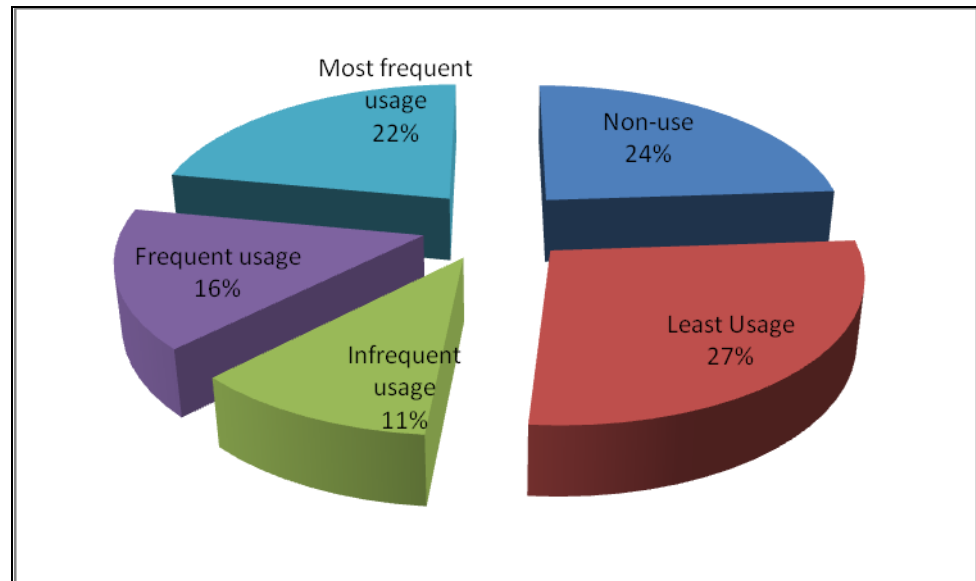


Figure 4: Sending messages by voice telephones

Source: Fieldwork, 2009

More than a third of the respondents most frequently or frequently send messages by voice telephones. In like manner, a similar proportion infrequently or do not use telephones to send or communicate administratively.

In an interview with the PRO for Sunyani Municipal Director of the Ghana Education Service on the use of voice telephones to send or receive administrative information, the over 50 years old officer had this to say:

The Municipal Education Telephonist is basically responsible for communicating with the schools and other officers in the municipality on the activities of the service through the telephone. While most of the SHS in the municipality have landline telephones it is only about five public basic schools that own landline telephones. I think the mobile phones have greatly facilitated telephone communication. Our offices do not have intercom connectivity so the offices have to even leave their duties and go to the telephonist to either make or receive phone calls.

Availability of medium of communication

It is not just enough to identify the mode of communication in an organisation or administrative setting. It is equally important to ascertain the availability, functionality and accessibility of the medium of communication. This study therefore sought to identify the various modes of communication that are currently available to the respondents (Figure 5).

It was observed that more than a third of the respondents rely on face to face interactions, which include morning assembly or devotion, school durbars, staff meetings. These take some time and energy to organise is what they rely on to either send or receives messages in the Sunyani Municipal Directorate of the Ghana Education Service. Again, nearly a third (29.4%) of the respondents

mentioned telephone availability in their offices or institutions. Fax machines were least mentioned

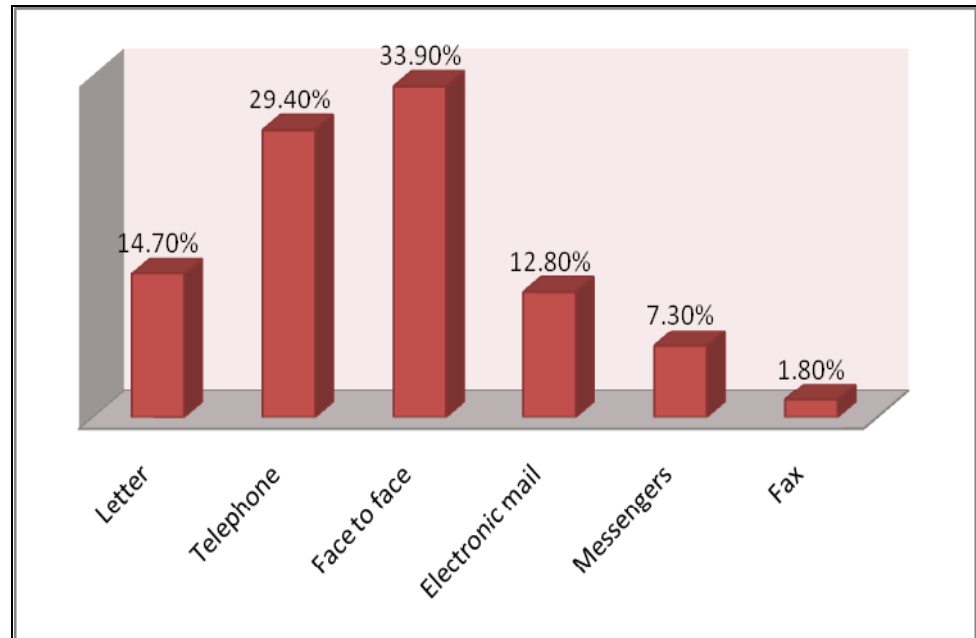


Figure 5: **Availability of medium of communication**

Source: Fieldwork, 2009

Acquisition of medium of communication

Respondents were further asked to state how the existing communication gadgets mentioned were acquired (Table 9). More than 37% of the respondents acquired the gadgets from their personal resources. The various schools (31.2%) had also acquired some of the gadgets. Other sources mentioned were the parents and teacher associations in the various schools and donations by the government.

Table 9
Sources of communication gadgets

Sources of communication gadgets	Frequency	(%)
School's administration	34	31.2
Government	12	11.0
Parents Teachers Association	10	9.2
Personal	41	37.6
No recollection	12	11.0
Total	109	100.0

Source: Fieldwork, 2009

When the Regional Education Service Public Relations Officer was asked on why personnel had to use their personal resources to acquire communication gadgets for official purposes, the 42 year old officer had this to say:

We have only three landline telephones in the Regional Education Directorate. The Regional Director and the Accountant have two of the telephones. The regional telephonist manages the third one. The telephone lines are sometimes not reliable. In most instances the officer making or receiving the call had to go to the telephonist for the call. Some officers therefore decide to use their personal

telephones to communicate on official matters. We do not reimburse them due to financial constraints. I will say they are doing a sacrificial job. The government, school authorities and sometimes the Parents Teachers Association provides some allowances to maintain the gadgets.

Accessibility to official telephones

The individual respondents were asked to indicate how official telephones are easily available to them for official purposes. Their responses are provided in Figure 6.

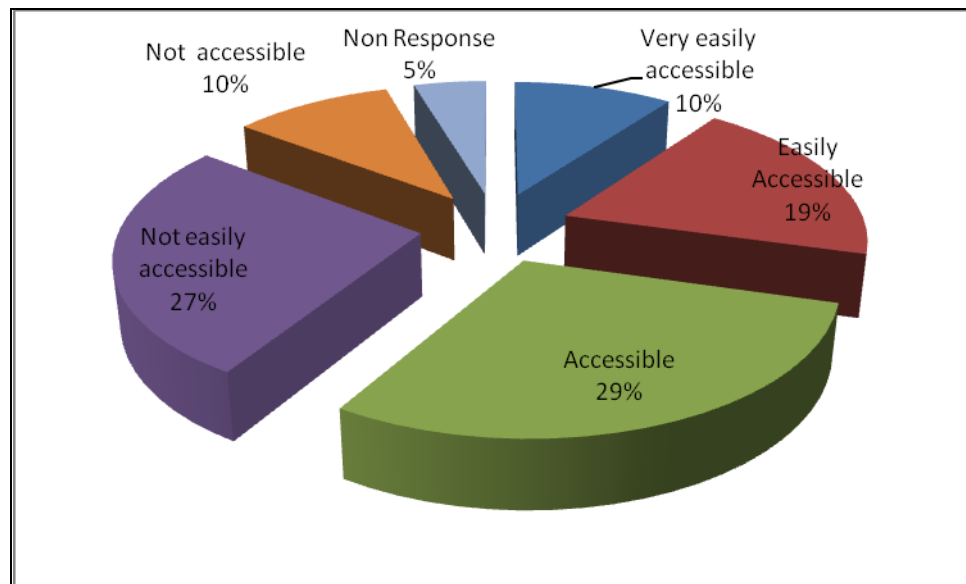


Figure 6: Access to official telephones

Source: Fieldwork, 2009

More than half (58.7%) of the respondents indicated that they have access to official telephones when the telephone lines are good and the receptionist is available. There were some 10 per cent who intimated that they have been having extreme difficulty in accessing the telephones.

Availability of official telephones

It was extremely important to determine the number of telephones available for official duties in the study area (Table 10).

Table 10

Number of Telephones for official duties

Number of telephones	Number of offices	%
0	20	18.3
1	41	37.6
2	9	8.3
3	24	22.0
Above 3	7	6.4
No response	8	7.3
Total	109	100.0

Source: Fieldwork, 2009

More than a third of the respondents had only one telephone officially being used for administrative purposes. It is worth noting that while some 18.3%

of the respondents did not have any official telephone for official communication, some 6.4% had more than three telephones at their disposal for official correspondences.

Importance of telephones in educational administration

The use of telephones saves users from travelling, saves time and ensures the speedy delivery of feedback from intended recipients. Respondents were therefore asked to indicate the role played by telephones in educational administration (Table 11). Majority of the respondents (70.6%) indicated that using telephones for official communication eases the general communication in educational administration.

Table 11

Role of Telephones in educational administration

Role of telephones	Frequency	%
Easy communication	77	70.6
Less expensive	6	5.5
Speeds up communication	18	16.5
Saves time	1	0.9
No response	7	6.4
Total	109	100.0

Source: Fieldwork, 2009

Both the Municipal Director of Education and the Regional Educational Public Relations Officers corroborated the reasons provided by the individual respondents during an in-depth interview with them. For Instance, according to the PRO for Municipal Director of Education:

Telephones make dissemination of messages to recipients faster and easier. It also saves cost in the general administration of the service. It is unfortunate that our intercom is no longer working as a result of fire outbreak in the office some few months ago. One needn't walk to another office to communicate. It was really saving a lot of time and energy. Receipt of feedback is immediate when using telephones. Personnel had the luxury of using the telephones for official conversations, and, in rare cases, sends or receives faxes and for internet connectivity.

Challenges in using telephones for educational administration

Undoubtedly, there are some challenges that usually accompany the use of telephones for educational administrative purposes. This study sought to identify the challenges respondents encounter in their quest to use telephones for educational administration purposes. Their responses are presented in Figure 7.

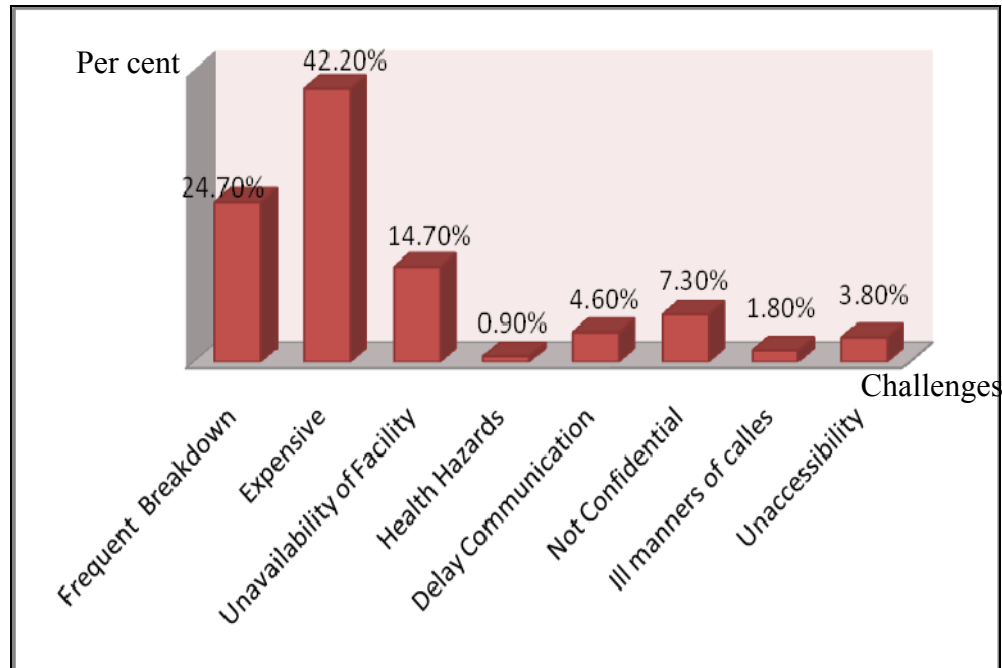


Figure 7: Challenges in Using Telephones

Source: Fieldwork, 2009

Respondents indicated ever encountering varied challenges in their quest to use telephones for educational administrative purposes. Some of the challenges mentioned were, frequent breakdown of telephones in the municipality, lack of sufficient telephones for educational administrative purposes. There were some people who said that the frequent use of telephones could have negative health implications on them. Majority of the respondents (42.2%) were of the firm belief that the main significant challenge associated with the use of telephones in educational administration is the high telephone bills.

Elaborating on the challenges faced by educational administrators in using telephones for official functions, the PRO for the Municipal Director of education said:

We do not have enough funds for servicing and paying for telephone bills. Almost all personnel who use telephones in the office have to sacrifice and pay for the call themselves. Some are compelled to use their personal mobile phones to perform official functions. Sometimes when the lines are good, some staff members will want to stay on the line for a long time which tends to discourage some colleagues from using the office telephones.

Effective use of telephones in the administrative functions of the Ghana Education Service in the Sunyani Municipality

According to the PRO for the Municipal Director of Education, certain measures could be adopted as a way of improving the use of telephones for educational administrative purposes. According to him:

The Ghana Education Service should provide each officer in the education service an official mobile phone and install landline telephones in every office of the service. Again, I will entreat all schools to endeavour to acquire telephones for official use. The

government, as a matter of urgency, must subsidize the cost of telephone bills. The telephone service providers must also come to the aid of the schools and offices by subsidizing the bills or giving us free credits for calls as part of their social responsibilities duties. The telephonists in the region must also be educated on best telephone practices to enable them render quality services to all our clients. Telephones are indispensable and that all hands must be on deck to ensuring that telephones are used to speed up the pace of transmitting information in the Ghana Education Service.

Discussion

Various modes of communication are used to send or receive messages in the Ghana Education Service as applicable in other public and private institutions. Despite the increased interest in using modern communication gadgets such as telephones, electronic mails and faxes, it emerged from this study that letters were the main medium of communication in the administrative functions of the Sunyani Municipal Directorate of the Ghana Education Service.

Letters are primarily drafted by an officer, typed by an administrative clerk(s), proof read by the officer before the final document is ready for signature and dispatch. Ghana's postal system could be described as the snail pace postal

system because it takes a considerable length of time before the letters reach their destinations. There has been evidence of some letters getting missing enroute to the intended recipients. Once the letters are received, it might go through the same process before the sender gets feedback from the receiver. The continual dominance of letters as a medium of communication in the administrative functions of the Ghana Education Service in the study area might lead to slowing down the pace of communication in the service.

It was identified that using telephones speeds up communication in the service as well as saving a considerable amount of time and transport cost (Table 8). However, there were not enough telephones available for official use in the service in the municipality (Table 7). The use of the few telephones were also not immune from some challenges such as frequent breakdown of telephone lines, high cost associated with making telephone calls and the unavailability of telephones in the service for administrative purposes (Figure 8). The situation whereby officers are compelled to finance their official telephone calls may act as a disincentive for using telephones for official purposes. The end result of this may be the fact that they may have to use other less expensive means of communication such as letters which also has the high potential of delaying the relaying of information in the Ghana Education Service.

One cannot deny the fact that some schools have some fixed lines to enhance communication. It was realised during the study that these telephones

were not sufficient to meet the increased needs of officers and students especially in the second cycle schools. The few telephone facilities available lacked routine maintenance. A case in point is the breakdown of the intercom facility in both the regional and the municipal offices of the service due to fire outbreak some months before the study was conducted. The long distance involved in moving from an office to the telephonist to either make or receive telephone calls might also account for lower rate of using telephones for administrative purposes in the Ghana Education Service especially in the Sunyani Municipality.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter deals with the summary of how the study was conducted and the major findings derived from the study, the conclusions drawn from the findings of the study and recommendations.

Summary

This was a descriptive study to assess the use of telephones in administrative functions of Sunyani Municipal Directorate of the Ghana Education Service. In this study, 111 respondents participated in the study comprising circuit supervisors, teachers, students, headmasters, supporting staff and officers from both the Municipal and Regional Education offices of the Ghana Education Service.

The main research instruments employed were questionnaires and in-depth interview (IDI) guide. The questionnaires were analysed using the Statistical Product for Service Solutions (SPSS). Responses from the in-depth interviews

were hand recorded, categorised and manually analysed. Data was presented using tables, frequencies and charts.

Summary of major findings

- Letters, telephones, face to face interactions, e-mails and faxes were mostly cited by the respondents as their medium for sending messages.
- A high proportion of the respondents (76.1%) either frequently or most frequently receive messages by letters. Again, two-thirds of the respondents most frequently send messages by letters. This suggests the popularity of letters as a medium of communication in the administrative functions of the Ghana Education Service in the study area.
- Nearly a fourth of the respondents indicated that they had never received administrative messages by telephones. While all the respondents who may be described as administrators (Headmasters, Circuit Supervisors and the supporting staff) most frequently receive messages by phone call, a high proportion of the teachers had never or least received such messages.
- It was observed that more than a third of the respondents rely on face to face interactions, which include morning assembly or devotion, school durbars, staff meetings for communicating in educational institutions in the municipality.

- Official telephones (landlines and mobile phones) were not enough for administrative for the respondents. In most instances, they had to use their personal resources to acquire these communication gadgets.
- Majority of the respondents (70.6%) indicated that using telephones for official communication enhances communication in educational administration.
- Some of the challenges encountered by respondents concerning the use of telephones for administrative functions were frequent breakdown of telephones in the Sunyani Municipality, lack of sufficient telephones for educational administrative purposes and the high telephone bills.

Conclusions

Effective communication plays a major role in facilitating the effective and efficient administration of education. Barriers to effective communication such as illegible handwriting, poor telephone connections and mechanical breakdown are prerequisite to stifling quality administration of education. Telephones could be effectively used to minimise these barriers, however, telephones are rarely used in the Sunyani Municipal Education Directorate due to high telephone bills, frequent breakdown of telephone lines and equipment and perceived health impact of using telephones for communication.

Observations from the study indicate that letters, rather than modern communication media such as electronic mailing, faxes, and telephones, remain popular with the respondents. This may explain the seemingly slow pace in sending and receiving information in the Sunyani Municipal Directorate of the Ghana Education Service.

Recommendations

The following recommendations are based on the findings of this study.

- It is recommended that telephone facilities and other Information Communication Technology (ICT) facilities should be made available by the government, PTAs, Corporate Organisations and NGOs and accessible in schools and education offices to all intended users in the directorate to accelerate communication in the service.
- It is further recommended that the Ghana Education Service should provide internal communication (intercom) in all education offices to minimise physical barriers in communication in the service.
- Lastly it is recommended that municipal and regional telephonist should be trained periodically to manage telephone facilities and improve telephone usage in the Ghana Education Service.

REFERENCES

- Allotey, F. K. A. & Akorli, F. K. (n.d). Telecommunications in Ghana. Accessed online from <http://www.vii.org/papers/ghana.htm> on August 2009.
- Atta, E.T., Agyenim-Boateng, E.O. & Baafi-Frimpong (2000). Lecture notes on educational administration. University of Cape Coast. Unpublished Handouts.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*. 117. 497-529.
- Bellis, M. (n.d). History of the fax machine and Alexander Bain. Accessed online from http://inventors.about.com/od/bstartinventors/a/fax_machine.htm on July 2009.
- Boah-Mensah, E. (2008). Mobile phone population hits 10 million. *Business and Financial Times*. , pp. 1.
- Evans, D. W. (1993). *People, communication and organisations*. Britain: Bell and Bain.
- Gulick, L. H., & Urwick, L. F. (1937). *Papers on the science of administration*. New York: Institute of Public Administration.
- Hoy, W. & Miskel, C. (2007). *Educational administration: Theory, research and practice* (8th ed). New York: McGraw-Hill Higher Education.
- Kirk, A. (2006). Advantages and disadvantages of using a fax. Accessed online from http://www.ehow.com/facts_4741334_advantages-disadvantages-using-fax.html on August 2009.

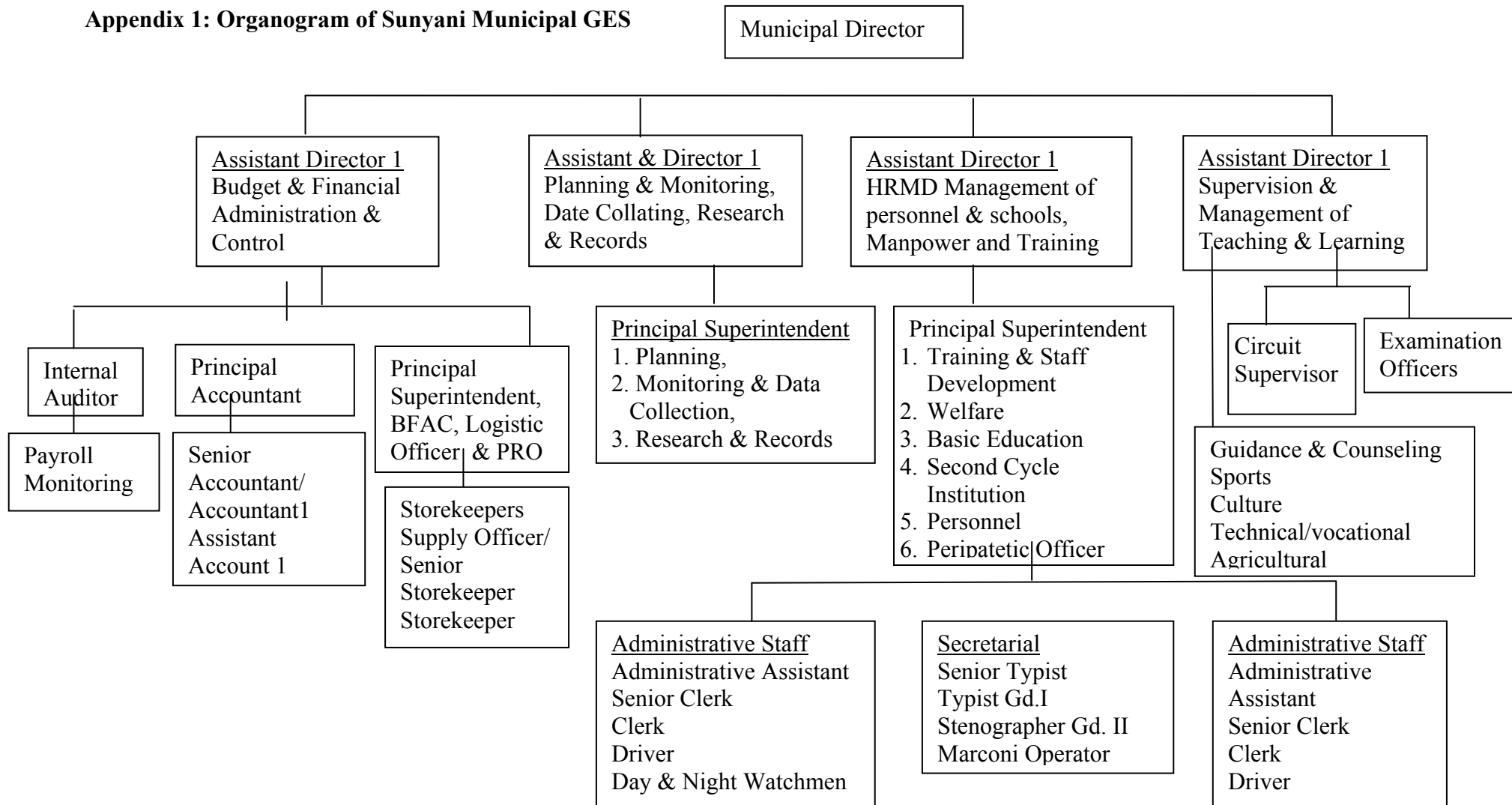
- Lewis, P.H. (1994, August 9). Who's the coolest internet provider? *The New York Times*, pp. 12.
- Marfo-Yiadom, E (2005). *Principles of management*. Accra: Woeli Publishing Services.
- Ministry of Local Government and Rural Development and Moks Publications & Media Services. (2006). Profile of the Sunyani Municipality. Accessed online from <http://www.ghanadistricts.com/districts/?news&r=10&=30> on June, 2010.
- Mussazi, C. S. (1995). *The theory and practice of educational administration*, London: Macmillan Publishing Limited.
- Neuman, W. L. (2000). *Social research methods: Qualitative and quantitative approaches*. (4th ed.). Boston: Allyn and Bacon.
- Nyan, J.K. & Sefenu, J.C. (2000). *Business communication*. Cape Coast: University of Cape Coast Centre for Continuing Education.
- Okine, C. B. (2008). Ghana Telecom: what does the future hold? *Daily Graphic*, pp.9.
- Republic of Ghana. (1974). Education administration: Functions of the Ghana Education Service. Accessed online from www.moess.gov.gh on July 2009.
- Rouse, J.M & Rouse, S. (2002). *Business communication, A cultural and strategic approach*. (1st Ed.). London: Thomson Learning.

Sekyere, E. A. (2009). *Teachers' guide*. Kumasi: Cita Printing Press Limited.

Sekyi-Badioo, Y. (2000). *Learning and communicating*. Kumasi: Wilas Press Limited.

Thill, J.V. & Bovee, C.L. (2008). *Business communication today*. (8th ed.). New Jersey: Prentice Hall International Incorporated.

Appendix 1: Organogram of Sunyani Municipal GES



APPENDIX 2: UNIVERSITY OF CAPE COAST
INSTITUTE FOR EDUCATIONAL PLANNING AND ADMINISTRATION
AN ASSESSMENT OF THE USE OF TELEPHONES IN THE
ADMINISTRATIVE FUNCTIONS OF SUNYANI MUNICIPAL
DIRECTORATE OF GES

**Questionnaire for Teachers, Circuit Supervisors, Head Masters/Mistresses
and Students**

Introduction

The study is being conducted to assess the use of telephones in the administrative functions of Sunyani Municipal Directorate of the Ghana Education Service. You have been sampled to participate in this study by providing responses to the questions that I will ask you. You will be asked question on the current modes of communication in the service, the use of telephones in the service as well as barriers to the use of telephones in the GES. I will entreat you to provide responses to all the questions that I will ask you; however, if a question makes you feel uncomfortable, you may choose not to answer it. Your responses would be kept strictly confidential.

SECTION A: BACKGROUND OF RESPONDENTS

Tick (√) as applicable to you

1. Status: Teacher []
- Student []
- Headmasters []
- Circuit supervisor []

2. Years of teaching experiences (where applicable) -----

3. If a teacher, what is your status?

- Professional []
- Non – professional []

SECTION B

CURRENT MODE OF COMMUNICATION IN GHANA EDUCATION SERVICE

4. Through which of the following media do you receive message(s) from the Ghana Education Service offices/your school authorities? Please indicate your response by circling/ticking (√) the option (5, 4, 3, 2 or 1) you consider appropriate.

Medium	Most frequent usage 5	Frequent usage 4	Infrequent 3	Least usage 2	Non use 1
Letters					
Telephone					
Face to face interaction					
E-mail					
Messengers					
Fax					
Other					

5. Through which of the following media do you send message(s) from the Ghana Education Service offices/your school authorities? Please indicate your response by circling/ticking (\surd) the option (5, 4, 3, 2 or 1) you consider appropriate.

Medium	Most frequent usage 5	Frequent usage 4	Infrequent 3	Least usage 2	Non use 1
Letters					
Telephone					
Face to face interaction					
E-mail					
Messengers					
Fax					
Other					

6. Which of the communication gadgets listed in Questions 4 and 5 are available to you for official use? Please list them

.....
.....

7. How did you acquire the gadget(s) mentioned in 6?

.....
.....

8. How do you maintain the gadget(s) mentioned in 6?

.....
.....

9. In what way(s) would you say you easily access the communication gadget(s) for office use?

- Very easily accessible []
- Easily accessible []
- Accessible []
- Not easily accessible []
- Not accessible []

SECTION C

THE USE OF TELEPHONES AT GHANA EDUCATION SERVICE/AT SCHOOL

10. How many telephones(s) do you have at your workplace for official communications?

.....
.....

11. In what way(s) do you think telephones are necessary in educational administration in your district/school?

.....

12. Please use the checklist below to rate your level of telephone/mobile phone usage with the scale 1-5, where 5 represents most frequent usage and 1 non use.

Indicate by cycling your response.

Usage.....	5	4	3	2	1
Casual conversation	5	4	3	2	1
For business transactions... ..	5	4	3	2	1
Summon help in an emergency	5	4	3	2	1
Retrieving messages from an answering machine	5	4	3	2	1
For internet connectivity.....	5	4	3	2	1

13. What would you say are some benefits you derive from using telephones for administrative purposes?

.....
.....

14. Apart from telephone services, through what other means do you communicate in your office/school?

.....
.....

SECTION D

BARRIERS TO THE USE OF TELEPHONE

15. What challenges, if any, do you encounter in using the telephone for official communication?.....
.....

16. Which of the following reason(s) do you think affect your colleagues' use of telephones in the office? (**Tick as many as applicable**)

- Facility not available []
- Cost of using telephone facilities is expensive []
- Hazardous to human health []
- Delays the process []
- Not confidential []
- Ill manners of callers []
- Other (Specify) -----

17. Which of the following factors pose challenges to your use of telephones in your district? (**Tick as many as applicable**)

- Facility not available []
- Cost of using telephone facilities is expensive []
- Hazardous to human health []
- Delays the process []
- Not confidential []

Ill manners of callers

[]

Other (specify) -----

18. In your opinion, what should be done in order that telephones could be efficiently used to enhance administrative activities in your school/district/municipal/metropolitan?

.....

THANK YOU

APPENDIX 2: UNIVERSITY OF CAPE COAST
INSTITUTE FOR EDUCATIONAL PLANNING AND ADMINISTRATION
ASSESSMENT OF THE USE OF TELEPHONES IN THE
ADMINISTRATIVE FUNCTIONS OF SUNYANI MUNICIPAL
DIRECTORATE OF GES

Interview Guide for Regional and Municipal Directors of GES

Preliminary Activities

1. Introduction and Explanation of purpose of interview.

Thank you for accepting to take part in this interview. As I have mentioned briefly in my invitation letter, I am an M.Ed student of the Institute for Educational Planning and Administration, University of Cape Coast. As part of my programme, I am conducting this study to assess the use of telephones in the administrative functions of Sunyani Municipal Directorate of the Ghana Education Service. You are kindly requested to respond to issues raised in this interview as genuine as you can. The issues cover the current modes of communication in the service, the use of telephones in the service as well as barriers to the use of telephones in the GES. I should be grateful if you respond to all questions I ask during the interview session but if a question makes you feel uncomfortable, you may choose not to answer it. Your responses would be kept strictly confidential.

Record date and time interview commenced.

Before we begin, I would like to get some brief background data about you

(Probe: e.g. working experience)

Main interview

1. In what ways do you communicate official matters among staff of the Ghana Education Service in your district?
2. Will you say the introduction and expansion of telephone facilities have affected communication practices in the GES in any way?
3. Specifically, what is the pattern of your use of telephones in the discharge of your administrative duties?
4. How do your subordinates use telephones to perform their administrative duties?
5. Do you have telephone intercom in your offices? If yes, how does it contribute to communication among staff?
6. If you communicate with your subordinates through the telephone, how long does it take them to provide you with feedback
7. How often, if any, does the GES supply you with mobile phone (s) for administrative functions?
8. If these facilities are supplied, in what ways are they used to facilitate official tasks?

9. Are there any examples of your colleagues' hesitance in using the telephone for administrative purpose?
10. In your opinion, what should be done in order that telephones could be efficiently used to enhance administrative activities in your school/district or municipality?

END OF THE INTERVIEW

These are all the questions that I have for you. Thank you very much for your cooperation.

Record time interview ended.....

INTERVIEWER'S comments:

.....
.....
.....