COMMUNICATION STRATEGIES IN OPEN AND DISTANCE LEARNING INSTITUTIONS: A case study of the Zambian College of Open Learning (ZAMCOL) in Solwezi.

By:

MWANZA GUIDO

A Report submitted to the University of Zambia in Partial fulfilment of the Requirements of the Master of Communication for Development.

The University of Zambia

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I, ..., declare that this dissertation:

    (a) Represents my own work;

    (b) Has not been submitted for a degree at this or any other University;

       and

    (c) Does not incorporate any published work or material from another dissertation.

Signed: ....

Date: ....

APPROVAL

This dissertation report of .... is approved as fulfilling the partial requirements for the award of Master of Communication for Development by the University of Zambia.

Signed: **Date:**

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ABSTRACT

This report was a study of the communication strategies at the Zambian College of Open Learning (ZAMCOL) in Solwezi. The institution offers Diploma in Secondary School, Teacher Education by open and distance learning (ODL) mode, it is both an in-service and out of service program aimed at upgrading academic and professional qualifications of teachers in Zambia. The study sought to understand the communication strategies and the challenges it poses between the Institution and the enrolled and prospective students and others. Data was collected through in-depth interviews, focus group discussions, self-administered questionnaire survey, and personal observations by the researcher. The findings were that it is not yet clear to tell whether information flow to and from the intended beneficiaries of ZAMCOL's learning process by ODL, is insufficient or it is only delayed. A lot still remains to be done in terms of communications research and getting feedback from the learners on the study material.

The paper recommends the use of radio or television which will by accessed by the student's self-driven neighborhood study groups. It also explored the use of alternative instructional technologies, and institute regular student and study Centre visits and evaluations.

Keywords: Open and Distance Learning (ODL); Communication Strategies; teacher education; quality education; Development Communication; Communication Technologies; Communication Problems, Zambian College of Open Learning(ZAMCOL).

DEDICATION

To my Late Father Emilio Mwanza, who in his life time motivated me to study, and take up the Priestly Vocation, but was very particular and straight forward in pointing out that " you should never force yourself continue in a life style that does not allow you serve your Lord God, in Spirit and Truth". These words I have followed and kept up to this time may his soul rest in eternal peace.

ACKNOWLEDGEMENTS

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CRONYMS AND ABBREVIATIONS

DODE	Directorate of Open and Distance Education
MoE	Ministry of Education
UNICEF	United Nations Children's Emergency Fund
UNFPA	United Nations Fund Platform for Action
FAWEZ	Forum for African Women Education
NWP	North-Western Province
EQUIP2	Education Quality Improvement Programme2
ED*ASSIST	Education Automated Statistical Information System
GER	Gross Enrolment Ratio
NER	Net Enrolment Ratio
NIF	National Implementation Framework
PTA	Parent Teachers Association
MDG	Millennium Development Goals
EFA	Education for All
CSO	Central Statistics Office
DEBS	District Education Board Secretary
DMO	District Medical Officer
SNV	Netherlands Volunteers Service
PEO	Provincial Education Officer
ZAOU	Zambian Open University
ZAMCOL	Zambian College of Open learning
ODL	Open Distance Learning

ZACODE   Zambia College of Distance Education

UNZA   University of Zambia

CHAPTER ONE

1.0.0 Introduction

As a *force* contributing to social and economic development, *open and distance learning (ODL)* is fast becoming an accepted and indispensable part of the main stream educational system in Zambia and other developing and developed countries with particular emphasis for Zambia's rural where education opportunities are not readily available.

Open Distance Learning (ODL) is considered nowadays as the most viable means for broadening educational access while improving the quality of education, it's been evolved in parallel with the arrival of newer and intelligent communication technologies and advocating peer-to-peer collaboration and giving the learners a greater sense of autonomy and responsibility for learning (Calvert, 2006).

ODL could embrace any or all of these, open learning, distance education, flexible learning and on-line and e-learning. *Open learning* entails the policies and practices that permit entry to learning with no or minimum barriers with respect to age, gender, or time constraints and with recognition of prior learning. These policies need not be part of a distance education system but are complementary to it. *Distance education* is the delivery of learning or training to those who are separated mostly by time and space from those who are teaching or training. The teaching is done with a variety of "mediating processes" used to transmit content, to provide tuition and to conduct assessment or measure outcomes. *Flexible learning* involves the provision of learning opportunities that can be accessed at any place and time. Flexible learning relates more to the scheduling of activities than to any particular delivery mode. Finally *On-line and e-learning* are terms that have emerged to describe the application of information and communication technologies (ICTs) to enhance distance education, implement open learning policies, make learning activities more flexible and enable those learning activities to be distributed among many learning venues (Farrell, 2003).

The Zambian College of Open Learning (ZAMCOL) is one such institution in Zambia, offering ODL, in Secondary Teacher Education. It started as a social organization to improve the quality of education in the north western province, by up grading primary school teachers with skills and knowledge to handle grades eight (8) and nine (9), in a province that was underdeveloped due to many factors that included wide spread illiteracy among other factors. It wanted to increase opportunity for more citizens to receive at least basic education, especially those in rural areas, where many diploma holder teachers refused to stay (Moonga, 2011).

It was a matter of urgency for change or development only comes as Michael Bannel (1997), noted in the difference between the rich and poor nations as being in the attitudes of its people, moulded for many years by education and culture.

Therefore effective education only takes place where good communication strategies are employed. Communication between teacher and student is a vital element of successful open distance education. Media has played an essential role in the establishment of teacher and student communication. For communication to take place, at a bare minimum, there must be a sender, a receiver, and a message. If this message is intended as an instruction, then besides student, teacher, and content, one has to consider the environment in which this educational communication occurs (Berg & Collins, 1995).

Moore (1990) argues that the success of open and distance education, is based on the content of the dialog between teacher and student and the effectiveness of the communication system in an educational process. Therefore this paper discusses the communication strategies in Open and Distance Learning Institutions, in the case study of communication strategies at the Zambian College of Open Learning (ZAMCOL), in Solwezi.

1.1.0 Background

1.1.1 *The Zambian College of Open Learning*

The Zambian College of Open Learning (ZAMCOL) is an institution that offers open and distance learning/education to both teachers who hold a primary teacher certificate and school leavers, in Zambia.

The fore runner of (ZAMCOL) was Teachers of Primary and Secondary Schools Upgrading Program (TOPSSUP), an initiative by the provincial education administration and local organizations in North Western Province, with blessings of the Ministry of Education (Mc Carrick, 2003).

TOPSSUP was set up in 1998 in the North-Western Province of Zambia. This organization was formed as the result of an acute shortage of qualified teachers to teach grades eight (8) and nine (9), and the use of untrained teachers to replace those seconded to teach in Secondary Schools and the Upper Basic Classes. Primary school teachers are trained to teach grades one (1) to seven (7) only, but due to the above mentioned problem, primary school teachers were asked to teach grade eight (8) and nine (9), not only that but some of the seconded teachers in most cases were asked to handle high school classes, [grades ten (10) to twelve (12)]. In order to staff Primary Schools, Untrained teachers were employed to teach grades one (1) to seven (7). The provincial situation in 1996 was almost that 33.4% of the secondary school teachers were seconded primary trained teachers (Retired Provincial Education Officer, Personal Communication, 5th, October 2012).

The situation was worsened when the Ministry of Education cut down on the use of un-trained teachers in primary schools in 1995. This simply aggravated the situation in the province. It followed that most of the schools remained with no teachers since un-trained teachers made the only staff in some of these schools (ZAMCOL, 2010).

In order to redress the situation as explained above, TOPSSUP was born as a local initiative. The program was tailored to upgrade primary school teachers to qualify to

teach secondary school classes, while school leavers or untrained school teachers were also trained to qualify as primary school teachers. Distance-learning was used as the mode of training to allow the students to continue teaching while obtaining their qualifications. It was envisaged that the locally trained teachers were going to be maintained in their districts and schools where they are very familiar with the terrain and ethos of the province and therefore will be easy to be retained in the local area (ZAMCOL, 2010).

During its second intake in 2004, there were a number of students coming   from other provinces. This meant that TOPSSUP was no longer a program for the North-Western Province only, but it was going to assist many more teachers all over the country wishing to upgrade their teaching qualifications. This encouraged the developers to have a desire to contribute to the teacher development in Zambia (Administrative Manager, Personal communication, 5th, October 2012).

From inception to 2005, TOPSSUP operated under the auspices of the North-Western Provincial Education administration where the Provincial Education Officer was the Director of the program, assisted by all Provincial Standards Officers and the University of Zambia Regional Tutor. While some Netherlands Volunteers Service (SNV) volunteers contributed in many ways that included administration, finances and as teaching and learning material production voluntary personnel (ZAMCOL's Bursar, Personal communication, 6th, October 2012).

However the Ministry of Education in 2005 felt that the Provincial Office could not be involved in teacher training and in the same year, the Colleges that collaborated with TOPSSUP were ordered to cut off the relationship by not allowing its students to write their examinations through them just when they were due to write. Thus TOPSSUP was asked to move out of the provincial Education Office and stand on its own as an Institution; this saw the birth of the ZAMCOL, which with the help of the Canadian Embassy, constructed and moved to its new structures on 22th, November 2005, officiated by the third Secretary in the Canadian Embassy Mousier Julie Growley (ZAMCOL's Bursar, Personal communication, 6th, October 2012).

Today ZAMCOL has two more completed structures, the Administration block and the Library, while two more are under construction and with plans to construct lecture rooms, laboratories, tutorials and student boarding facilities and many more. ZAMCOL, as an institution has created and filled many operational structures, like management positions, auxiliary positions and technical positions, with a part time teaching work force from secondary school teachers, college lecturers and retired secondary school head teachers and district education standard officers. ZAMCOL's students come from all over the country as long as they meet the qualification requirement of five O' level credits and any other qualification obtained after grade 12, which includes the primary school teacher certificate (ZAMCOL, 2010).

The program is run in collaboration with the Copper Belt University (CBU) and is expected to take three years as required or a maximum of six years. Three weeks in April and August and two weeks in December learner support residential sessions are organized during the school holiday in these months. Within this short time, students attend lessons from Monday to Friday with Saturday and Sunday for their own consultations with tutors, the library and among themselves on their assignments and projects (ZAMCOL, 2010).

The pressure of work to both students and tutors forces some students to drop out, while others engage consultants to write assignments and projects for them or copy from friends. Furthermore, most of these students and tutors have full-time jobs, which take precedence over their part time job and Diploma course respectively. This leads to plagiarism in students, limited time by tutors to assist students, thus the delays in grading and poor-quality marking, and sometimes loss of students' scripts or assignments hence the need for effective communication strategies. However the student clientele has grown to the point of necessitating the creation of two operational study centers in Mongu and Chipata, with three upcoming centers in Kasama, Chinsali and Mansa (ZAMCOL, 2012).

1.1.2 *Education in Zambia and its Challenges*

Education is critical in enhancing a country's social economic development. It builds people's abilities in terms of skills and the ability to receive and process information for livelihood choices. Despite this recognition, Zambia has yet to reach educational standards that are commensurate with sustainable development.

Map of Zambia

Sustainable development could not be reached when an estimated 22 percent of the population has had no formal basic education. Furthermore of the total population, only 25 percent have completed lower primary, 27 percent upper primary, 13 percent junior secondary and 11 percent senior secondary. It is only 2 percent of Zambia's population that had completed a Bachelor's degree or above, by 2000 (MOE, 2009).

The educational situation above in Zambia could be attributed to poor primary or

junior secondary education delivery among others. Surely you could not expect anything good from a teacher who is not prepared or trained to handle these education levels. Therefore the move by the Ministry of Education (MoE) to train more teachers to replace and staff more schools, especially those in the rural area is a welcome one. As the saying goes ' no one gives that which one does not have', could be applied to teachers, that they could only offer the best of themselves only when they are raised to the expected professional standards in education of at least a diploma level.

Therefore the move to train and upgrade more teachers to professionals of degree and diploma levels has been welcome by many government and private institutions (universities and colleges) in Zambia. However most of these institutions are mainstream education providers and are overwhelmed by the numbers of applicants.

The only way to revert this situation and have more teachers trained is that most of these institutions that give training to teachers, are offering training also by ODL mode. Therefore as more and more institution come on board and introduce training by ODL, the need to cheek on quality of delivery of education to their unsuspecting students becomes important. Quality and standard delivery of education is assured by effective communication strategies employed by the institution.

Education is delivered when there is communication between the teacher and the learner, even in the case of a main stream face to face teacher/ learner encounter, where lessons are delivered by the teacher to the learners through a medium, and learners give feedback through questions and the answering of exercises given by the teacher. The question is, 'what happens in the case of ODL, learners as regards, and questions to the teacher, prompt feedback and any other query to ensure quality education reception'? Therefore the mode of the communication strategies employed is very important, in this regard, as it is also a challenge in the main stream education institutions.

Therefore in Zambia, the government through the Ministry of Education (MoE) has the mandate to ensure quality education delivery in all ODL, institutions. In this regard the

governance and provision of ODL, in Zambia by the MoE, has developed to the creation of a directorate of distance education, which has full responsibilities and mandate of ensuring quality education delivery in all ODL, institutions.

1.1.3 *Open and Distance Learning in Zambia, since 1964 to Date.*

Open and Distance learning in Zambia has been in existence since the Colonial times, as Correspondence Studies in Luanshya on the Copper belt Province. According to a verbal narrative, at the Directorate of Distance Education (DODE), at the Ministry of Education Head Quarters, in Lusaka; Correspondence Studies were organized by the then Department of Continued education in the ministry of education, under which in 1964 saw the creation of the National correspondence college, in Luanshya (Senior Education Officer, personal communication, 26th, April, 2012).

Two years after Zambia's independence, in 1964, the department of continued education had plans to improve and expand its coverage to all parts of the country. However it was unfortunate for the ministry, that the officer, designated to head the new expansion plan at the National Correspondence College in Luanshya, joined the University of Zambia, to start the establishment of the then Department of Correspondence Studies in 1966; which was later launched in March, 1967, to coordinate distance learning offered by various schools of the university (UNZA, Student handbook, 2012).

It meant that there were two public institutions offering Distance Education by 1968; Luanshya National correspondence college was offering, primary and secondary education and the University of Zambia, offering degree courses. Methods of communication used at that time were only through print media, and the post office, where many letters and learning material did not reach the intended people in some cases. These leads the Ministry of Education Distance Education Department improve on the communication strategies in an effort to offer quality distance education service in the country. Therefore the education radio forum and satellite education centres in some main school stations were started as well throughout the country in 1964,

together with some continuance education centres opened in some district centres. By the time of this study, the department of distance education in the Ministry of education, was in 1990, transformed into the present Directorate of Distance Education (DODE), which looks in the affairs and matters of all open, distance and e- learning institutions in Zambia. Although it is not in the scope of this study, it is worth mentioning that there are so many institutions offering open, distance and e- learning in Zambia, by date of this study (Senior Education Officer, personal communication, 26th, April, 2012).

1.2.0. Statement of the Problem

1.2.1 *Background to the Problem*

ZAMCOL and other institutions (colleges and Universities) offering ODL in Zambia, are institutions that need to survive and make profit in their ventures hence the reason why it is understandable that they only employ possible strategies of communication with their would be and enrolled students. However there are more people with good intention and interest for further education but cannot obtain it, due to varied barriers in education and sometimes even the type of communication strategies employed by ODL institutions also denies them that chance. Think of boys and girls making ends meet in the streets and men and women early morning drinking in a Chibuku Tavern, or chanting on the road side in one of these highly populated residential areas, like Chibolwa compound in Lusaka. Think of how much they could gain, on a well prepared and presented topic on business dynamics in commerce for Diploma teachers, if it was presented on one of the community radio stations.

Therefore unless these ODL institutions as Sir John Daniel (2006) said, employ all possible and available strategies of communication in use in this age the world over, with the help of donors and the cooperation of already existing structures like the internet providers, radio and television stations (public, private and community), schools, churches and other Social Structures available in all towns and remote places,

the objectives of the MDGS, and the power of the Open and Distance Learning as a tool for Development will not be realized, by many people in rural and remote places of our country.

The Vision of the Zambian College of Open Learning states that, 'it should become one of the leading distance education institutions, in the region that will provide quality education through innovative ranges of open and distance learning methods (ZAMCOL, 2010).

The need to acquire quality education by many rural and remote dwellers seems brighten but it is not in the scope of this study to illustrate the importance of ODL to many people who did not acquire or are not in the main stream education system. This study has examined communication strategies used in ODL institutions, in the specific case of ZAMCOL as they train Teachers in Zambia, through ODL which is cardinal as there is an acute shortage of trained teachers in Zambia.

In the similar way ZAMCOL's (2010:1), Mission states that '*it is committed to providing wide access to quality teacher education using a variety of open and distance learning methods to enhance professional development and promote the application of theory to practice as well as develop the desire for life-long learning'* and its goal is '*to provide relevant quality teacher education that would respond to the needs of local communities by contributing to the teachers professional development'*. ZAMCOL's Mission and Goal are tuned to the same purpose as they meet with the aspirations of Country's Vision 2030, as regards the turning of teachers into professionals with a lowest qualification as a diploma by the year 2015 (Ministry of Finance, 2010).

1.2.2 *Problem of the Statement*

The purpose of this study has been the exploration of the communication strategies employed at ZAMCOL for passing on information from the institution management to the prospective and enrolled students and from students to the institution's

management. Arrived at, due to *the problem at ZAMCOL, as an institution offering secondary school teacher training through ODL, which is:*

> **Information flow between the institution and the learners is insufficient. It has thus rendered the Communication strategies employed in the teaching and learning processes to be inadequate. Resulting in situations where Assignments sent to the institution for marking get misplaced or lost and some students taking advantage of the situation to plagiarize other students' assignments.**

This raises a lot of questions on standards due to suspicion of plagiarism being wide spread, although in the actual fact only one or two assignments appear to have the same author; in other cases it is the question of the misplaced or lost sent assignments which appears with a different name after the owner identifies it by some secret typed characters in the assignment. This loss or miss placement of assignments is due to either the fault of the college or the post office, and in isolated cases students own carelessness, on sending these assignments through friends or other people heading towards a Town destination, in most cases students in remote rural areas. This has impacted negatively on the Vision, Mission and Goals of ZAMCOL, as a tool of Learning, Development and Social Change, for many teachers, who are expected to be retained in their rural schools as agents of change as they will continue helping many children attain the universal basic education, by the year 2030 and thus win the fight against illiteracy in these areas. This can come about only by elevating the professional standards of many teachers in the rural area, who still hold a primary school teacher certificate, to at least a diploma level by the year 2015.

If this situation continued, ZAMCOL would be of very little significance to the lives of the very people it was originally established for, and which in turn will impact negatively to the quality of education at Primary and secondary school levels. Therefore the reverse of this situation, ZAMCOL and other ODL institutions in the same predicament should embrace all available appropriate and cost effective communication strategies to step up their enrolment, and have a wide coverage,

through the regular ODL approach that involves a face to face contact once in a while, and an additional program that offers the same quality learning without any face to face contact at all to students and many other people.

1.3.0 Rationale

This study has been conducted because there are many teachers in Zambia, who still need to upgrade their professional qualification by the year 2015, if Zambia has to meet the Millennium Development Goals. In which case if nothing is done to improve on the communications strategies, ZAMCOL, as an institution with a mission and committed to offering training through ODL, will be of no use to the very people for whom it was established. By and large the reasons for undertaking this study may be summarized as follows:

1. Information got may be used to increase the communication strategies to cover many people affected by life threatening social-economic and social psychological problems, which are rooted in poverty, due to retarded development and low education levels. The law that "on the average the educated earn more than the less educated" has served as the cornerstone of the "human capital research program" (Blaug, 1992).

2. Information got may be used by ODL institution in counselling students due to the understanding that on one hand, "people invest in themselves" to throw light on decision patterns made in such diverse fields of health, migration, and education. While on the other hand the number of unsuspecting candidates for these ODL institutions is on the increase due to the knowledge that there are great "rates of return in education for success" (Woodhall, 1985).

3. The underlying idea is to offset the costs of an additional year of education against the benefits in terms of increased earnings while studying and working. It is imperative therefore for the student of Communication Development to try and bring the strengths and weakness in the communication strategies and approaches that this particular ODL,

institution (ZAMCOL) uses in its effort to promote Teacher Education, in Zambia among the underprivileged.

4. Such promotion is helping in busting the number of qualified teachers in the country and in the long run it might eradicate illiteracy, which is poverty of the mind among other problems.

5. The study also provides a basis for ZAMCOL to evaluate itself and bring its communication strengths to the state of the art. To the knowledge of this student there has not been a scholarly study examining the communication problem in Teacher Education, through ODL at ZAMCOL, this research is therefore of great importance, that it has:

   a. Contributed knowledge to research in the field of Communication for Development and will provide a basis for further academic research in the communication in ODL education approaches.

   b. Offered data for future communication policies and planning for ZAMCOL and check how they are offering ODL in general.

   c. Helped the student in appraising communication and Development theories in the practical Education Development context.

   d. Made recommendations to ZAMCOL's Management on how well they can consider the use of other communication strategies, available to their own benefit and that of their prospective and enrolled students. This will help ZAMCOL's policy makers formulate deliberate information on, and the plan to employ the use of the available communication Technology.

1.4.0   Objectives of the Study

The evaluation of the Communication strategies is a moderate process to understand how ZAMCOL has processed and used information to develop its own educational communication strategies, which has been in use up to date. The evaluation was carried out between July and September 2012, at ZAMCOL's headquarters in Solwezi. The main purposes were:

- ***To establish the communication strategies used by ZAMCOL as an institution offering teacher training by ODL in a country where other institutions are offering similar services.***

- *To find out by region and age, students who have had their sent assignment to the institution for marking misplaced or getting lost.*

- *To find out by region and age, students' media preferences, as their best means of communication.*

- *To investigate the factors promoting students reproducing other student's assignments.*

- *To put into practice the communication development theories learnt in class in a real life situation and test their functional utility in an institutional setup.*

- *To establish the People's Knowledge, Attitudes and Practices, about ZAMCOL's situation as regards effective communication as an institution that offers ODL teacher training.*

- *To assess the computer possession and its usage and interest for the internet, among students and lecturing staff at ZAMCOL, by age.*

CHAPTER TWO

2.0.0 Literature Review

This chapter surveys and evaluates the existing literature on open and distance learning, with particular emphasis on the communications strategies in the field. There is substantial literature on open learning, and the various other terms that relate to the concept (e.g. distance learning, flexible learning, self-paced learning, resource-based learning, etc.). However, there is relatively little discussion of the impact of communication strategies used in open and distance learning institutions and its implications to bring about change and development. Therefore, this chapter will highlight and critically review some of the areas of communication strategies in the management of open and distance learning which are not sufficiently covered by the current literature.

2.1.0 The Global Situation of Communication in Open and Distance Learning

The history of human communication has shown that advances in technology have powered paradigmatic shifts in education in general (Frick, 1991).

Therefore in any education style, communication between teacher and student is a vital element of a successful educational endeavor. Media especially, therefore plays an essential role in the establishment of teacher and student communication in open and distance learning. In this case for communication to take place there must be a sender, a receiver, and a message at a bare minimum. Consideration should be taken however that, if this message is intended as an instruction, then besides student, teacher, and content, we must consider the environment in which this educational communication occurs (Berg & Collins, 1995).

Keegan, (1995:15) account, the beginning of ODL which dates back to the 18th Century, where the advancement and innovation in transportation and communication heralded by industrial revolution; made ODL as an alternative model of education whereby technology made it feasible to separate teacher and learner from fixed places, at a fixed time, or to meet a fixed person, in order to be trained. The environment in which this educational communication was taking place was enabling, in that there was an effective print industry, for the study material and an effective and reliable postal service, to deliver study material to the students and back to the Tutor in form of answered exercises and assessments. The tutor marks the exercises or assessments and sends

them back to the student, with comments to give feed back to the student. This type of educational communication is known as Correspondence study, due to the constant communication between Tutor and Student via the postal services. An example of this type teaching and learning is shown in the early works of, Isaac Pitman who taught shorthand in Great Britain via correspondence in the 1840s, through print study material transmitted through the postal services. His works have acted as the precursor of this mode and the prototype of modern correspondence education (Moore, et al, 2005).

Thus the available types of technologies used in open and distance learning are divided into two groups: *synchronous learning* and *asynchronous learning* though the expansion of the Internet blurs beats these distinctions (Holmberg, and Börje, 2005).

Although ODL started with correspondence mode, it is now agreed to have undergone notably four other stages namely multimedia model, tele-learning model, flexible learning model and interactive flexible learning model, although detailed exposition of these, is not in the scope of this study (Taylor, 2012).

Synchronous learning technology is a mode of delivery where all participants are "present" at the same time. It resembles traditional classroom teaching methods despite the participants being located remotely. It requires a timetable to be organized.

Web conferencing, videoconferencing, educational television, Instructional television are examples of synchronous technology, as are direct broadcast satellite (DBS), internet radio, live streaming, telephone, and web based (Burns, 2012).

The asynchronous learning mode of delivery is where participants access course materials on their own schedule and so is more flexible. Students are not required to be together at the same time. Mail correspondence, which is the oldest form of distance education, is an asynchronous delivery technology and others include message board forums, e-mail, video and audio recordings, print materials, voicemail and fax (Burns, 2012).

The two methods can be combined in the delivery of one course or even program. Burns, (2011) notes that many courses offered by open universities. Some

ODL institutions use periodic sessions of residential or day teaching to supplement the remote teaching. These institutions may use a blend of technologies and a blend of learning modalities (face-to-face, distance and hybrid) all under the rubric of "distance learning,"(Holmberg, and Börje, 2005).

Other technology methods used in the delivery of distance education include interactive radio instruction (IRI), interactive audio instruction (IAI), online three-dimensional (3D) virtual worlds, immersive environments, digital games, webinars, web casts etc.(Dickey, 2005).

A popular 3D virtual world has the involvement and interaction of learners and teachers and among learners themselves, puts in use the synchronous and asynchronous technology in learning. The wide world web and the application and use of computers can provide opportunities for students and tutors to work collaboratively with each other in virtual world learning (Oblinger, 2000).

2.1.1 *The Role of Technology in Distance Education*

Technology has always had an intimate relationship with distance education because it mediates the separation between teacher and learner through the use of print, radio, telephone, television, audio and videotapes, and computers. This relationship, moreover, is taking on a heightened importance because of technology's growing range and accessibility, lower costs, greater ease of use, expanding pedagogical power and increasing political and social cachet (Bates, 1993).

Given this new importance, it becomes paramount to distinguish between the roles of different types of technology.

With all the distinctions in mind, one can differentiate between distance education technologies that involve primarily one way communication (e.g. course units, videotapes, television, radio) and those that involve primarily two way communication (e.g. telephone tutoring, videoconferencing, e-mail, computer conferencing (Bates, 1993).

Two way technologies not only allow for interactivity between teachers and learners, but also among distance students themselves (Bates, 1993).

Interactivity involves the ability of the learner to respond in some way to the teaching material, and to obtain comment or feedback on the response, which considerably increases learning effectiveness.

This interactivity creates space for real communication to take place, where no amount of one way technology can achieve such interaction. This distinction does not mean that there is no place for one-way technologies in distance education, but that they should supplement, not dominate, the distance education experience.

The distinction between one way and two way communication technologies has implications for distance education far beyond the technological. The question of production, distribution, and communication in distance teaching and learning is not merely a historical issue concerning the available technologies…. It is first of all related to the basic pedagogical, social, and institutional concepts of adult learning (Bates, 1995).

Nipper, (1989: 64) observes that while much of our traditional understanding about learning is seen as an individualized process, there is a growing body of literature that addresses the importance of social learning. Indeed, Nipper (1989: 66) argues that 'learning although a very *personal* matter must never be an individual matter one learns best by and with others'. According to Daniels and Walker (1996), social learning involves the process of framing issues, analysing alternatives and debating choices in the context of inclusive public deliberation.

Social learning, however, cannot occur in isolation. The basis of social learning is communication, which Nipper (1989: 64) characterizes as the degree of 'noise' accepted by the institution. For Nipper, the more communication there is with and amongst the learners, the more noise there is in the system. That noise is the sound of people coming together to learn. It also signals the interactivity that can enable real communication.

Technologically speaking, noise cannot occur in the first and second generations of distance education, as it will be stated later. In these generations of distance education, learning is not social, but individualized and considered 'the acquisition of the information given by the study material'. In comparison, with Nipper's noisy learners, who are 'active and creative learners' who are involved in social learning through their interactivity (Nipper, 1989: 64-71)?

It is no longer a secret that more and more institutions are offering training by ODL, partly as a solution to their funding problems and as a response to be of service to the ever growing number of prospective learners not on the main stream register; their response to the future technological choices, gives rise to this question that: "will the technology chosen enhance social learning, or will it simply make the educational transaction more efficient by enhancing individualized learning"?

2.1.2 *Historical Perspective of Communication Technologies in ODL*

There are notable three generations of technology history, used and being used by ODL, since the times of the industrial revolution. Each of them represents a notable revolution, namely, the industrial revolution linked with production technologies, the technological revolution linked with distribution technologies and the computer revolution linked with information communication technologies. Like an extended family, each new generation in the history of distance education does not automatically eliminate the previous one, but exists alongside it, with the potential for mutual reinforcement (Nipper, 1989).

2.1.3 *The First Generation: Correspondence Study*

Although Keegan (1990: 94) cited Stewart who 'sometimes tries to trace distance education back as far as the epistles of St. Paul', and Willis (1994: 5) proposes that 'Itinerant wanderers delivering information by word of mouth were perhaps the world's first distance educators', distance education did not really begin until the rise of the industrial society. By the end of the 19th century, it was well established in the form of correspondence study.

In its original form correspondence study basically involves the use of print based course materials and the postal service. Therefore this educational communication takes place in an asynchronous environment which uses, one way technologies that preclude the creation of public space and interactivity that grounds a real communication that brings about change.

It is argued that, the beginnings of correspondence study depended on the emergence of the same factors that contributed to the birth of adult education visa vi adult literacy, the printing press, a publishing industry, mass production, low cost pens and their demand, brought on by the demands of the Industrial Revolution for an educated workforce. Addition to this list is the introduction of a cheap and reliable postal service, an efficient transportation system and, in some countries like Canada and Australia, large, sparsely populated areas which did not have close access to on campus training (Hamilton, 1990).

The first recognized correspondence courses were done, in England, in 1840 by Isaac Pitman who offered shorthand courses to aid in business administration (Verduin and Clark, 1991).

This British model of correspondence study was spread around the globe by colonialism and adapted to local needs. For example, in Australia, the introduction of mandatory childhood education created the need for more teachers, many of whom were educated by correspondence courses (Kingston, 1999).

In addition to this technological development, Holmberg, (1986:46) points out that, the two World Wars promoted the growth of distance education. The armed services demanded correspondence education for soldiers during World War I and soldiers returning from World War II looked to education, including correspondence study, as a way to change society after the horrors of the two World Wars and the Depression.

2.1.4 The Second Generation: multimedia distance education

Holmberg, (1989: 1), says that, "the term correspondence was felt by many to be too narrow" and "distance education" became the designation of choice for education that was no longer simply tied to print material and the postal service. This second generation of multimedia distance education integrated the use of print with broadcast media, cassettes, and to some degree computers (Nipper, 1989).

This type, increased the two way communication, which, often squandered by emphasizing the quantity and seamlessness of production over the quality of the learning experience, especially group interaction and social learning.

Like the first generation of distance education, the main objective of the second generation has been: the production and distribution of teaching/learning material to the learners. Communication with the learners has been marginal, and communication amongst the learners has been more or less non-existent. (Nipper, 1989: 63)

A number of factors contributed to the growth of the second generation of distance education, new communication technologies, growing sophistication in the use of printed materials, improved support services for distance students and the establishment in 1969 of the Open University of the United Kingdom (Keegan, 1990).

The Open University in the second generation of distance education became a reflection of the time and place in which it arose as a program within an institution, and an influence on numerous institutions in subsequent years. More than any other occurrence, its establishment is categorized in different ways by different authors as in the case of Holmberg, (1986: 30) as "the beginning of a more prestigious era in the history of distance education".

The use of multimedia carried out in the combination of correspondence instruction, supplementary broadcasting and publishing, residential short courses, and support services at the local and regional levels modernized and revitalized the approach to distance education (Selman and Dampier, 1991).

In the early multimedia course model of the Open University, employed was the use of one way technologies that included the radio and television broadcasts, and audio and video cassettes, in addition to its preponderant specialization in print based correspondence courses (Woolfe, 1977: 82).

In the early 1990s, some Open Universities begun to embrace third-generation, distance teaching technologies, in this sense was the process of changing its teaching to new teaching systems that encouraged more interactivity. However one would think that by this time, there will be acceleration of the development of new educational communication technologies, but the vast majority of distance education throughout the world at the end of the 1980s was still primarily print-based (Bates, 1993).

A critical analysis at what Bates, (1993:40-50), alluded to, in the use of radio and television, for distance education, as creating a "cult of the expert", which lends to the professionalization, legitimatization, commoditization and instrumentalization of certain forms of professional knowledge which requires experts to do certain things, in the learning process.

Nipper, (1989: 63) concludes that, "such a conception of knowledge, rules out the kind of knowledge that is built through people learning together to achieve social change. However like the first generation of distance education, this generation also promoted the system serving forms of distance education that included professional accreditation, military training and human resource development.

Although the second generation of distance education presented the potential for transformation through the power of communication because of its two way communication possibilities (e.g. teleconferencing), it wastes this potential by concentrating on one-way communication, expert knowledge, mass marketing and student independence. All in all, like the first generation of distance education, the second generation only served the system, but did not really offer true social change in the individuals' personalities (Bates, 1991).

2.1.5 The Third Generation: computer-mediated distance education

Noble (1995) refers to the 21st, centaury as the second Industrial Revolution due to the information communication technologies in use. In the first Industrial Revolution of the 19th century, the context of the economy shifted from homes and household workshops to factories and offices; now it is shifting to the infrastructures of the information highway (Menzies, 1996) and back to the home. The harbinger of this second Industrial Revolution, the vehicle of this so-called knowledge-based economy is the computer.

The information highway has made inroads into almost every facet of everyday life, including distance education. But in many ways its vaunted promise merely masks the way education is being used to achieve student conformity and adaptation to dominant ideologies of society (Spencer, 1998).

It is argued that due to the, incessantly repeated necessity of acquiring the skills needed for the so called knowledge based economy, becoming educated has become a tool to serve economic purposes, and not for social purposes. Therefore getting knowledge by distance education has created a dependency on technology (Spencer, 1998).

This generation of distance education aided by sophisticated and improved information communication technologies, has the capacity to train large numbers with limited resources. This is done in the same vein with mass production of commodities. Therefore within this knowledge based economy, open and distance learning can produce large numbers of skilled personnel within the same period of time as the main stream education system at affordable fees, but without regard of their individual social needs. Thus it is argued that no questions are asked, or encouraged, about the difference between knowledge and non-knowledge, not even by the academic world, as regards the purpose of education.

As a matter of fact, Spencer, (1998:187) confirms that, while the "primary movement and obligation of all knowledge are to *overcome partiality towards a more comprehensive taking account …* this requirement of all truth seeking is in systematic

conflict with seeking above all to maximize profits for corporate shareholders". In this way, the tension between individual needs and the needs of the system is clearly exposed, especially as more and more multinational corporations get into "the education businesses".

Even in the information communications technology age, distance education's traditionally individualized learning experience is continued in the use of the Internet and the World Wide Web. Modular coursework, self-paced quizzes, CD-ROM and linked websites may add to a student's information overload, but do nothing to provide the vital interaction so necessary for dialogue, social learning and participatory development. However it is encouraging that, one aspect of the information age holds out the prospect for interactivity, social learning and public space, and that is in the computer conferencing (Spencer, 1998).

One has just to realize that computer conferencing is full of issues like access, power and self-confidence. For Spencer (1998: 124) access has the "tendency to closure" in distance education. In this case, example is given, in the increased use of computer conferencing which could result in greater student interaction, but only for those who have the equipment and skills to participate.

Spencer's view is echoed by Denny (1999:14), who states that "among the hype for everything online it is easy to forget that 80% of the population of the world has never even used a telephone, let alone sent an email message".

To say something about power, Rumble (1995: 19) contends that 'technology is the excuse for, rather than the cause of, the distribution of power between managers and workers'. Managers seem to have power due to the availability, possession and the use of available technology in communication in this case, they will have access to information which workers do not have.

 On the social sphere, one will learn one or two things socially that help speed up development in society, as Kirkup (1996) presented the feminist concerns with respect to power and the computer conferencing, which Nipper (1989: 67) notes that it 'may

cause experiences of personal defeat, frustration, and educational inadequacy'. While there is great hope for Open and Distance Learning breakthrough in education for all, technology could still encourage and perpetrate differences in society, between the haves and the have not, due to its possession and use.

However, Garrison (1997: 3) sees computer conferencing in distance education as a technology that 'has the potential to support learners in collaboratively constructing meaning and confirming understanding'. Therefore the development of computer conferencing as a two way technology has the potential to change the field of distance education by fostering the conditions for real communication that is capable of development and change.

Although this third generation of distance education carries the potential, for aiding development among peoples through communication that empowers them with information for their transformation, it is not short of biases. At this point, it is important to remember that the use of the new technologies in ODL like the other technologies that preceded it, computer technology is more likely to control teachers and learners than to serve them (Menzies, 1994).

 Critical theorist Herbert Marcuse (1969) anticipated this control when he stated that technology serves to institute new, more effective, and more pleasant forms of social control and social cohesion. In spite of this ominous precedent, computer technology can provide us with a unique opportunity in the history of distance education to create the conditions that foster interaction among groups of people learning together to build networks that speeds up development.

One of these conditions is the character of computer conferencing itself. Rather than replicating the conventional classroom, Garrison (1997: 4) argues that computer conferencing "represents a very different approach to the educational transaction". In terms of communication potential, he contends that there is a 'qualitative difference between real time verbal and asynchronous written communication'. For Garrison, written communication's reflective and precise nature is very different from oral

communication's spontaneous and less structured nature. The development of written communication skills in computer conferencing has far reaching implications for higher order learning.

The relationship between written communication and cognitive development, as Garrison (1997:4) cited White's statement that "writing as an advanced skill becomes both the means and the expression of critical thinking and problem solving". In contrast, the so called 'interactive' one way technologies like CD-ROM may introduce students to yet more information, but do nothing to foster the critical skills needed for analysing that information. All in all, authoritarian, one way, top down, content driven coursework does not promote the cognitive development that is the hallmark of higher education.

All in all, can one then conclude that, the development of computer conferencing systems in this generation of distance learning provide the opportunity for the interactivity in ODL via the two way communication which is the foundation for communication as a tool for development. The challenge in this is that, will that opportunity be taken or will it be directed to serve the system as usual at the expense of society's development?

2.2.0 Views on the Use of Communication Technology in Open and Distance Learning

Greenberg (1998) defines contemporary open and distance learning as "a planned teaching/learning experience that uses a wide spectrum of technologies to reach learners at a distance and is designed to encourage learner interaction and certification of learning". The first and widely used form of communication technology is printed study material and written /typed feedback sent through the mail as a way of communication, teaching, and learning in open and distance learning (ODL),which is known as Correspondence study (UNESCO, 2002).

An Englishman, Isaac Pitman, is credited as an early pioneer of correspondence study. He began teaching shorthand by correspondence in Bath, England in 1840. Students

were instructed to copy short passages of the Bible and return them for grading via the new penny post system (Bizhan, 2011).

The teaching of academic and vocational courses by correspondence became quite popular by the 1900s and problems of quality and ethical practice came with the popularity. Therefore as many institutions offered ODL, the more problems to do with quality that is standards and quality of the study material sent to learners was becoming questionable in some institutions (Holmberg, 2003).

The invention of educational radio in the 1920s and the advent of television in the 1940s created important new forms of communication for use in distance education. Educators used these new technologies to broadcast educational programs to millions of learners, thus extending learning opportunities beyond the walls of conventional teaching institutions (Daniel, 2001).

At the advert of reliable long distance telephone systems in the early 1900s, there was development in the communication strategies used in ODL, institutions which also increased the capacity of distance educators to reach new student populations. However telephone systems never played a prominent role in education until the introduction of new teleconferencing technologies in the 1980s and 1990s. Teleconferencing systems made it possible for teachers to talk with, hear, and see their students in real time that is, with no delays in the transmissions even if they were located across the country or around the world (Castells, 2000).

Consequently in Moore,(2005) it is noticed that, with the rise of the information communication technology distance and open learning , increasingly uses combinations of different communications technologies to enhance the abilities of teachers and students to communicate with each other. With the spread of computer network communications in the 1980s and 1990s, large numbers of people gained access to computers linked to telephone lines, allowing teachers and students to communicate in conferences via computers.

Open and Distance Learning also makes use of what Ferguson and Wijekumar, (2000) gave credit to, computer conferencing on the World Wide Web, where teachers and students present text, pictures, audio, and video. File sharing and communications tools like email, chats and audio and video conferencing are integral to the Internet model.

It is common practice in our days that, business and university level learners have used a conferencing method, which Hiltz and Wellman, (1997: 10), describe as a "one way video/two way audio system where television pictures that are transmitted to particular sites, where learners can reply to the broadcasters with a telephone call in system". However in the same way television pictures can also be transmitted in two directions simultaneously through telephone lines, so that teachers and students in one place can see and hear teachers and students in other places. This video conferencing technology increasingly uses the Internet and wide world web (Greenberg, 1998).

Thanks as Perraton and Creed, (2000) stated, to modern digital technologies such as computers, telecommunications, and networks which are reshaping both society and social institutions like schools. These technologies have vastly increased the capacity to know and to do things and to communicate and collaborate with others. They have allowed transmission of information quickly and widely, linking distant places and diverse areas in productive endeavours through new ways. They have allowed formation and sustenance of communities of work, play, and learning in unimaginable ways a decade ago.

Of course education in general has already experienced significant change driven by digital technology. Technology has been heavily depended on, in the management and administrative processes of both main stream and distance learning. Moore, M. G. (2003) demonstrate this by giving example, of the use of computers to simulate physical phenomena, networks to link investigators in virtual laboratories or "co laboratories," and digital libraries to provide scholars with access to knowledge resources. There is an increasing sense that new technology will also have a profound impact on teaching, freeing the classroom from the constraints of space and time and enriching learning of by providing students with access to original source materials.

Yet, while communication technology has the capacity to enhance and enrich teaching and learning, it also poses certain challenges in the administration of ODL.

2.2.1 Challenges Faced in the use of Communication Technology in ODL

In the application and use of technologies available in correspondence study, vast are the min challenges faced, which ranges from the none existence of the postal services in some rural areas, to the misplacement or loss of a mail in other instances, when there is too much pressure of work, during dispatch of mails hence delay in completion of the course [Farrell, (ed.), 2003].

It was asserted that these challenges will be a thing of the past with the advent and use of powerful computers and networks to deliver educational services to learners and back to the teacher, at anyplace and anytime in open and distance learning facilities. As Christensen, et al., (2001:101) points out that "technology is creating an open learning environment in which the student has evolved into an active learner and consumer of educational services, stimulating the growth of powerful market forces that could dramatically reshape the higher education enterprise". This in itself has the power to rule out the possibilities of loss or misplacement of a mail in the enterprise of learning and teaching in open and distance learning. Technology secondly has the capacity as Christensen, et al., (2001), puts it right, of freeing the learner, from all educational constraints of age, pace and duration of study, as it creates an open learning environment.

In as much as the news concerning the impact which Bob Hoffman,(2003:24) highlights about information technology on the marketplace, and in use in open and distance learning institutions from "e-commerce" to "edutainment" to "virtual universities" and "I-campuses". Most open and distance learning institutions, and open universities have identified some challenges in the application and use of technology in communication. Pointing out issues to do with application and use of technology, Bates, (1995) raises the issue of possession of the equipment and the technical knowhow in handling the equipment. Challenge is been identified as Okopi, (2008)

discusses a case in Nigeria, where the knowledge to operate new technologies, let alone the operation of the computer by both the teachers and the learners.

Today some Authors have even suggested that teachers in open and distance learning institutions be given subsidized laptops or desk tops or loans to purchase these together with the appropriate technology by their institutions, to facilitate communication in addition to the computer lessons for both teachers and learners.

The challenge that arises when teachers and learners do not possess the knowledge to handle computers and or the possession of the facility is the failure to participant in the benefits these new technologies like video conferencing or teleconferencing bring. These technologies Boyd, (1991) is more direct when he contends that computer mediated teleconferencing may be a medium through which interactivity between teacher and learner and among learners could take place. In computer conferencing, groups of people can practice, reflect, make critical thinking and solve problems across long distances and nationalities and thus their use enhances development in communities where these people live.

2.2.2 Benefits of application of Communication technologies in Open and Distance Learning.

A rush to obtain a qualification, to answer to modern market and demand, popularity is growing for need of open and distance learning, thus questions arise such as learners' characteristics, students' needs, effectiveness of communication, and the value of outcomes in comparison with the on campus face to face study has become of public interest.

Oblinger, (2000) identified four broad reasons why educational institutions might embrace open and distance learning in response to the above questions:

- **Expanding access:** open and distance education can assist in meeting the demand for education and training from the general public and businesses, especially that it offers the possibility for flexibility to accommodate many with various constraints imposed by their

personal responsibilities and commitments. Access to education and training is extended to many people who would have not without the use of technology in communicating with the institution and the teachers there.

- **Alleviate capacity constraints:** there is no worry about class room or dormitory accommodation for the large numbers enrolled, or courses running at the same time because it is mostly or entirely conducted off site, the system will reduce on this worry.

- **Making money from emerging markets:** there is an increasing acceptance among the people for the value of lifelong learning, even beyond the normal schooling age, therefore targeting on business executives who have the means to afford new technologies to expand their knowledge horizons, special distance courses for them would financially benefit these institutions. Oblinger, (2000:10) claims that it is "more lucrative than traditional markets".

- **Catalyst for institutional transformation:** many traditional institutions like certain universities need to open their doors to the public to expand their presence in various areas and be of service to them, in this competitive modern world where economic and market practices demands rapid change and innovation, for which Oblinger, (2000) believes open and distance learning programs can act as a catalyst.

In addition, to these reasons other benefits for open and distance learning include:

- **The consideration of people with disabilities, handicaps, or sicknesses:** who can access the course even when they may be unable to go to a traditional school setting because they cannot get around easily or due to a low immune system and get sick from other students? Open and distance education can help in these cases because the students will not have to leave their home or be around other people. It makes it possible for these students to still learn and to be able to get a good education, which is aided by technology (Sandelowski, 2000).

- **The consideration of equal Opportunity to Education for all Regardless of one's gender Socioeconomic Status and age:** Students have the opportunity to receive equal education regardless of their income status, area of residence, gender, race, age, or cost per student (Thompson and Hancock, 1996).

CHAPTER THREE

3.0.0 Conceptual and Theoretical Frame Work

This chapter gives a brief examination of the concepts and theories of the Communications used in Open and Distance Learning institutions, relevant to passing on messages and information capable of combating illiteracy and under development. It also looks at the communication concepts and theories used at the Zambian College Of open Learning, (ZAMCOL) in Solwezi. The main concepts used which require definition are Media and media selection, communication, development, diffusion of innovation theory and other theories.

These are used in the report to relate to the researchers experiences and observations during the time in the field.

The theories and concepts explain why certain or particular communication strategies used in distance learning can contribute to the personal capacity building, and thus not only help many to obtain a professional qualification but also become agents of social change. Thus in ZAMCOL's case a diploma in teacher education and be able to contribute to national development through their presence and work in rural Zambia, where they live and work.

3.1.0 Media and Media Selection

3.1.1 Communication Media Selection in Open and Distance Learning.

As Holmberg (1982) defined Open and Distance Learning as "all forms of study which are not led or controlled by a teacher present in classrooms or similar localities but nevertheless benefit from the planning and teaching of tutors". It entails Open Learning as a philosophy that is based on the principle of flexibility to increase access to and equity in education and implies that a provider will find a variety of ways to open access to credible learning opportunities to a diverse range of learners. There by seeing that there is,

- ➢ Relaxation during admission(age, and entry qualification)
- ➢ Relaxation with regard to place and time to study
- ➢ Relaxation with regard to selection of courses.

It is Distance learning because it is a methodology generally used to define a way in which learners are separated from the instructional based institution or teachers, either in space or time, for a significant portion of their learning. It has the following characteristics:

- ➢ Minimum face-to-face contact
- ➢ Print and non-print media is used
- ➢ Interaction is mainly through media
- ➢ Learning is learner-based
- ➢ Learner support service are cardinal
- ➢ Variety of evaluation methods is employed

The definition of Open and Distance Learning (ODL) above reveals that there is a separation between the learner and the institution, learner and tutor as well as with other learners. As such learning modules or materials should be presented through the medium. Over the last decade in ODL there has been a steady move towards electronic media (standalone and networked).The question in developing ODL study material is in choosing what media one is going to use that is appropriate in meeting the learners needs, given their separation, time and pace of study (Saettler, 1990).

3.1.2 Definition of medium

In his definition Daniel, (1998) sketches that, Medium is a facility, a tool, a means through or by which something is accomplished, conveyed or carried on. It is substance regarded as a means of transmission of a force or effect. An educational medium is a channel of communication which is or can be used in an educational programme.

This definition includes all and every form of communication.

3.1.3 Media selection and mix

The actual choice and mix of media according to Euler, et al, (1998) should be led by a combination of the learners' needs and the teaching material's developer:

- The choice of media is a complex decision which is influenced by a variety of factors.
- Chu, Schramm and Joseph Tremaine's research results in 1967, showed that there is no significant difference between the media. They contend that one can learn from any of the medium, and if you teach the same material through different media to similar group of learners, the same results will be got.
- Psychologists have also proved that no individual learner learns in the same way. This happens because the capability of each learner is different, and motivation to learn also.
- There are many factors which influence the choice of media at the disposal of the ODL institution.

3.1.4 Media Mix

Euler et al, (1998), highlights the importance of marrying media with teaching objectives, and subjects with the target group. Each medium has its own strong and weak points and there is no standard or ideal combination of different media. The choice of media should also depend on the following questions:

- Is the medium capable to present the instructional stimuli required for learning?
- Can it arrange the learner to engage in the required learning activity?

Therefore a multi-media approach in Open and Distance Learning is very necessary as in Calvert (1986) that there is no one medium capable to present all the required stimuli. The only scientific justification for multimedia approach is that one is either not capable of presenting all the required stimuli or is not capable of eliciting all the required responses.

Therefore the actual choice and choice of the mix of communication media should be led by a combination of the learner' needs and the teacher's needs. The effectiveness of the learning experiences hinges more on aspects of purpose, structure, pacing and engagement than on precisely which media you choose. This could either be one of these:

- Telephone communication; performs same /most functions as in a face to face contact. Telephone communication is also useful in guiding the learner.
- Learning Films/video; are useful for large group presentation, individualized study as well as practice and drills especially timed drills.
- Computers are useful for research, providing feedback, presenting information overcoming isolation etc.

We can go on listing functions each medium performs and prove that different media performs different functions and the selection and utilization of media is influenced to great extent by the factors discussed in this chapter. It also becomes clear that each medium has its strong and weak points which can be overcome by employing the multi-media approach to the teaching and learning process. One thing that needs to be emphasized is that there is no standard or ideal combination however scholars in media selection and mix points out that:

1. Each medium can teach effectively as people can learn well from either the print, broadcast or face – to – face contact
2. Using more than one medium can improve motivation as variety of approaches stimulate and maintain interest.
3. A combination of media improves access to learning or understanding because a point repeated in different ways has a chance of being grasped.
4. Using two media can be economical in the teaching sense than the financial one.
5. Each medium has its own advantages therefore by using several media; we overcome or lessen individual difficulties in communication.

The following table outlines the most popular types of distance learning media mix by their characteristics and notable features, as suggested by Hiltz, et al., (1997) & Euler et al., (1998).

Type	Characteristic	Notable Features
Audiotape	Audio learning tool, very mobile and inexpensive when combined with print materials.	Useful in language learning and practice as well as literature. Linear format.
Videotape in VHS and DVD formats	Visual and audio tool; the checkout approach with print materials is very popular in California.	Multi-sensory tool with linear delivery format.
Laptop computer checkout	Versatile approach to providing a wide range of learning activities from skill and drill to simulations.	Hardware is expensive and being replaced by less expensive Internet delivery.
Mobile van / lab	Resources taken to the learners, useful for work site learning and reaching parents at elementary schools. Van learning.	Historically useful way to distribute videos, audiotapes, DVDs, and other learning tools, but it can be expensive to operate. It is less and less popular as distributed learning increases.
Radio course	Low cost way to reach ESL learners. Ideally it should be used by more learning providers.	The radio course must include ways for learners to interact with the instructor. Phone call in during or after air time could be integrated into the programming.

Telecourse	Delivery over television, usually a cable public access channel or school owned channel.	The tele course must include ways for learners to interact with the instructor. Phone call in is popular. Print materials accompany on-air instruction.
Videoconference – Two way interactive video	Electronic communications among people at separate locations. Can be audio, audio graphic, video or computer based.	Often uses proprietary software and consequently expensive. Internet models and broadband communications are making it more affordable and accessible.
Email	Asynchronous text files and attachments.	Good tool to stimulate learning, writing, and communications skills.
Internet	Instructionally delivery over the Internet, either learning modules or entire courses.	Instructional learning systems permit teachers to create, manage, communicate with, and test students online. The interactivity and ability to hyperlink to worldwide learning resources are extremely attractive. Improved broadband communications are enabling the effective use of video and synchronous

communications.

Chat and asynchronous communications facilitate links between the teacher and learner and among the learners.

The medium for instructional delivery usually defines the type. It is generally assumed that print materials can and should be integrated or mixed with the other media

3.1.5 Factors influencing Media Choice

Bates (1995) suggests that media choice in open and distance learning institutions is based on or influenced by seven factors:

1) Accessibility
2) Cost
3) Teaching capability
4) Capacity for interactivity
5) Organization impact
6) Speed of update
7) *Novelty*

3.1.6 Accessibility

The ODL institution has to choose media that is available to both learners and the institution's teaching staff. It has to consider what is administratively possible at the time the course is due to be made available, and what time it has at its disposal including air time in case of radio and television broad casts (Daniel, 1998).

The institution should avoid media that does not depend on students having access to the appropriate technology e.g., radio, TV, computer, internet or use of the web, or choosing suitable media not available or else they may just end up missing the broadcast.

It is difficult in some areas or for some learners to have access to certain media because of the geographical location and the learner's economic status (Watkins, 1991).

3.1.7 Cost to the institution

The cost of certain electronic media would limit the institutions' choice of such media. Consider how much the media will cost the institution in terms of cost per learner hour for a given number of students on a course. Consider the fees that learners are prepared to pay and identify what media mix, tuition and administration you can pay for that fee. Consider also the cost for installation and maintenance of the media (Watkins, 1991).

3.1.8 Teaching Capability

The learning task and the type of learning influence the choice of media will induce. Not all media are equally suitable/good at the same educational task but certain media are suitable in performing particular instructional functions. Hence Clark (1996) wrote, "the studies of improvement of teaching by using media have been part of educational research since Thorndike (1912) recommended pictures as a labour saving device in instruction." Instructional functions that different media perform are:

- Gaining and maintaining attention, or motivating the learner
- Informing the learner of the objectives and the required performance
- Recalling previously learned matter
- Presenting the learning matter
- Guiding and structuring the learning
- Activating the learning/engaging them in activities
- Providing feedback
- Facilitating feedback
- Providing transfer of learning

The media mix as Wagner, (1993) commented should match the five key learner needs which are:

1. To stimulate/motivate learners

2. To present new materials

3. To provoke student interaction

4. To give feedback to learners

5. To help learners to assess their progress

Student Needs and Media Capability

Student Need	Best Media	Worst Media
Stimulate/motivate learners	Video and audio	Print
Present new materials to learners	Print, video and audio	Broadcasting
Encourage learners to interact with material	Computer-based material, web-based material	Broadcast (no pause for interacting)
Give feedback to learners on their work	Computer and web-based	Any mass media print
Help learners to assess their progress	Print, computer and web-based	Mass media print

(Bates, 1995, Laurillard, 2002)

3.1.9 Capability of interactivity

The selected Media should as Comeaux, (1995) said in his write up, be able to provide interaction between the teacher and the learner and among learners themselves. In this case therefore the following should be common to the selected media:

- Timely feedback to ODL learners is very important if enhanced learning is to be encouraged.
- Prompt learner feedback which enhances quick and formative learning which facilitates a faster learning process of any topic or course.
- Noted should be taken that in ODL, feedback comes from learning materials and from interactions with tutors and other students.
- Media that delivers individualized feedback to students in response to their activity and reaction to the material presented.

3.1.10 Organization impact

In analyzing how media impacts on the organization Wallace, (1991) in her dissertation maintains that selected media should take into consideration the institution's organizational capacity, which includes some of the following factors that impact on the organization directly:

- The amount of disruption that the introduction of a medium causes to the ODL system.
- The organizational capacity to install special equipment.
- The need for specialized staff.
- Maintenance requirement.
- Long lead times.

3.1.11 Speed of update

Bates (1996) took note of the need to update the selected media, because it will serve the institution a lot of money. The use of, state of the art media will not only make the institution use the latest version but will make things easier in terms of communication. It will be quick and use less space and time, but when you delay in updates it will mean new equipment and installations. Therefore care should be taken

when choosing which media to use, as some will require regular updates while others updates are done only at specific intervals. Therefore note should be taken as:

o Some media can be updated more quickly than others e.g. web-based verses print media.
o Media requiring the storage of finished learning materials tend to take longer to update e.g. print-based media.
o Faster moving subject matter need to use easily updated media.

3.1.12 Novelty and teacher adaptability

This refers to how easily adaptable the media is to members of staff who will have to use the selected media because some teachers have preferences for certain media and hate others. In other cases there are teachers with particular aversion or phobia for certain medium of instruction and will mostly be unwilling to use it well (Twiggy, 1996).

In this case the term teacher refers to the subject Tutors and Lecturers, and not the student teacher, although, it also applies to them. Preference for media in this case is due to upbringing, and schooling. Most of the subject Tutors and lecturers are people who were trained before the advert and boom of modern Information Technology. They are therefore comfortable with the type of media they are used to, although they are some who have trained themselves, and have their hands on new Information Technologies.

Secondly Russell (1996) says some media will require expertise; therefore, it is unlikely that the unskilled teacher would select the appropriate medium which he or she is unable to use effectively.

In other instances the learners characteristic is another factor to be considered when choosing the media since different learners have different learning styles. It is therefore very essential to select the most effective communication media in each learning situation because:

o It is clear that certain media are suitable to carry out specific functions
o It should be recognized that how people learn, is as important as how they are taught.

3.1.13 Mass media

Wiebe, (2003) defined mass media as those media readily available to the general public. It is a collective phrase used to represent the use of not only the press, cinema, radio, television and internet, but also to some extent, books magazines, pamphlets, direct mail literature, posters, folk media, and natural communication methods such as rumours, lectures and preaching to pass on information to a large number of people. It is so termed because its reach extends to vast heterogeneous populations. Generally the mass media employs technological means to communicate to the public. They are founded on the idea of mass production and distribution.

3.2.0 Communication

Communication is neither the transmission of message nor the message itself. It is the mutual exchange of understanding, originating with the receiver responding back to the sender. Therefore communication is the process of exchanging information and ideas. It is an active process, which involves encoding, transmitting, and decoding intended messages. There are many means of communicating and many different language systems. Speech and language is only a portion of communication. Other aspects of communication may enhance or even eclipse the linguistic code. These aspects are paralinguistic, non-linguistic, and met linguistic. Paralinguistic mechanisms signal attitude or emotion and include intonation, stress, rate of delivery, and pause or hesitation. Non-linguistic clues include gestures, body posture, facial expression, eye contact, head and body movement, and physical distance or proximity. Met-linguistic cues signal the status of communication based on our intuitions about the acceptability of utterances. In other words, met linguistic skills enable us to talk about language, analyse it, think about it, separate it from context, and judge it (Berg & Collins, 1995).

According to Fotheringham "communication is a process involving the selection, production, and transmission of signs in such a way as to help a receiver perceive a meaning similar to that in the mind of the communicator". (Fotheringham, 1966:267), while Bradley calls it "a process, a series of progressive and interdependent steps leading to the attainment of an end, in speech the end being the communication of some specific meaning from one person to another". (Bradley, 1974: 123)

Some authors have said communication occurs when "humans manipulate symbols to stimulate meaning in other humans" (Infante, Rancer and Womack 1997:8). It is important to note from here that for communication to take place, the intended meaning by the sender should be correctly received by the receiver of the message. However the roles of sender and receiver interchange depending on who is talking and who is listening at the time.

3.2.1 The Scope of Communication

The scope of this study is to review the strategies of communication in open and distance learning institutions with particular emphasis to the ones used by ZAMCOL. Communication is essential in any learning, for the Teacher has a message in form of a lesson, to be passed on through a medium, or a face to face presentation to learners, and there are learners on the receiving side, getting the message/s in form of a lesson, to which they respond through class exercises, home, work, fieldwork, or any other work given by the teacher, the answering of the exercise by the students gives feedback to the teacher, to whether the students have mastered the lesson or not. On the other hand marked work by the teacher gives feedback to the students on their performance, so that they gage themselves about their performance.

It is therefore more crucial in ODL institutions, where students are removed from the teacher and from one another by space and time. In this case there is need to understand the role of communication in learning. Though it is difficult to define communication through a single definition, communication as defined by Encarta dictionaries (2007) is an exchange of information between people for example, by means of speaking, writing or using a common system of signs or behaviour. From the above definition, communication could be viewed from its three components, source of massage, a channel to convey the message and a receiver of the conveyed message. In the case of the source/ receiver of communication could be the teacher or the learner. From the channel point of view, communication is a medium, a carrier of information from the source to the receiver and /or vice-visa (COL, 2003).

There is no one fit all medium but there are a number of tools and media which serve as means of communication among human beings, starting with a sign which is regarded as a primitive means to the super computer-based communication. The prominent means of

communication are; signs and sound, language, postal system, telephone, mass media, satellites and Computer (IGNOU, 2001).

It is also known that some communication media distribute messages in text, still and moving images and sound. Knowledge generating messages may be communicated to a large number of learners, either synchronously or asynchronously pushed by broadcasting or access on demand through audio/visual players or internet. As these devices change, so will the quality and nature of the message/s change too (COL, 2003).

3.2.2 Purposes of communication in education

Communication serves two purposes in education: One is the distribution or delivery of information or messages in form of pre-packaged material and transmission of synchronous or broadcast programme of lectures. The second role of communication is the crucial component of all education which is the interaction between teachers and learners and where possible, among learners themselves also (IGNOU 2001).

This therefore means that, if any person or organization is going to communicate with other people about any kind of development or to put across useful information, the intended audience should get the correct information and get the correct meaning by the use of any of the following forms of communication: interpersonal communication, group communication or the mass communication.

3.2.3 Interpersonal Communication.

One way of defining interpersonal communication is to compare it to other forms of communication. In so doing, we would examine how many people are involved, how physically close they are to one another, how many sensory channels are used, and the feedback provided. Interpersonal communication differs from other forms of communication in that there are few participants involved, the interactants are in close physical proximity to each other, there are many sensory channels used, and feedback is immediate (Davies, 1979).

Ordinarily people create different relationships with each other hence the engagement in different interpersonal communications. Some researchers such as Melkote (1991) and others say

that a good way of defining interpersonal communication is that it must account for these differences. These researchers say that interacting with a sales clerk in a store is different than the relationship one has with ones friends and family members. (Gulmulko, 1971).

Thus, some researchers have proposed an alternative way of defining interpersonal communication. This is called the developmental view (Infante, *et al*., 1997).

From this view, interpersonal communication is defined as communication that occurs between people who have known each other for some time. Importantly, these people view each other as unique individuals, not as people who are simply acting out social situations.

Interpersonal communication can be vital in the process of communicating educational messages. In his writings Melkote, (1991:29) puts it that, "interpersonal communication is more likely to cause attitude change", in an educational enterprise.

3.2.4 Group Communication.

Researchers have defined a group in different ways. For instance White says that, a group is defined as a forum having at least three and not more than twelve or fifteen members. A group needs to have at least three members; otherwise it would simply be a dyad. With three members, coalitions can be formed and some kind of organization is present. Too large of a group (more than twelve or fifteen members) inhibits the group members' ability to communicate with everyone else in the group (White, 1994:40).

A group's members must be able to communicate freely and openly with all of the other members of the group. Groups will develop norms about discussion and group members will develop roles which will affect the group's interaction.

A group must have a common purpose or goal and they must work together to achieve that goal. The goal brings the group together and holds it together through conflict and tension.

White, (1994:40), sees it as "the advantage that makes people free to get clarification on matters that they are not very clear about. Small group communication can take the form of a meeting, a working lunch or a breakfast."

3.2.5 Mass Communication

Mass communication occurs when a small number of people send messages to a large anonymous and usually heterogeneous audience through the use of specialized communication media.

The units of analysis for mass communication are the messages, the mediums, and the audience.

Mass Communication represents the creation and sending of a homogeneous message to a large heterogeneous audience through the media.

In a country like ours, mass communication plays a vital role in creating people's awareness about policies and programmes of development that concerns them. It helps in motivating them to be active partners in the nation-building endeavour. A skilful synthesis between traditional and folk forms of communication on the one hand and modern audio-visual media including Satellite Communication on the other is being attempted.

3.3.0 Approaches to Communication

3.3.1 Conceptual Framework

By and large development communication is the integration of strategic communication in development projects.

Therefore Strategic communication is a powerful tool that can improve the chances of success of development projects. It strives for behaviour change not just information dissemination, education, or awareness-raising. While the latter are necessary ingredients of communication, they are not sufficient for getting people to change long established practices or behaviours.

It is not a mistake that all development requires some kind of behaviour change on the part of stakeholders. Research shows that changing knowledge and attitudes does not necessarily translate into behaviour change.

Experience shows that in order to effect behaviour change, it is necessary to understand why people do what they do and understand the barriers to change or adopting new practices. It is not enough to raise awareness of the "benefits", it is critical to understand peoples' barriers or the "costs" they perceive such a change would entail. (Steven, 1979:312).

Consequently meaningful communication is about getting information out to particular audiences, listening to their feedback, and responding appropriately. Whether discussing a development project or broader economic reforms from health, education or rural development to private sector development, financial reform or judicial reform the idea is to build consensus through raising public understanding and generating well informed dialogue among stakeholders.

In this case well-conceived, professionally implemented communication programs that are tied directly to reform efforts or development project objectives that bring understanding of local political, social and cultural realities to bear in the design of development programs can make the difference between a project's success and failure.

3.3.2 Importance of Communication

The question is "why should you communicate?" The answer could be as Infante et al. (1997:23) pointed out that, "it is important to communicate because it helps us create cooperation and interaction with one another, promote democracy, acquire information and entertain ourselves."

Communication is one of the basic functions of management in any organization and its importance can hardly be overemphasized. It is a process of transmitting information, ideas, thoughts, opinions and plans between various parts of an organization.

From this observation therefore, it is not possible to have human relations without communication. However, good and effective communication is required not only for good human relations but also for good and successful business.

Where there is effective communication, you can maintain a good human relation in the organization and by encouraging ideas or suggestions from students or workers and implementing them whenever possible, you can also increase production or adherence at low cost.

Communication can be achieved either through oral or written form. In oral communication, listeners can make out what the speaker is trying to say, but in written communication, which is in text matter, the message is a reflection of one's thinking. So, written communication or messages should be clear, purposeful and concise with correct words, to avoid any misinterpretation of your message. In the case of written communication, Melkote, (1991:236)

puts it right that it "provides a permanent record for future use and it also gives an opportunity to employees to put up their comments or suggestions in writing".

3.4.0 Development communication.

Development communication is the integration of strategic communication in development projects.

Strategic communication is a powerful tool that can improve the chances of success of development projects. It strives for behaviour change not just information dissemination, education, or awareness-raising. While the latter are necessary ingredients of communication, they are not sufficient for getting people to change long-established practices or behaviours.

All development requires some kind of behaviour change on the part of stakeholders. Research shows that changing knowledge and attitudes does not necessarily translate into behaviour change. In order to effect behaviour change, it is necessary to understand why people do what they do and understand the barriers to change or adopting new practices. It is not enough to raise awareness of the "benefits", it is critical to understand peoples' barriers or the "costs" they perceive such a change would entail.

Meaningful communication is about getting information out to particular audiences, listening to their feedback, and responding appropriately. Whether discussing a development project or broader economic reforms from health, education or rural development to private sector development, financial reform or judicial reform the idea is to build consensus through raising public understanding and generating well informed dialogue among stakeholders.

Well-conceived, professionally implemented communication programs that are tied directly to reform efforts or development project objectives that bring understanding of local political, social and cultural realities to bear in the design of development programs can make the difference between a project's success and failure (Kent Sidel, 1993).

3.4.1 Economic development is a measure of how wealthy a country is - and of how this wealth is generated (for example agriculture is considered less economically advanced then banking).

3.4.2 Human development measures the extent to which people have accesses to wealth, jobs, knowledge, nutrition, health, leisure and safety - as well as political and cultural freedom. The

more material elements in this list, such as wealth and nutrition, are often grouped together under the heading standard of living. The less material elements, such as health and leisure, are often referred to as quality of life.

3.4.3 Education Development

Educational Development is the Growth, differentiation, or evolution of educational systems. However it should not be confused with "Student Development" or "Faculty Development". In this case education development is the growth in awareness and knowledge capacity of an individual person in society as he or she gains more information on known and unknown things to him or her. It is the movement from ignorance to knowledge. Aderogba, (2010:56-57).

3.5.0 Review of Theories

3.5.1 The conceptual frame work of communication at ZAMCOL

The Conceptual frame work of Communication at ZAMCOL is in two ways, first it is in the general management communication, in simple terms the chains of command, and secondly it is in the way the course material given to the students is prepared.

The Zambian College of Open Learning, is governed by a constitution and a board of directors who sees to it that policies, standards and quality is maintained, while and advisory board which meets twice in a year helps the board of directors and the ODL management team to follow and deriver on time all planned activities. The ODL management team comprises of the Director, deputy Director, Administrative manager and deputy, Academic manager and two deputies, The Editor and the deputy, The librarian, The ITC manager and deputy, the Accountant and accounts clerks, Reprographics assistants, and secretaries and other senior and junior auxiliary workers, in different departments.

Material production is done by qualified specialists in the field of their specialization, who are either part time lecturers of the institution or are hired to do the material production in case no expert in the field is in reach.

The material should be done in the same way that a teacher in a classroom is required to mediate/ explain/ teach the requisite content/skills, in the ODL context the materials need to take on the role of the teacher and do the same. The "teaching voice" therefore needs to be *more* than just a

friendly, social, 'team-talking' voice that says *"Welcome to Unit 1 of this Course…"; "I am sure you have found Activity 1 quite easy…"* or which announces a new topic, *"The next section is about prefixes and suffixes.."* The teaching voice needs to teach the content. Just about all the units submitted for the evaluation do reflect a friendly "voice" that makes the type of comments included above. This is necessary and good, however this notion needs to be taken much further and to a deeper level the voice in the materials needs to **mediate** or **teach.** Distance Education writers, like Lockwood, talk about **unpacking the content**. A concern in many of the materials is that information is **stated** rather than taught and unpacked. This is why it is found, that many of the materials, in their current state, are not yet suitable for self-study purposes.

The Theoretical frame work of communication in general will have some theories of communication, like the agenda setting theory, and the diffusion of innovations theory. In general communication can be classified into four main levels**; interpersonal communication, group communication, organizational communication and mass communication (IGNOU, 2001). T**eaching is more concern with interpersonal and group communication rather than the other two levels of communication. This is mainly because interpersonal communication includes conversation between two persons, which they share their feeling, emotions, thoughts and ideas in cases of face to face teaching etc., while in group communication; the members of a group interact with each other on common interest in cases of mass teaching. Group communication is used to take a collective decision on the problems, an issue or a matter of common concern. Both face to face and mass teaching is fashioned along this line.

3.5.2 Diffusion of Innovations Theory

Diffusion of Innovations is a theory that seeks to explain how innovations are taken up in a population over a period of time, through certain communication channels. An innovation is an idea, behaviour, or object that is perceived as new by its audience, while diffusion is the process/special communications of spreading the innovation over time in a population.

In his comprehensive book *Diffusion of Innovation*, Everett Rogers defines diffusion as the process by which an innovation is communicated through certain channels over time among the members of a social system. Rogers' definition contains four elements that are present in the diffusion of innovation process. The four main elements are:

(1) Innovation - an idea, practices, or objects that is perceived as knew by an individual or other unit of adoption.

(2) Communication channels - the means by which messages get from one individual to another.

(3) Time - the three time factors are:
(a) Innovation-decision process
(b) Relative time with which an innovation is adopted by an individual or group.
(c) Innovation's rate of adoption.

(4) Social system a set of interrelated units that are engaged in joint problem solving to accomplish a common goal.

Diffusion of Innovations offers three valuable insights into the process of social change:
- *What qualities make an innovation spread successfully?*
- *The importance of peer-peer conversations and peer networks.*
- *Understanding the needs of different user segments.*

3.5.3 What qualities make innovations spread?

Diffusion of Innovations takes a radically different approach to most other theories of change. Instead of focusing on persuading individuals to change, it sees change as being primarily about the evolution or "reinvention" of products and behaviours so they become better fits for the needs of individuals and groups. *In Diffusion of Innovations it is not people who change, but the innovations themselves. It means that products are sometimes reinvented to suit peoples' needs better and are sometimes modified for the same purpose, of becoming better fits for individuals and groups.*

Why do certain innovations spread more quickly than others? And why do others fail? According to Everett Rogers (2003:15-17), one of the Diffusion scholars recognize five qualities that determine the success of an innovation, as stated below:

1) Relative advantage

This is the degree to which an innovation is perceived as better than the idea it supersedes by a particular group of users, measured in terms that matter to those users, like economic

advantage, social prestige, convenience, or satisfaction. The greater the perceived relative advantage of an innovation, the more rapid its rate of adoption is likely to be.

There are no absolute rules for what constitutes "relative advantage". It depends on the particular perceptions and needs of the user group.

2) Compatibility with existing values and practices

This is the degree to which an innovation is perceived as being consistent with the values, past experiences, and needs of potential adopters. An idea that is incompatible with their values, norms or practices will not be adopted as rapidly as an innovation that is compatible.

3) Simplicity and ease of use

This is the degree to which an innovation is perceived as difficult to understand and use. New ideas that are simpler to understand are adopted more rapidly than innovations that require the adopter to develop new skills and understandings.

4) Trialability

This is the degree to which an innovation can be experimented with on a limited basis. An innovation that is trialable represents less uncertainty to the individual who is considering it.

5) Observable results

The easier it is for individuals to see the results of an innovation, the more likely they are to adopt it. Visible results lower uncertainty and also stimulate peer discussion of a new idea, as friends and neighbours of an adopter often request information about it.

Reinvention is a key principle in Diffusion of Innovations. The success of an innovation depends on how well it evolves to meet the needs of more and more demanding and risk-averse individuals in a population (the history of the mobile phone is a perfect example).

A good way to achieve this is to make users into partners in a continuous process of redevelopment. Computer games companies, pharmaceutical corporations and rural research institutes are examples of organizations that seek to make users active partners in improving innovations by supporting user communities or by applying participative action research techniques. (E.M. Rogers, 2003).

3.5.4 The importance of peer-peer conversations and peer networks

The second important insight is that impersonal marketing methods like advertising and media stories may spread information about new innovations, but it's conversations that spread adoption.

Why? Because the adoption of new products or behaviours involves the management of risk and uncertainty. It's usually only people we personally know and trust and who we know have successfully adopted the innovation themselves who can give us credible reassurances that our attempts to change won't result in embarrassment, humiliation, financial loss or wasted time.

Early adopters are the exception to this rule. They are on the lookout for advantages and tend to see the risks as low because they are financially more secure, more personally confident, and better informed about the particular product or behaviour. Often they will grasp at innovations on the basis of no more than a well worded news article. The rest of the population, however, see higher risks in change, and therefore require assurance from trusted peers that an innovation is do-able and provides genuine benefits.

As an innovation spreads from early adopters to majority audiences, face-to-face communication therefore becomes more essential to the decision to adopt. This principle is embodied in the Bass Forecasting which illustrates how face-to-face communication becomes more influential over time, and mass media less influential. Mahajan, Muller and Bass (1990) as reproduced in Rogers, E.M. (2003:210), the emphasis on peer-peer communication has led diffusion scholars to be interested in **peer networks**. Many diffusion-style campaigns now consciously attempt to utilize peer networks, for instance by using Popular Opinion Leader techniques or various "viral marketing" methods. These methods which are becoming increasingly popular aim to recruit well connected individuals to spread new ideas through their own social networks.

3.5.5 Understanding the needs of different user segments

Diffusion researchers believe that a population can be broken down into five different segments, based on their propensity to adopt a specific innovation: innovators, early adopters, early majorities, late majorities and laggards.

> **Innovators:** The adoption process begins with a tiny number of visionary, imaginative innovators. They often lavish great time and money, energy and creativity on developing

new ideas and gadgets. And they love to talk about them. Right now, they're the ones busily building skills to convert cooking oil into diesel fuel and making websites to tell the world about it. Unfortunately their one eyed fixation on a new behaviour or gadget can make them seem dangerously idealistic to the pragmatic majority. Yet no change program can thrive without their energy and commitment.

How to work with innovators:

• Track them down and become their "first followers", providing support and publicity for their ideas.

• Invite keen innovators to be partners in designing your project. (Rogers, 2003)

Early adopters: Once the benefits start to become apparent, early adopters leap in. They are on the lookout for a strategic leap forward in their lives or businesses and are quick to make connections between clever innovations and their personal needs.

They love getting an advantage over their peers and they have time and money to invest. They're often fashion conscious and love to be seen as leaders: social prestige is one of their biggest drivers. Their natural desire to be trend setters causes the "take off" of an innovation. Early adopters tend to be more economically successful, well connected and well informed and hence more socially respected. Their seemingly risky plunge into a new activity sets tongues wagging. Others watch to see whether they prosper or fail, and people start talking about the results. And early adopters like to talk about their successes. So the buzz intensifies. What early adopters say about an innovation determines its success. The more they crow and preen, the more likely the new behaviour or product will be perceived positively by the majority of a population.

Early adopters are vital for another reason. They become an independent test bed, ironing out the chinks and reinventing the innovation to suit mainstream needs.

Fortunately early adopters are an easy audience. They don't need much persuading because they are on the lookout for anything that could give them a social or economic edge. When you call a public meeting to discuss energy saving devices or new farming methods, they're the ones who come along. They're the first people in your block to install a water tank, mulch their garden, buy laptops for their kids, or install solar panels. (Rogers, 2003)

How to work with early adopters:

• Offer strong face-to-face support for a limited number of early adopters to trial the new idea.

• Study the trials carefully to discover how to make the idea more convenient, low cost and marketable.

• Reward their egos e.g. with media coverage.

• Promote them as fashion leaders (beginning with the cultish end of the media market).

• Recruit and train some as peer educators.

• Maintain relationships with regular feedback. (Rogers, 2003)

Early majority: Assuming the product or behaviour leaps the chasm, it may eventually reach majority audiences. Early majorities are pragmatists, comfortable with moderately progressive ideas, but won't act without solid proof of benefits. They are followers who are influenced by mainstream fashions and wary of fads. They want to hear "industry standard" and "endorsed by normal, respectable folks".

Majorities are cost sensitive and risk averse. They are looking for simple, proven, better ways of doing what they already do. They require guaranteed off-the-shelf performance, minimum disruption, minimum commitment of time, minimum learning, and either cost neutrality or rapid payback periods. And they hate complexity. They haven't got time to think about your product or project. They're too busy getting the kids to football and running their businesses. If they do have spare time they're not going to spend it fussing around with complicated, expensive, inconvenient products or behaviours. They want to hear "plug and play", "no sweat" or "user-friendly" and "value for money".

How to work with the early majority:

• Offer gives a ways or competitions to stimulate buzz.

• Use mainstream advertising and media stories featuring endorsements from credible, respected, similar folks.

• Lower the entries cost and guarantee performance.

• Redesign to maximize ease and simplicity.

• Cut the red tape: simplify application forms and instructions.

• Provide strong customer service and support. (Rogers, 2003)

Late majority: They are conservative pragmatists who hate risk and are uncomfortable your new idea. Practically their only driver is the fear of not fitting in; hence they will follow mainstream fashions and established standards. They are often influenced by the fears and opinions of laggards.

How to work with the late majority:

• Focus on promoting social norms rather than just product benefits: they'll want to hear that plenty of other conservative folks like themselves think it's normal or indispensable.

• Keep refining the product to increase convenience and reduce costs.

• Emphasis the risks of being left behind.

• Respond to criticisms from laggards. (Rogers, 2003)

Laggards: Meanwhile laggards hold out to the bitter end. They are people who see a high risk in adopting a particular product or behaviour. Some of them are so worried they stay awake all night, tossing and turning, thinking up arguments against it. And don't forget they might be right! It's possible they are not, really not laggards at all, but innovators of ideas that are so new they challenge your paradigms! In the early stages, where you are focusing on early adopters, you can probably ignore the views of laggards, but when you come to work with late majorities you'll need to address their criticisms, because late majorities share many of their fears.

How to work with laggards:

• Give them high levels of personal control over when, where, how and whether they do the new behaviour.

• Maximize their familiarity with new products or behaviours. Let them see exactly how other laggards have successfully adopted the innovation.

Each of these adopter personalities is very different. It's vital to know which one you are addressing at a given time. And no, you usually can't address them all at once. Why? Because products and behaviours only mature gradually. The exception is when you have Understanding Diffusion of Innovations customized quite *different* products or behaviours for each group. How big is each segment? Rogers went as far as assigning precise notional percentages for each segment:

Innovators: 2.5%

Early Adopters: 13.5%

Early majority: 34%

Late majority 34%

Laggards 16% 9

However the "20:60:20 Rule" is a good all-purpose rule of thumb. When designing a change project you need to know one vital fact: the percentages who have already taken up the innovation. That figure tells you which segment you are addressing *next*. It gives you great insight into how to design your project and how to pitch your communications. Of course, no one is an innovator or a laggard about all new ideas.

That would be too exhausting. In reality, most people are majorities about most things, and only innovators or laggards about certain specific things. We wouldn't say "Grandfather is a laggard", we'd say "Grandfather is an *iPhone* laggard" or "Kenneth Kaunda is an open markets laggard". (Rogers, 2003).

3.6.0 The Relevance of the Theory to the Study

Rogers's theory is of great importance to this study because it helps us to understand the processes that people go through before they can adapt to new messages of their get through learning. In evaluating the communication strategies used by ZAMCOL in communication to the enrolled and prospecting students in Zambia, it has become apparent that the progress that has been achieved over the years, while being as a result of peer to peer messages and planning in terms of advertising messages on both the local and national media, the use of appropriate channels, and use of the right people to endorse the institutions' legitimacy and registration with the Ministry of Education, however ZAMCOL has not yet conducted a national wide research which could establish the effectiveness of its communication strategies.

It is on record that ZAMCOL started as a local initiative to give rural teachers, a training which could help them teach upper basic classes (grades 8 and 9) in their rural schools. The programme was widely embraced by rural dwelling teachers than the urban teachers. It was noted that many urban teachers refused to enroll in the programme due to two, factors ; wrong massages received about the institution and the status of the institution at that time as regards it relationship with the ministry of Education. According to Rogers this rejection should be anticipated and communication planners should be able to know that initial rejection of early massages does not render them ineffective.

It is well known that ZAMCOL, has started to do well and many people who thought that it will be a failure are not too happy to see that it succeeds. Therefore to hear of its discontinuance was going to be not only good news to them but a success in their scheme of disruption of a local good initiative that has proved to be beneficial not to the north-western province only but to the entire country.

The knowledge stage of the innovation-decision process is of great value to people involved in message development and dissemination because at this vulnerable stage of the innovation-decision process, communicators are able to create an impressionable impact on their target audience. Communicators should focus their efforts on creating awareness and knowledge when promoting a new product or innovation.

The reprographic and editorial department at ZAMCOL with the undying efforts and zeal of ZAMCOL Director, and the use of available appropriate communication systems has made the story of ZAMCOL to be what it is today.

Knowledge Adoption

During periods of Learning or knowledge adoption, rapid social and technological evolution, change and disruptive technologies are experienced and utilized by different students and institutions at different times. Unfortunately, in the ZAMCOL experience, adult primary school teachers are late in perceiving, understanding, and adopting new instructional technologies. Consequently, ZAMCOL as an education provider should conservatively adopt new tools and communication techniques suitable to students' adoption.

The accepted model for stages of technology adoption is a *bell curve* with the stages of the technology and knowledge adoption life cycle described from left to right as:

Early Market	Main Street	End of Life

Innovators and Early Adaptors fall within the Early Market group; these are self-motivated and focused students of any age group these make it in life, come what may. Early Majority and Late Majority users are in the Main Street users group; this is the largest group which has students who want to improve their education but do not know how. They want to upgrade their professional qualifications but do only the bare minimum to achieve it; they succeed in their plans with their minimum efforts though. While the Laggards fall within the End of Life

grouping, these are students who want to study for life, their knowledge adoption is lifelong learning, they want to improve in their studies only for better understanding of issues, they want to be better equipped and be able to serve or work with authority of the knowledge gained.

The tools and resources available to support the ODL design are determined therefore, in part, basing on where the delivery technology is in the technology life cycle. Usually it will be in the "Main Street" or "end of life" stage for adult learners.

The implications for adult education are that proven, widely accepted technologies are generally used, but their usefulness may be limited by emerging, more powerful technologies.

3.7.0 Agenda Setting Theory

In explaining the Agenda setting theory, Defleur (1998:272) writes that agenda setting implies a relationship between the treatment of an issue or event in the News Papers, Television and Radio News, and the beliefs about its importance or significance of the part of individuals who make up the News audience. The media meets this objective by selectively deciding which stories to give prominence and which one to leave out. Thus by placing special attention on some topic while eliminating others, the media influences peoples' prioritization of issues around their setting.

Therefore it is important to state that the press determines what issues people would be discussing among themselves and how much importance they would attach to different issues. According to this theory, media develops its agenda concerning particular issues and decides how much prominence to accord them. This may be done through the selection and omission of major issues. However Baran (2004:429) retaliates that the theory arguments do not say that the media tells people what to do, or think, but says that the media certainly tells us what to think about, but not certainly what you should decide to do about what you are thinking about an issue. This theory is also appreciable to the teaching situation as the institution plans the material to be taught to students, guided by the syllabus and the curriculum of the coarse being taken. Therefore due importance is accorded to various topics in the coarse by the institution according to how much value it has in the syllabus. Assignments and project questions are set by the institution and thus set the type of academic talks and activities by the students each period.

This theory could also help the students, in their own time at home or in their schools to help their pupils achieve a common purpose in a specific period of time. As regards student teachers in the rural area, the theory can help them pass on information of importance to the whole

community by setting the tone of the week's discussions towards the said topic, as teachers are still regarded highly by many rural inhabitants.

CHAPTER FOUR

4.0.0 Methodology

This chapter will look at; Research questions, method, study design, study place, ethical considerations, data gathering, entry, and analysis. It also looks at the limitations to this study and thus treated as expected.

Due to a number of limitations in the study a triangulation approach, as suggested by some communication scholars, which involves using both qualitative and quantitative methods, was used in this research. The study has been a field of practice for the researcher to employee theories of research and communication leant in class in a concrete institutional situation at the Zambian College of Open Learning (ZAMCOL) in Solwezi. This involved as Russel, (2009:18) says a Triangulation, "which is the use of multiple methods to study one research question, or it could mean the use of two or more different measures of the same variable". This helped the researcher gain a much greater feel and sense of communication strategies in Open and Distance Learning institutions especially the ones used at ZAMCOL.

4.1.0 Research Questions

The following were the research questions;

What communication strategies and channels, are being used by ZAMCOL to reach its enrolled and prospective students, and what gaps, weakness are there in these strategies and channels to attain its, Mission, Vision, aims and Goals(objectives).

➢ What strategies and channels are being used at ZAMCOL, as an institution of open and distance learning, in a country where other institutions are offering similar services?

➢ From which region (rural or urban) and what age groups, of students have been losing assignment sent to the institution?

➢ From which region (urban or rural) and what age groups, of students' have which media preference, as their best means of communication?

➢ What are the factors promoting students reproducing other student's assignments?

How far, could these communication strategies and channels used, go in promoting standards and quality of education received and consequently promote new enrolments due to the generated interest and awareness among the general citizenry. To what extent is the general public aware about ZAMCOL and its activities among the rural people in Zambia?

4.1.1 Method

This study focused on communication strategies at ZAMCOL in Solwezi, in the months of July to December 2012, whereby taking special interest of the August 2012 three-week residential session, when enrolled students were gathered for their face to face contact with tutors and their friends. The researcher spent six months at ZAMCOL headquarters in Solwezi, participating in the day to day activities of the institution and reviewing the study material given to the students during their face to face contacts.

Apart from the day to day participation in the activities of ZAMCOL by the researcher and access to available vital documents, Twelve (12) in-depth interviews were conducted with officials at different levels, which gave quality official stance on the study. While three (3) focus group discussions were held, which has given the students' side on the study; that is to say one with each intake of students enrolled at ZAMCOL present at this August residential school.

Hundred and twenty self-administered questionnaires were distributed to students and some staff members of ZAMCOL.

4.1.2 In-Depth Interviews.

Twelve (12) in depth interviews were conducted with the following officials:

1. Senior Education Officer (DODE)
2. Executive Director (ZAMCOL)
3. Manager Administration (ZAMCOL)
4. Manager Academic (ZAMCOL)
5. Manager Information Technology and Communication (ZAMCOL)
6. Former Provincial Educations Officer (North-western Province)
7. Former UNZA Resident Lecturer 1996 -2006 (North-western Province)
8. Librarian (ZAMCOL)

9. Bursar (ZAMCOL)
10. Editor (ZAMCOL)
11. President Students Union (ZAMCOL)
12. Registry Officer (ZAMCOL)

The researcher wanted to have first-hand information from these specialized people who are directly involved in the day to day communication with students enrolled at ZAMCOL.

4.1.3 Focus Group Discussions

Three focus group discussions of 10 people each were conducted with the first, second and third year students at ZAMCOL during the August 2012, residential school. The researcher encouraged all group members to participate freely in the discussions by providing an enabling environment, were confidentiality was top priority. The discussion focused on getting their views and experiences regarding the communication strategies used by ZAMCOL to reach out to its prospecting and enrolled students.

4.1.4 Participant Observation

The researcher spent six months at ZAMCOL Head Office observing and participating in the day to day activities of the institution. From the Head Office the researcher had a chance to work closely with both the Academic and Administrative Managers and found out what kind of records ZAMCOL keeps. This gave the researcher an insight into the kind of organizational communication existing at the institution. During the same period the researcher observed how both the teaching and administration staff work and interact with each other and with the students within the institution. He also gathered some information through unsolicited comments from students, members of staff and other supporting staff he met. At the time of attachment, ZAMCOL was in the process of designing and drawing its first ever communication and strategic plan for the next five years, starting January 2014, to which the researcher participated and contributed instrumentally.

4.2.0 Study Design

The study was a cross sectional evaluation of the information and communication technologies which ZAMCOL uses in communicating with its enrolled and prospective students. As earlier

mentioned both qualitative and quantitative methods were used to collect the information. It is important to note at this stage that the researcher had too much information at his hands to do with communication and administration at ZAMCOL. It is important however to note that the aim of this research is to evaluate the communication strategies used at ZAMCOL, in passing on and obtaining information from would be, and enrolled students and the outside world. Hence the focus on the channels used, content development and transmission as well as its effectiveness was looked at closely.

Since its foundation in 1998, ZAMCOL has not conducted a countrywide research to get feedback from it's would be, enrolled and former students to find out how effective their communication is. Thus, this study should be seen as the first ever done at ZAMCOL and it is an attempt to evaluate communication strategies, using primary information and existing documentation at ZAMCOL. Despite a few shortcomings, it is worth noting that the information presented here is credible and is documented in various literatures present at ZAMCOL, and the Ministry of Education Provincial administration North Western Province.

4.2.1 Study Place

The study was conducted at ZAMCOL, headquarters located at Kankasa farm block area in Solwezi. ZAMCOL an institution which was formerly designed to upgrade primary certificate holder teachers to a diploma level only for North-western Province, is now a National institution offering a Secondary School Teacher's Diploma   through open and distance learning mode. This offer is not restrictive to primary certificate teachers only but to any one inclusive of school levers. It now provides technical support and study coordination to students through its provincial centres in Mongu, Chipata and now Kasama, Chinsali and Mansa.

4.3.0 Ethical Considerations/Consent

There was no ethical problem for getting clearance from the University Ethical Committee. There was a warm welcome by management at ZAMCOL to do a representative study of the information feedback from the students and members of staff. However due to financial and other constraints, the researcher suggested to have a representative sample of 120 done within the three quarts of enrolled students, forty among each of institution's intake ,that is third, second and first year students. Even though the researcher, felt that this sample will not be representative

enough of the diverse social economic backgrounds among students, thus in depth and the focus group discussions were held to bridge the gap. Both students and members of staff were in agreement with the researcher to carry out this research and had no objection what so ever, even though they asked for anonymity whenever they were engaged in any of the research information gathering activity.

All the information collected during the study was confidential. However since the study was non-invasive, there were not many critical ethical issues to worry about. This research was given blessing by the Executive Director of ZAMCOL and participants were not coerced but participated voluntarily and freely.

4.4.0 Data Gathering

Both primary and secondary sources of data were used in this study.

4.4.1 Primary Sources of Data

Data collection involved 120 self-administered questionnaires to ZAMCOL students and others in August 2012. While in depth interviews and focus group discussions were conducted as earlier mentioned. A checklist of questions and prompts to keep the discussions and interviews alive and productive according to the study objectives was maintained in all interviews and discussions. In addition to all this is the vital and irreplaceable data picked by the researcher during his time of attachment with the institution.

4.4.2 Secondary Sources of Data

The data here included: Collection from archival sources at ZAMCOL and the ministry of education. These sources provided not only needed literature, but were also consulted to provide or confirm existing data and information gotten from students and staff members on the communication problem and approaches at ZAMCOL.

Study materials given to students as a form of teaching and learning tool at home were obtained from both the editorial and reprographic department at ZAMCOL and from the students themselves who are the end users of this study instrument and are in the position to tell whether the producers of these instruments are really communicating knowledge to them or not.

Other sources included the libraries, that is physical and websites based libraries and information databases were also consulted regularly

4.4.3 Data Entry and Analysis

Data was entered in Microsoft word and voice recording gadgets respectively and thus analysed using the Statistical Package for the Social Sciences (SPSS) in the same manner as the Survey questionnaires were formulated scientifically using this computer program. In depth interviews were analysed according to the responses of how the stake holders perceive of the issues relating to Teacher Education at ZAMCOL in Zambia. Focus group discussions, and other data gathered by the researcher through his observation, were as usual spontaneous and thus Analysis of this data was both direct and at times deductive. Above all data from the in-depth interviews, focus group discussions and the researcher's own observations was thus analyzed using descriptive and deductive methods to generate interpretive proportions.

By and large descriptive proportions were generated to provide an overview of the characteristics of interest. These formed a basis for interpretation of variables.

4.5.0 Limitations of the study.

Due to the limited time factor and strict financial resources, the researcher collected 110 of the 120 research questionnaires from the sample frame of one thousand plus enrolled students and others at ZAMCOL. Therefore the sample size, fairness in sampling of ZAMCOL stakeholders, that is Students, Lecturers/Course designers and the community at large and taking into consideration their active involvement or none involvement in ODL activities at the institution, was not strictly observed.

The sample size was planned at 120 survey questionnaires, but managed to get 110 answered survey questionnaires back by the 15th, of December 2012, this is due to the location of students around the country and not forgetting their social economic situations and their geographical location within the country. The shortage was however balanced up by the three (3) focus group discussions and twelve (12) in depth interviews.

The use of research questions rather than hypothesis is a limiting factor in terms of robustness of the study and its conclusions. This leaves the study in the realm of exploratory research which invites further research.

The situation was that there were no prospective students' representations in the focus group discussions nor did they participant in the survey questionnaire, as most of those contacted considered the issue to be a matter for those in the college. However this needs to be addressed seriously.

CHAPTER FIVE

5.0.0 Data Analysis, Interpretation and Discussion

5.1.0 Introduction

This chapter gives an analysis, interpretation and discussion of the findings of this study. The aim of the study was to evaluate the communication strategies used by ZAMCOL in teacher training by ODL mode in Zambia. As stated earlier the study was conducted using quantitative and qualitative methods of research. This was done in order to get firsthand information from people who are directly involved in the learning and teaching processes at ZAMCOL. That is the development, production and dissemination of the teaching and learning material, the actual learning and use of these materials during and after residential schools and the student support services during and after residential schools, in April, August and December of each year.

Data analysis was done using the statistical package for the social sciences (SPSS). Descriptive proportions were generated to provide an overview of the characteristics of interest. These formed a basis for interpretation of variables. The resulting data is presented in detail in various tables, graphs and charts. The details also come out in the subsequent descriptive discussions.

In the same way data from Personal observations, interviews and other sources was also presented. This data forms a core of this study because it highlights all the methods and processes of the teaching and learning by ODL at ZAMCOL in Zambia. This data was analyzed using descriptive and deductive methods to generate interpretive proportions.

5.1.1 Analysis and interpretation of the findings

Analysis is done, as said already by using the statistical package for the social sciences (SPSS), Microsoft Excel and Microsoft word. The analyzed data is presented in various tables and graphs simply identified by the word and numbers "**Figure 5.1.1**". Presentation of data is in accordance with the study objectives. Some findings from the focus group discussions and the in-depth interviews are presented in word, just as short analyzed interpretation, directly deduced from the sources.

Data obtaining from the analysis table or graph is immediately interpreted as raw finding from the research.

5.2.0 Presentation of findings on the communication strategies used by ZAMCOL and how appropriate these are to the enrolled and prospective students.

5.2.1: *Which Communication mode has* ZAMCOL *mostly used* **in connecting to its students and others** *as an Institution of Open and Distance Learning in Zambia?*

According to the data obtained it was discovered that there are various communication strategies used by ZAMCOL in the teaching and learning processes by ODL in Zambia. The graph below shows the responses of the participants in the research to the mode of communication that ZAMCOL has used mostly in communicating with them.
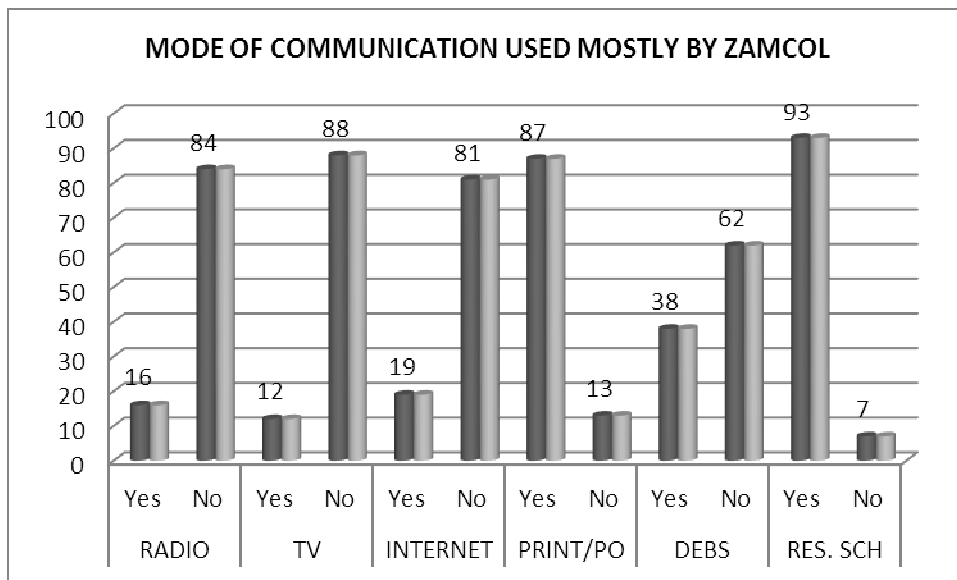
Figure 5.2.1

Figure 5.2.1 Mode of Communication mostly used by ZAMCOL in connecting to its students and others.

From the data obtained, the most used modes of communication by ZAMCOL in connecting to its students and others are residential school which was at 93 percent acceptance and only 7 percent refusals and the Print Material sent by post office at 87 percent acceptance and 13

refusals. The District Board Secretary's office had 38 percent acceptance and 62 percent refusals. The internet had 19 percent acceptance and 81 percent refusals. Radio had 16 percent acceptance and 84 percent refusals. Television had 12 percent acceptance and 88 percent refusals. These were responses by respondents as modes of communication mostly used by ZAMCOL in connecting to them.

It was further observed during the in-depth and focus group discussions that other strategies of communication like newspapers, brochures, and theater for community development are only used before and during Graduation of students. These were used as channels for advertising the institution and it was a general acknowledgement of the importance of theater for community development in social gatherings like graduations as a tool of information dissemination.

5.2.2 Frequently used and preferred modes of communication by ZAMCOL

A key aspect of carrying out effective learning is the need to send and receive assignments on a timely basis, by the students and the ODL institution respectively; so that tutors receive and send back marked scripts to the institution in time. This helps in the maintenance of each students course assessment (CA) records so that if need be, that will be one source for student support. It is relevant also for students' prompt feedback. There are several communication modes used by ZAMCOL to communicate with its students and others to pass on and receive information. The tables below shows the most frequently used modes of communication by ZAMCOL.

The statistics indicate that Residential Schools, Print Material sent by Post Office and the DEBS offices respectively remains the main channels of ZAMCOL's communication with its students and others.

Distribution of responses to the question in the questionnaire, set to determine which mode is mostly used in communicating to students and others. For example:

What mode of communication has ZAMCOL employed most with you? (f)Residential school

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	102	92.7	92.7	92.7
	No	8	7.3	7.3	100.0
	Total	110	100.0	100.0	

Figure: 5.2. 2
Figure: 5.2.2 Residential Schools are used as a mode of communication to pass on direct information on coarse material and answer student questions.

According to the data obtained 102 or 92.7 percent of the participants accepted to receiving direct information on coarse material from tutors and subject experts during residential schools. Many questions from students are answered by subject experts and tutors. Also it is during this time that distribution of study material to students is done.

What mode of communication has ZAMCOL employed most with you? (d)Print material/post office

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	96	87.3	87.3	87.3
No	14	12.7	12.7	100.0
Total	110	100.0	100.0	

Figure: 5.2.3

Figure: 5.2.3 Print Material sent by Post Office, mostly used communication mode to send and receive assignments

From the data obtained 96 or 87.3 percent of the participants accepted that Print Material sent by Post Office, is the mode of communication through which they send their assignments and sometimes receive study material and assignment questions.

What mode of communication has ZAMCOL employed most with you? (e)DEBS office

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	42	38.2	38.2	38.2
No	68	61.8	61.8	100.0
Total	110	100.0	100.0	

Figure: 5.2.4
Figure: 5.2.4 DEBS Offices, mostly used mode of Communication to advertise student enrollments and other information on ZAMCOL

As the data obtained indicates 42 or 38.2 per cent of the participants accepted having had seen an advert from the DEBS offices about student enrollment and availability of enrollment forms or a job from ZAMCOL.

5.2.3 The effectiveness of the modes of communication as experienced by students.

Measuring the effectiveness of the modes of communication as experienced by students was most challenging task to the researcher as it is to any other researcher. It was more challenging in this case because the students who were participating in the research were all enrolled and studying at ZAMCOL. For this reason the researcher tried by all means to phrase the questions in such a way that brings out the required measure of the variable effectiveness of the mode of communication used.

"How would you rate the type of communication that you are experiencing with ZAMCOL now?"
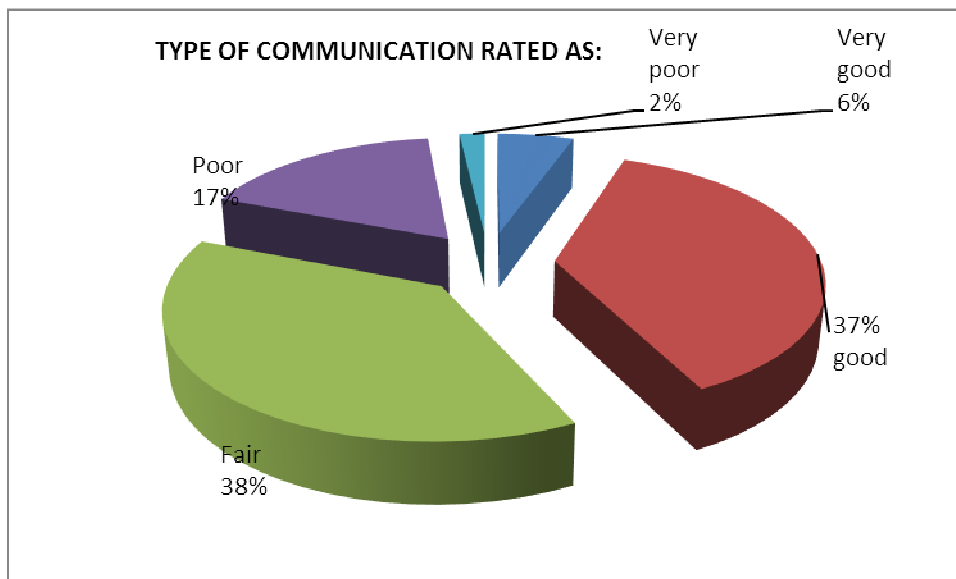
Figure 5.2.5

Figure 5.2.5 represents finding of the effectiveness of the mode of communication after participants answered the question: "How would you rate the type of communication that you are experiencing with ZAMCOL now?" 38percent of the respondents said it was fair, 37 percent said it was good, 6 percent said it was very good. While 17 percent said it was poor and 2 per cent said it was very poor.

Figures 5.2.6 (a) and (b) represents the 3 focus group discussions of 10 people each and the 12 in depth interviews, the following are the findings as presented below.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	22	53	53	53
	No	14	33	33	86
	No response	06	14	14	100.0
	Total	42	100.0	100.0	

Figure 5.2.6 (a)

The focus group discussions comprised of 30 people and the 12 in depth discussants giving a total of 42 people. From the discussions 22 people or 53percent of the discussants agreed with the prompt question, "Did you get your required information?" 14 people or 33 percent refused, while 6 people or 14 percent of the discussants had no response to the question.
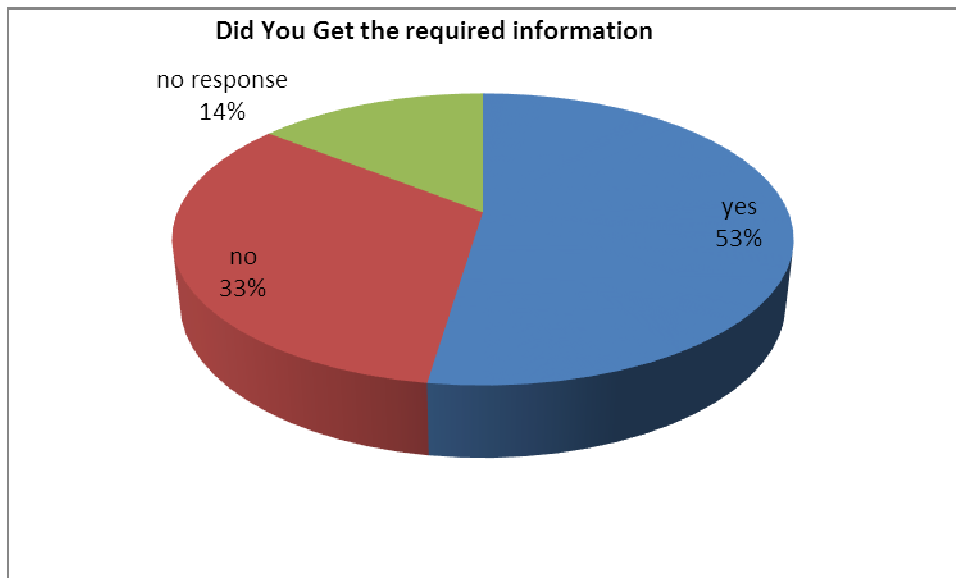
Figure 5.2.6 (b)

Figure 5.2.7 rates the effectiveness of the mode of communication ability of ZAMCOL, as an institution offering ODL.
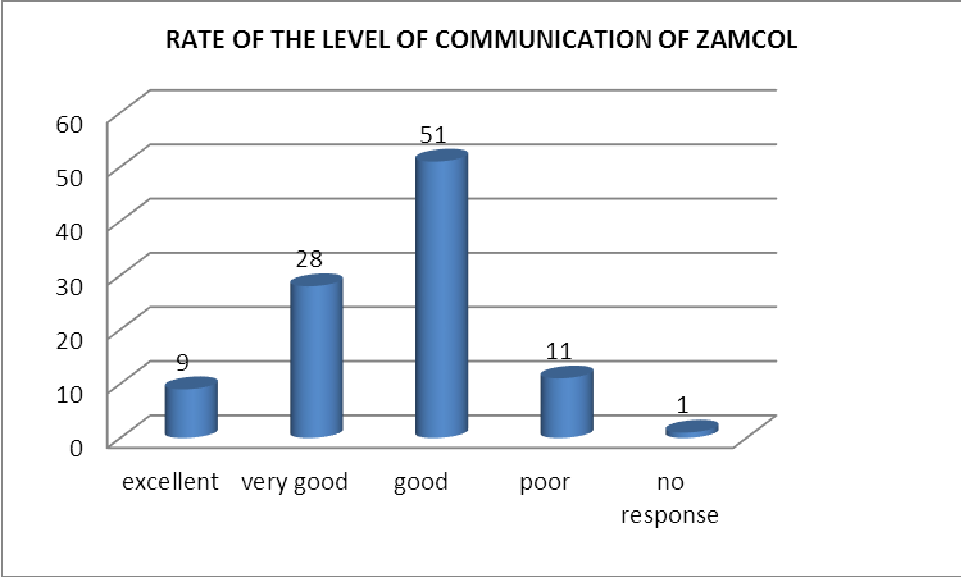
Figure 5.2.7

According to the findings, 51 percent of the respondents appreciated that the communication modes were good and helped them get most of their required information. 28 per cent said it was very good and 9 percent said it was excellent, while 11 per cent did not agree to their effectiveness and 1 percent did not respond.

Figure 5.2.8 Communication Systems Owned by Students
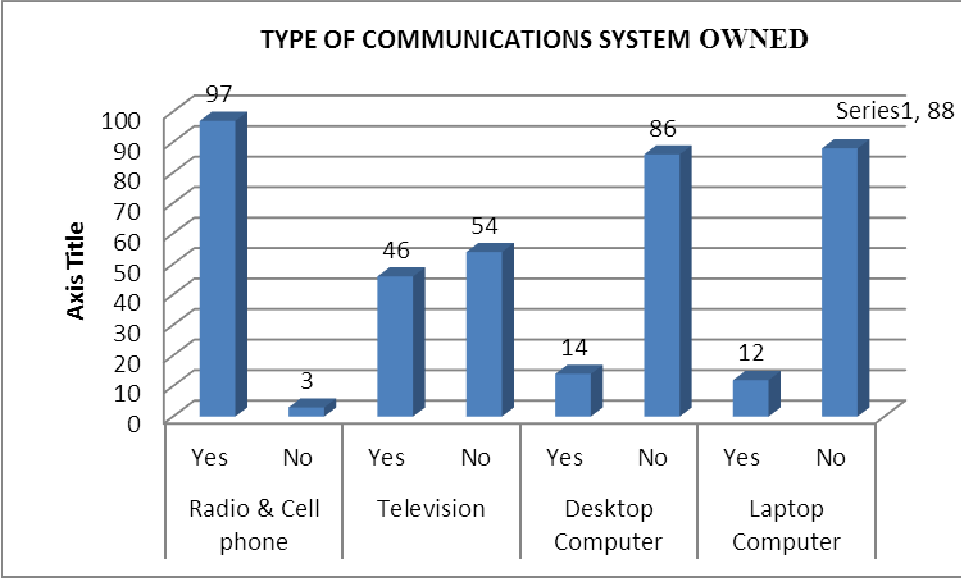
Figure 5.2.8

Figure 5.2.8 contains data obtained from the respondent's answers to the question, in the questionnaire, "what communication, systems do you own?" 97 percent accepted and 3 percent refused owning a Radio and Cell phone. 46 percent accepted and 54 percent refused owning a Television set. 14 percent accepted and 86 percent refused owning a Desktop Computer. 12

percent accepted and 88 percent refused owning a Laptop Computer.

Figure 5.2.9 programs followed on the owned communication systems

The data obtained from figure 5.2.9 below shows that entertainment and news ranks the highest at 55 percent each to usage of the systems of communication owned. Sports and Education stood at 47 and 43 percent each while Commercials and Highlights stood at 25 and 30 percent each to the usage of the communication systems owned.
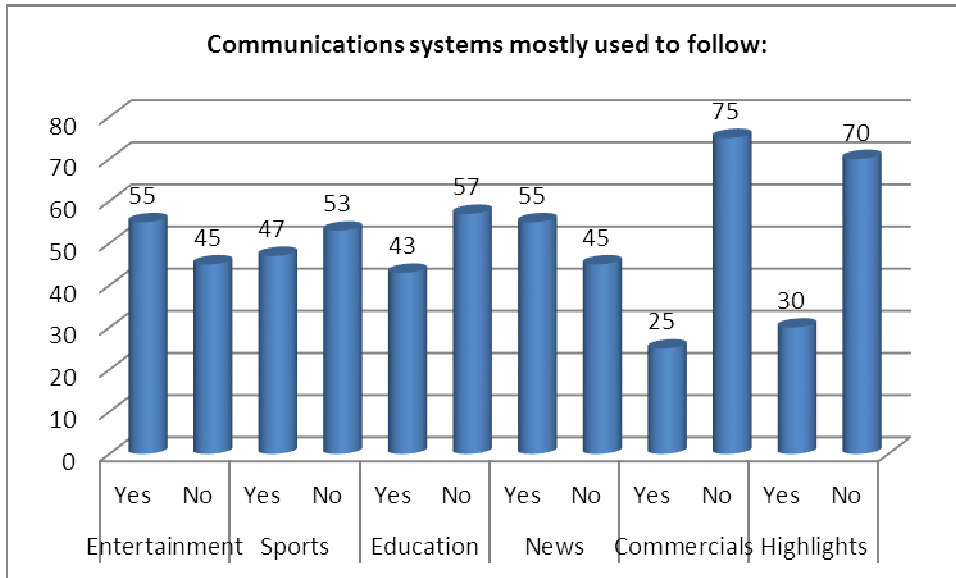
Figure 5.2.9

The data obtained also shows that, Commercials and Highlight stood at 75 and 70 percent each of programs not followed. Education and Sports stood at 57 and 53 percent each while entertainment and news stood at 45 percent each not used to be followed on the owned communication system.

Figure 5.2.10 Media by which students get connected to their surrounding world
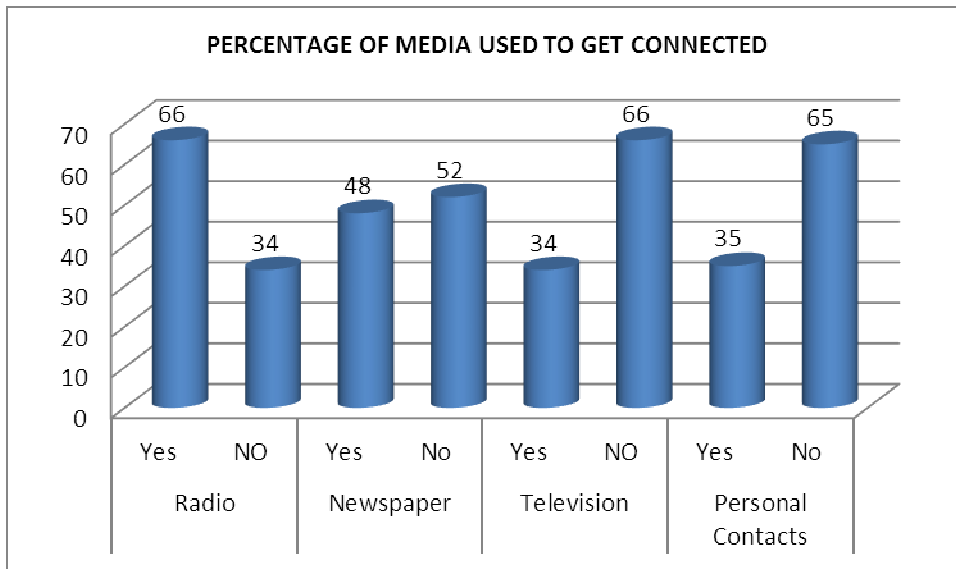
Figure 5.2.10

Figure 5.2.10 represents data obtained from the respondents on the question, "which media do you use to get connected to your surrounding world?" From the data obtained, most respondents preferred Radio and Newspaper to get connected to their surroundings representing 66 and 48 percent each. Television and Personal contacts stood at 34 and 35 percent each.

Figure 5.2.11 Preference of appropriate and favorite Media
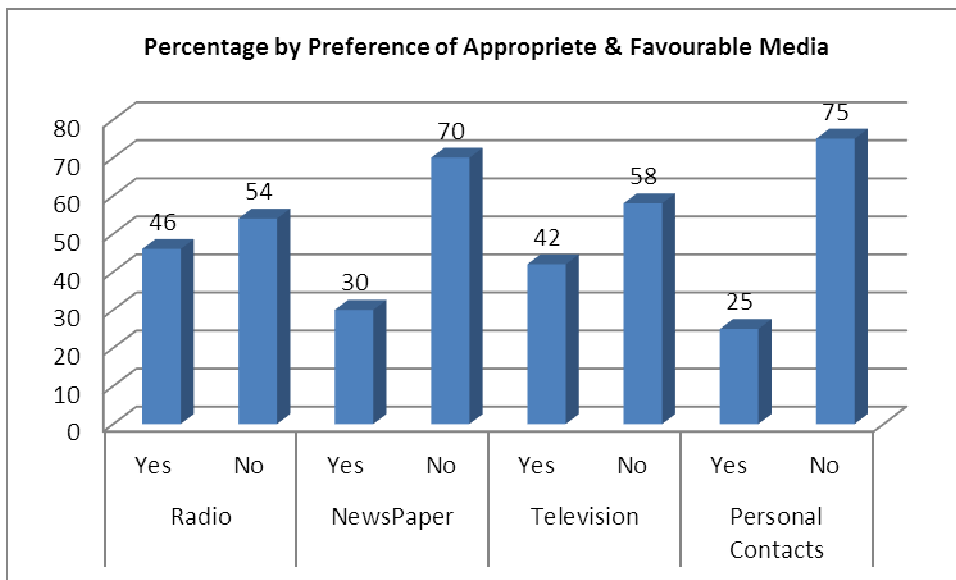
Figure 5.2.11

Most respondents preferred Radio and Television representing 46 and 42 percent each. While Newspaper and Personal contacts stood at 30 and 25 percent preference each. The data also

shows that Personal contacts and Newspaper were most not preferred at 75 and 70 percent each, while Television and Radio stood at 58 and 54 percent each.

Figure 5.2.12 Use of Preferred favorite and appropriate media

As presented in figure 5.2.12, the respondents showed that 51 percent used their preferred favorite and appropriate media several times a day, 22 percent used it when they felt like during the day,
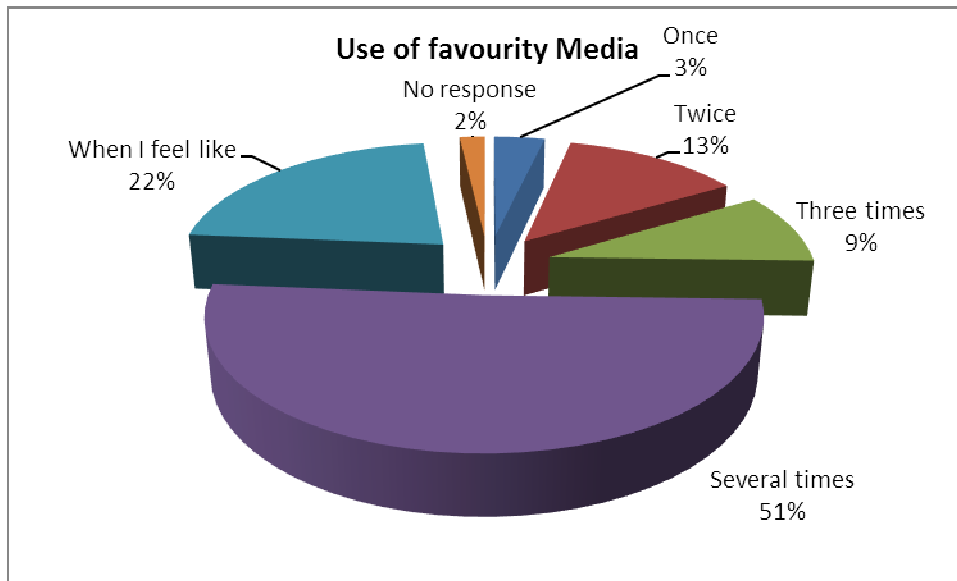
Figure 5.2.12

13 percent used it twice a day, 3 percent used it once per day and 2 percent did not respond to the question.

Figure 5.2.13 Appreciation by getting required information on Favorite media

Data in figure 5.2.12 was set to find out if whether respondents appreciated their favorite and appropriate media by getting required information. From the data Presented, 40 percent of the respondents get their required information sometimes, 27 percent get it most of the time,
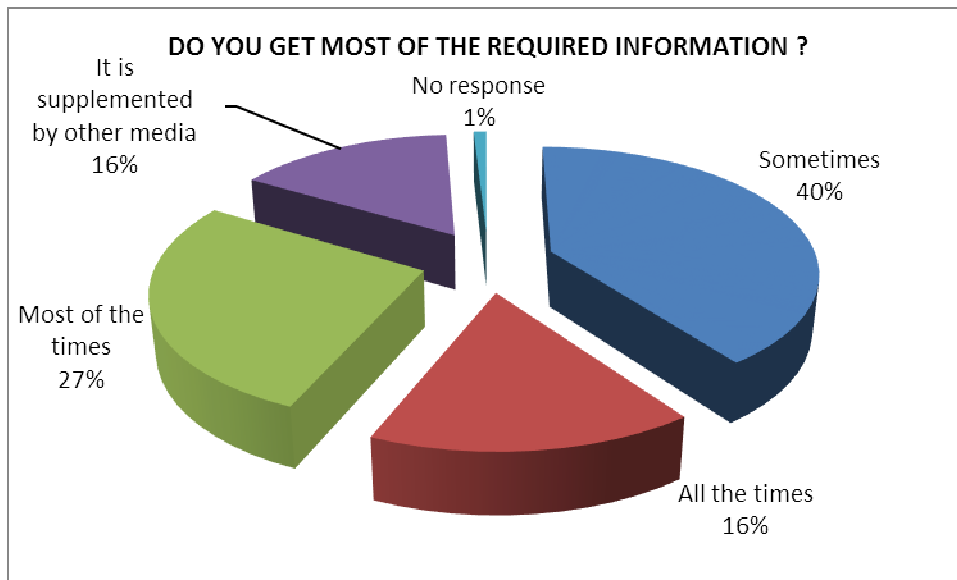
Figure 5.2.13

16 percent get it all the time and another 16 percent get it when supplemented by other media and 1 percent did not respond.

Figure 5.2.14 Performance of the Favorite and Appropriate media
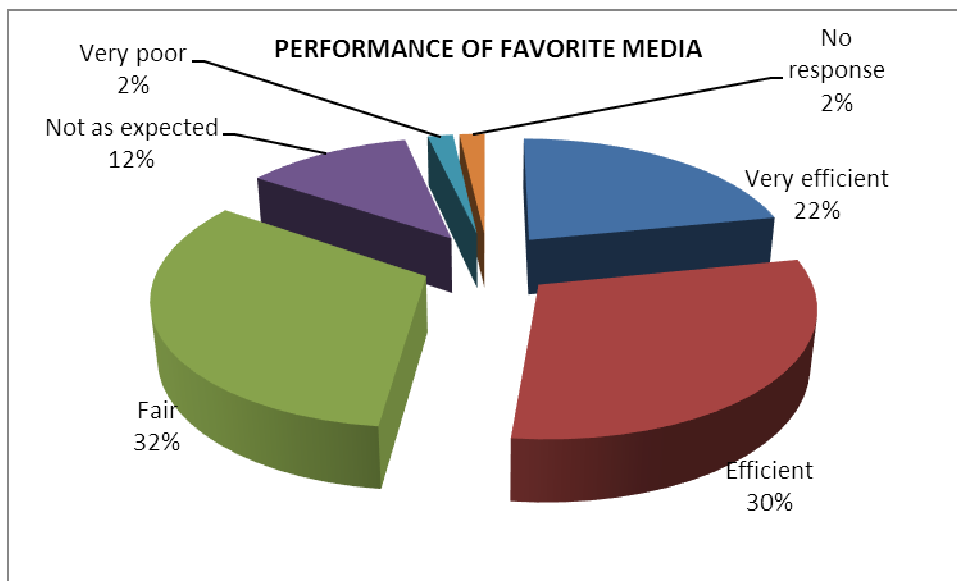
Figure 5.2.14

Data presented in figure 5,2,14 shows that 32 percent of the respondents said that their favorite and appropriate media performed fairly, 30 percent said that it performed efficiently, and 22 percent said it performed very efficiently. However 12 percent said that it did not perform as expected, with 2 percent saying that the performance was very poor and another 2 percent gave no response.

Figure 5.2.15 highest level of education attained and Radio Preference

		Which media do you use to get connected? (a) Radio			Total
		Yes	NO	No response	
Highest level of education attained	Junior Secondary	4	1	0	5
	Senior secondary	11	3	2	16
	College	50	23	7	80
	University	7	1	0	8
	No response	1	0	0	1
Total		73	28	9	110

Figure 5.2.15
*Above in figure 5.2.15 is preference data obtained by a Cross tabulation of variables, "**Highest level of education attained * which media do you use to get connected**"; of the participants in the research questionnaire*

From the data obtained in figure 5.2.15 it shows that 4 of the 5 respondents had attained Junior Secondary, preferred Radio. 11 of the 16 respondents attained Senior Secondary preferred Radio, 3 did not and 1 had no response. 50 of the 80 respondents' attained College education preferred Radio, 23 did not and 7 had no response. It also shows that 7 of the 8 respondents attained University level preferred Radio and 1 did not and 1 of the respondents who did not indicate the level of education attained did not.

In the same way data in figure 5.2.16, is a cross tabulation of the Highest level of education attained by the respondents and preference use of the Newspaper.

		Which media do you use to get connected? (b) Newspapers			Total
		Yes	No	No response	
Highest level of education attained	Junior Secondary	2	3	0	5
	Senior secondary	6	9	1	16
	College	39	41	0	80
	University	6	2	0	8
	No response	0	1	0	1
Total		53	56	1	110

Figure 5.2.16

Data obtained from figure 5.2.16 shows that 2 of the 5 respondents attained Junior Secondary, preferred Newspaper, and 3 did not. 6 of the 16 respondents attained Senior Secondary preferred Newspaper, 9 did not and 1 did not respond. 39 of the 80 respondent's attained College education preferred Radio while 41 did not. It also shows that 6 of the 8 respondents' attained University level preferred Newspaper, and 2 did not and 1 of the respondents who did not indicate the level of education attained did not.

In the same way data in figure 5.2.17, is a cross tabulation of the Highest level of education attained by the respondents and preference use of the Television

		Which media do you use to get connected? (c) Television		Total
		Yes	NO	
Highest level of education attained	Junior Secondary	2	3	5
	Senior secondary	4	12	16
	College	28	52	80
	University	3	5	8
	No response	0	1	1
Total		37	73	110

Figure 5.2.17

Data obtained from figure 5.2.17 shows that 2 of the 5 respondents attained Junior Secondary, preferred Television, and 3 did not. 4 of the 16 respondents attained

Senior Secondary preferred Television and 12 did not. 28 of the 80 respondent's attained College education preferred Television while 52 did not. It also shows that 3 of the 8 respondents' attained University level preferred Newspaper and 5 did not and 1 of the respondents who did not indicate the level of education attained did not.

In the same way data in figure 5.2.18, is a cross tabulation of the Highest level of education attained by the respondents and preference use of Personal Contacts

		Which media do you use to get connected? (d) Personal contacts		Total
		Yes	No	
Highest level of education attained	Junior Secondary	1	4	5
	Senior secondary	7	9	16
	College	27	53	80
	University	4	4	8
	No response	0	1	1
Total		39	71	110

Figure 5.2.18

Data obtained from figure 5.2.18 shows that 1 of the 5 respondents attained Junior Secondary, preferred Personal contacts and 4 did not. 7 of the 16 respondents attained Senior Secondary preferred Personal contacts and 9 did not. 27 of the 80 respondent's attained College education preferred Personal contacts while 53 did not. It also shows that 4 of the 8 respondents' attained University level preferred Personal contacts and 4 did not and 1 gave no response.

5.3.0 Assessment of the Communication Strategies Used In Contact Sessions and Feedback on Study Material Obtained from ZAMCOL.

Despite the respondents acknowledging the effectiveness of the communication strategies, used by ZAMCOL, with no regard to the effectiveness of their own favorite and appropriate modes of communication, it was discovered that not much feedback is gotten from the students who are users of the study material from ZAMCOL and beneficiaries of the residential school time. However it is important to emphasize that, the student gave most of the insights on their desire to have a forum in which they could offer their feedback on the residential time and the study material they get. They were views of the respondents based on their experience. However when the researcher concluded the findings, it was not clear whether these communication strategies have yielded positive results or not because no proper research has been done on this.

Figure 5.3.1 Residential schools as a mode of Communication

Residential Schools as mode of communication
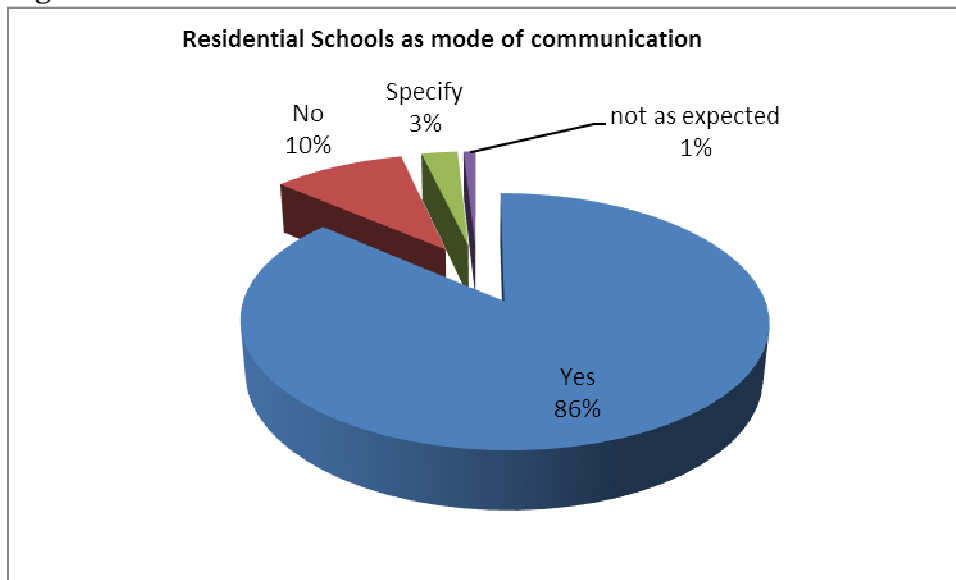
Figure 5.3.1

The data in figure 5.3.1, gives answer to the question, "Would you say the residential, time and the face to face lecture is helping you?" It was asked in the survey questionnaire. The question was set in a way that will give answer to the question of the affectivity of the modes of communication used in the residential school time. Which are, tutoring, lecture times, and the lecturing staff, social and academic interaction with other students and staff members, use of the data and e- library now available at the institution and the student support services?

However data obtained from figure 5.3.1 only gave an overall picture of the residential school time as a communication mode itself than those other components of communication during the same time. Hence the focus group discussions and the in- depth interviews covered these.

Data obtained from figure 5.3.1 shows that 86 percent of the respondents agreed that it was helping them as a mode of communication. 10 percent refused, 3 percent gave specific times and 1percent said it did not work as expected, as a mode of communication.

5.3.1 Communication methods used in residential school times, how much they are appreciated or not by the students.

To come up with the communication methods used during the residential school times, the researcher used the data from the 12 in-depth interviews and the three focus group discussions.

The first focus group discussion was with a group of 10 second year students of variance subject

course belonging. It is good to mention here that ZAMCOL offers Secondary Teachers Diploma courses in English, Mathematics, History, Science, Business Studies, Home Economics, Industrial Arts. From the groups' brain storming, the following were identified as methods of communication: *Registration, Induction, Lecturing, Social and Academic interaction among students or with staff members and the student support services.   From the discussions 5 of the discussants appreciated both the registration and induction of new students as a method of communication. 9 of them appreciated Lecturing, Social and Academic interaction. Only 4 of them appreciated the student support services as a method of communication.*

The second focus group discussion was with a group of 10 third year students of variance subject course belonging. The group added, *Student Leadership union, and tutoring, to the Registration, Induction, Lecturing, Social and Academic interaction among students or with staff members and the student support services.*

From the discussions 2, strongly said that student Leadership is a method of communication, 4 of them supported Social and Academic interaction among students or with staff members and the student support services. While 9 or almost all of them, were in support of Tutoring, Registration, Induction and Lecturing.

The third focus group discussion was with a group of 10 first year students of variance subject course belonging. This group was just coming for the residential school for the second time. They came up with, *the Registration, Induction, Lecturing, and Social and Academic interaction among students or with staff members as methods of communication used during residential school time.*

All 10 of them, appreciated the Registration, Induction and Lecturing, as a method of communication during the residential school time, and only 6 of them appreciated the Social and Academic interaction as a method of communication during the residential school time.

5.3.2 Channels of Communication in the residential school time presentation from the 12 in-depth interviews

Data obtained from the 12 in-depth interviews, concerning communication in the residential school time and feedback on the study material is here presented: The first interviewee was looking at Residential school time from the point of view of student study centers, which cuts on

student travel costs, if these were placed in strategic places, like the case of ZAMCOL's Mongu, Chipata, Chinsali, Kasama and Mansa study centers. The second, Third and fourth interviewee were of the same view, that residential school time, was time for students to meet their subject lecturers and talk to them on issues, from the study which seem to be giving the problems and also that students should get feedback on assignments sent to the institution.

The fifth interviewee presented that students' use of the library facility both data and e-library gives them opportunity to even interact at a speed that they would not think of achieving in ordinary sense. It is due to the fact that the Librarians will help them get the information they desire from the books on the shelves and from the e-library.

The sixth and seventh interviewees were emphasizing the point of policy and standards, as regards the carrying out of the residential schools. The sixth interviewee had nothing to do with feedback on the study material; they get from ZAMCOL, he said, "it is a matter between students and management." However the seventh interviewee wanted to know also, what students say about those study material.

The eighth, ninth and tenth interviewees senior officers at ZAMCOL, the Librarian, bursar and the Editor, emphasized the same point of students being present at all residential schools each year, but each one of them talking more on their role, in the students life in each residential. The Librarian said that her team, in the library is ready to talk to any student, to help them find the information they are looking for. The bursar said his door is always open, that is why he said, that he shifts his office to the residential site, so that he is available to anyone. The editor emphasized on the point of student making use of the material they get. He said that, it seemed that many students only use the material to answer assignments and when examinations are due, that is why they do not give much feedback.

The eleventh interviewee was the president of the Students' union, who looked at the residential school as a time for inter personal relationships with both, other students and staff members. These will help in many ways both academically and socially.

The twelfth interviewee was the registry officer in charge of all academic issues, who was of the view that students should use the time to find out anything in their personal data files that needed correction, like updates in their grade 12 results, course work and check on any missing posted

mail.

5.4.0 Establishing People's Knowledge, Attitudes and Practices, about ZAMCOL's situation as regards effective communication as an institution that offers ODL teacher training.

Establishing People's knowledge, Attitudes and Practices, was not an easy task, but different measures were used to establish these aspects, by using the questionnaire questions, interviews both focus group discussions and in-depth and from the researchers own experiences and observations during the attachment.

Three questions in the questionnaire were used to establish part of the people's Knowledge, attitudes and Practices. These were: 1, *"Are you familiar with ZAMCOL as an institution offering Teacher education by open and distance learning". 2, "If your answer in 28, is no, what would your associate your lack of familiarity to"? (Information breakdown, less publicity of the institution, bad information systems, lack of personal interest, no response). 3, "how did you know about ZAMCOL if you answered, yes to question 28"? (by radio, by the Television, Newspaper/Poster advert, told by a friend, through the education offices, no response)*

Figure 5.4.1 gives response data on the first question, "are you familiar with ZAMCOL, as an institution offering Teacher Education by ODL".

Data obtained shows that 3 percent of the respondents had no response to the question, 27 percent were not familiar with ZAMCOL as an institution that offers teacher education by ODL, and however 70 percent were familiar with ZAMCOL, as an institution that offers teacher education by ODL.
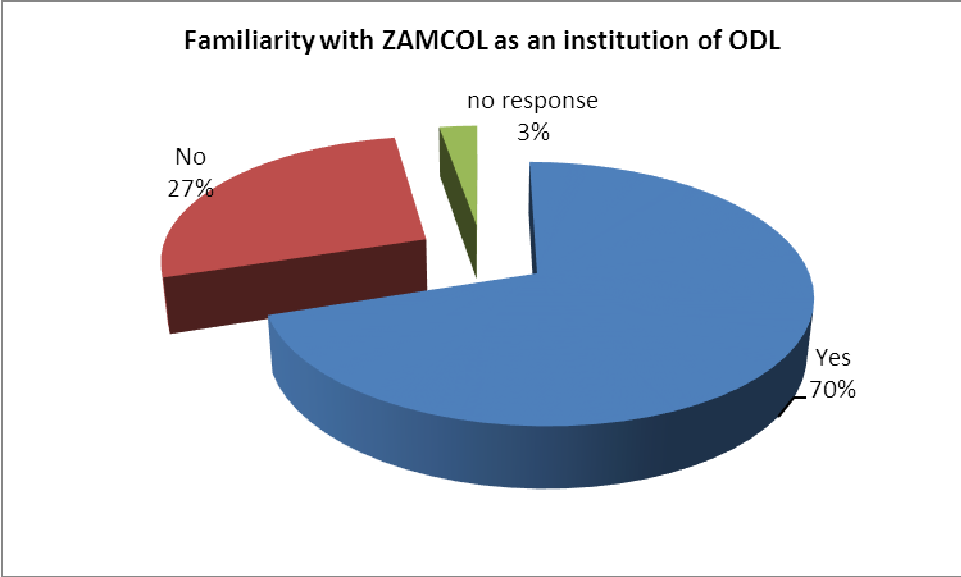
Figure5.4.1

Figure 5.4.2 gives response data on the second question, "If your answer in 28, is no, what would your associate your lack of familiarity to"?

Data presented in figure 5.4.2 below, shows that 2 percent of the respondents associated their lack of familiarity with ZAMCOL, as an institution that offers Teacher Education by ODL, to Information breakdown. 3 percent had no personal
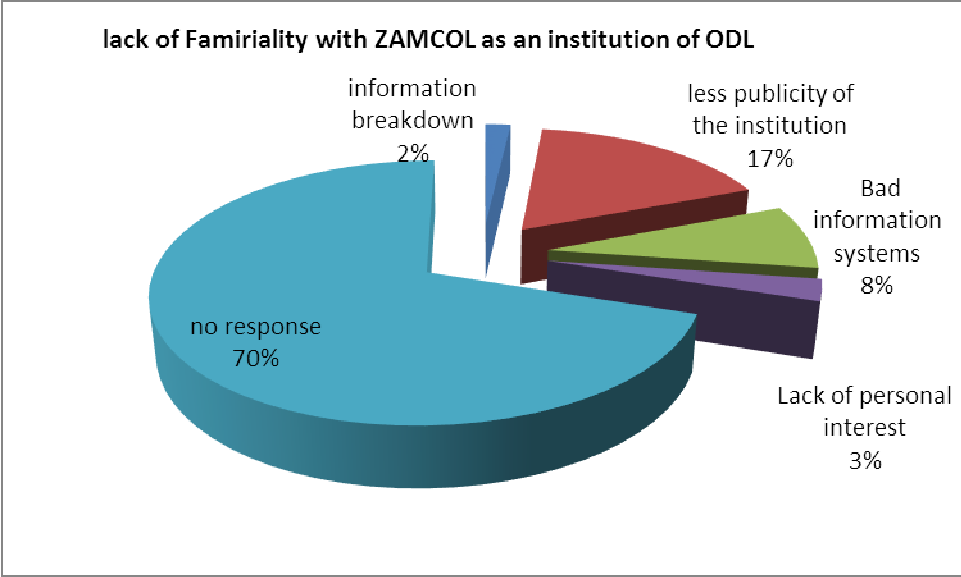
Figure 5.4.2

interest in trying to, 8 percent associated it to bad information systems used by the institution itself, 17 percent associated it to less publicity of the institution and yet 70 percent had no

response, sending a signal of no knowledge or no interest.

Figure 5.4.3 gives response data on the third question, "how *did you know about ZAMCOL if you answered yes, to question 28"?*
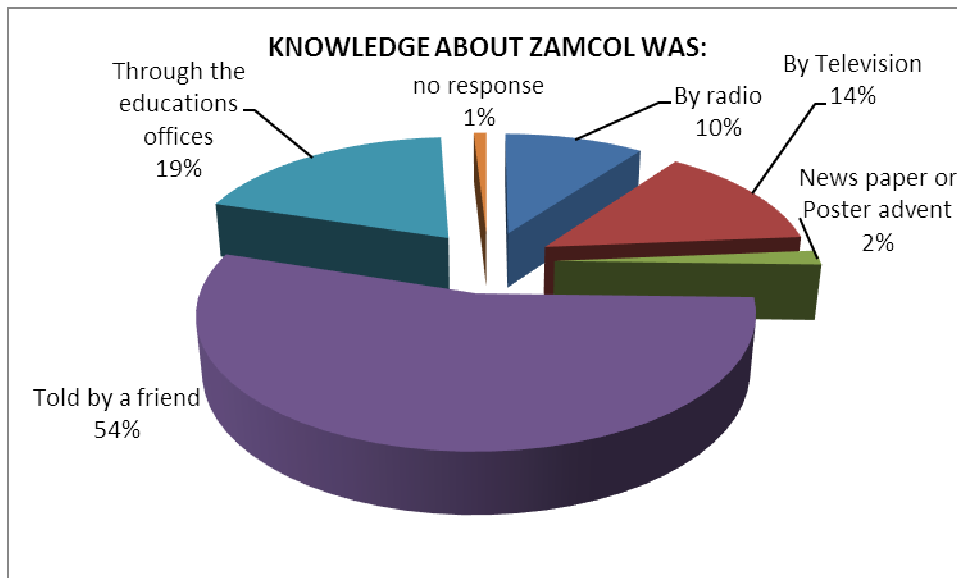
Figure5.4.3

Data presented in figure 5.4.3, shows that 1 percent of the respondents had no response, 2 percent of the respondents got their knowledge through the Newspaper or Poster advert, 10 percent got it through the Radio, 14 percent got it through the Television. Yet 19 percent of the respondents got it through the educations offices and 54 percent were told by a friend.

Presentation of response data from the 12 in-depth and 3 focus group discussions, on the people's knowledge and practices, as regards ZAMCOL's communication strategies.
There are several ways in which people come to know and get involved with each other or with an organization or an institution like ZAMCOL, which seem to be a very small organization in Zambia that is most of the time mistaken for ZAMCOM (Zambia Institute of Mass Communication).

Therefore establishing people's knowledge, attitudes and practices about communication on an institution of such growing magnitude took some pains even to get it from the interviews.

However during the in-depth interviews and the focus group discussions it was pointed out that currently ZAMCOL has expanded by number of enrollment and establishment of study centers, they know about this through familiar ways of communication with the institution. What was obtained from a prompt question, "**With your practical experience to ZAMCOL, which one is its priority communication strategy? Is here given in figure, 5.4.4: below.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Radio adverts	1	2.3	2.3	2.3
	Television	1	2.3	2.3	4.6
	Printed material sent by post	12	28.6	28.6	33.2
	Personal interact	9	21.5	21.5	54.7
	Through the educations offices	4	9.6	9.6	64.3
	Residential	15	35.7	35.7	100.0
	Total	42	100.0	100.0	

Figure 5.4.4

Figure 5.4.4: Knowledge and Practical experience of people with ZAMCOL's Priority communication strategy

35.7 percent of the respondents noted that Residential School was the best time to receive knowledge and send information, between ZAMCOL and students/others. 28.6 percent of the respondents preferred Printed material sent by post, as it saves on travelling costs, and one still remains in their work place. While 21.5 percent felt it was common practice receiving information from other people you trust. 9.6 percent used the Education offices and 2.3 percent each of the interviewees get knowledge about ZAMCOL by Radio and Television adverts.

Figure 5.4.5: gives data response about people's knowledge and attitude about ZAMCOL's communication Problems.
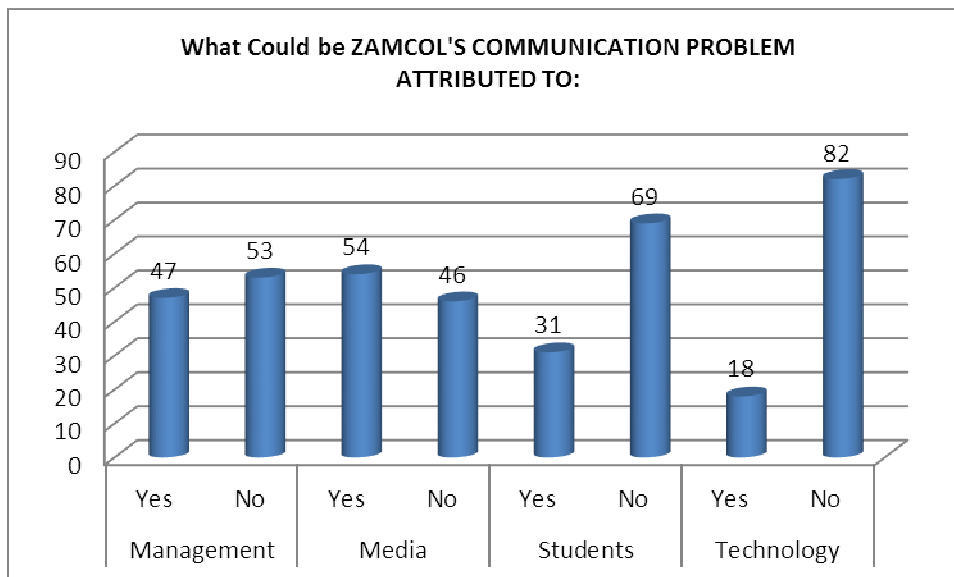
Figure5.4.5

Data obtained in figure 5.4.5: comes as responses to a question, below with four optional answers. "What could you relate ZAMCOL's communication problems to?" (a) Management (b) Media (c) Students (d) Technology

Notwithstanding the foregoing data of people's knowledge and attitudes obtained in figure 5.4.5 which shows Media with 54 percent and Management with 47 percent of respondents in the questionnaire survey, relating to each as ZAMCOL's communication problem. Students had 31 percent and Technology had 18 percent of respondents relating to each as ZAMCOL's communication problem.

Figure 5.4.6: gives data response about people's knowledge, Practices and attitude about ZAMCOL's communication modes.

Data in figure 5.4.6 is response to a question in the questionnaire survey, which was administered to students, enrolled and unenrolled and the teaching staffs, at ZAMCOL, the question was as stated below.

"How would you describe the communication mode and the information you get from ZAMCOL?" The question was set in a move to come close to people's attitudes, as regards ZAMCOL's communications.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Relevant	69	62.7	62.7	62.7
	Timely	29	26.4	26.4	89.1
	Currently	7	6.4	6.4	95.5
	irrelevant	3	2.7	2.7	98.2
	Out dated	2	1.8	1.8	100.0
	Total	110	100.0	100.0	

Figure 5.4.6

Data obtaining thus shows that 62.7 percent of the respondents said ZAMCOL's communication was Relevant. 26.4 percent of the respondents said ZAMCOL's communications were Timely. 6.4 percent of the respondents said ZAMCOL's communications were Current. While 2.7 percent of the respondents said ZAMCOL's communications were irrelevant and 1.8 percent of the respondents said ZAMCOL's communications were outdated.

5.5.0 To find out by Region and Age (a) Students who have lost an Assignment sent to the Institution by Post and other means, (b) Students' Media Preferences, as their best means of Communication.

Finding out about loss or miss placement of a mail, assignment or any other document sent to the institution for its action is a very frustrating situation to be experienced by anybody, especially when one is very sure that they had sent it to the institution.

Figure 5.5.1 below gives data responses to the question, "did you ever miss an

Students Who lost an assignment /letter by percentage
- no response 4%
- Yes 34%
- No 62%
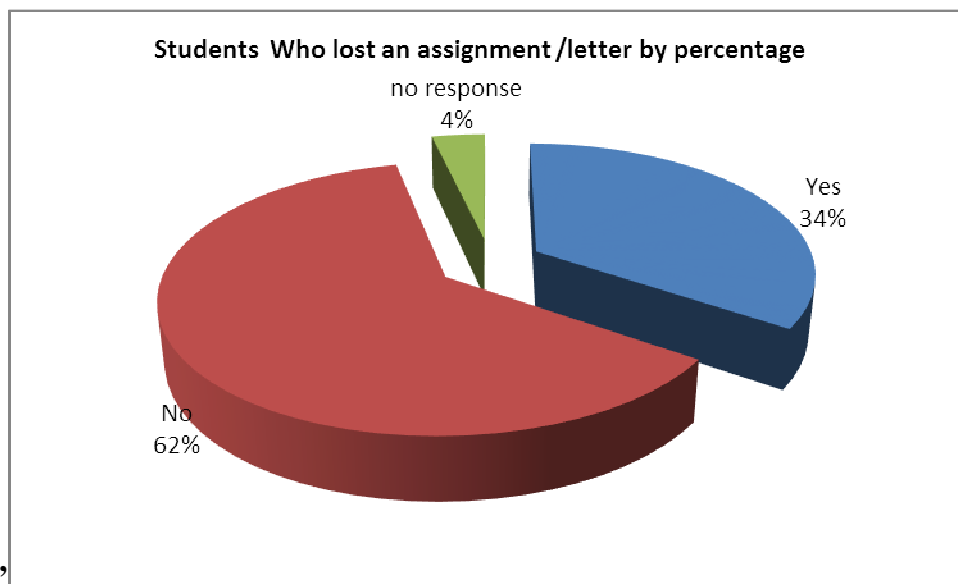
assignment?"

Figure 5.5.1

Data obtained from figure 5.5.1: shows that only 34 percent of the respondents had ever missed an assignment, while 62 percent of the respondents did not ever miss any assignment, may be because not all respondents were students. 4 percent of the respondents did not respond to the question.

Figure 5.5.2: gives data response of age groups of Students who have lost an Assignment or Letter sent to the Institution by Post and other means

		What was the age at last birthday			Total
		20 -30	31-40	41 -50	
Did you ever miss an assignment/letter	Yes	20	18	0	38
	No	36	27	5	68
	no response	3	0	1	4
Total		59	45	6	110

Figure 5.5.2

Data obtaining from figure 5.5.2, shows that 20 respondents agreed and 36 refused, those between 20 to 30 years old to have ever missed an assignment/letter, also that 18 respondents agreed and 27 refused, those between 31 and 40 years old to have ever missed an assignment. Respondents between 41 to 50 year olds had 5 refusing to have ever missed an assignment, with 1 respondent having no response to the question.

Figure 5.5.3: gives data response by region of Students who have lost an Assignment or Letter sent to the Institution by Post and other means
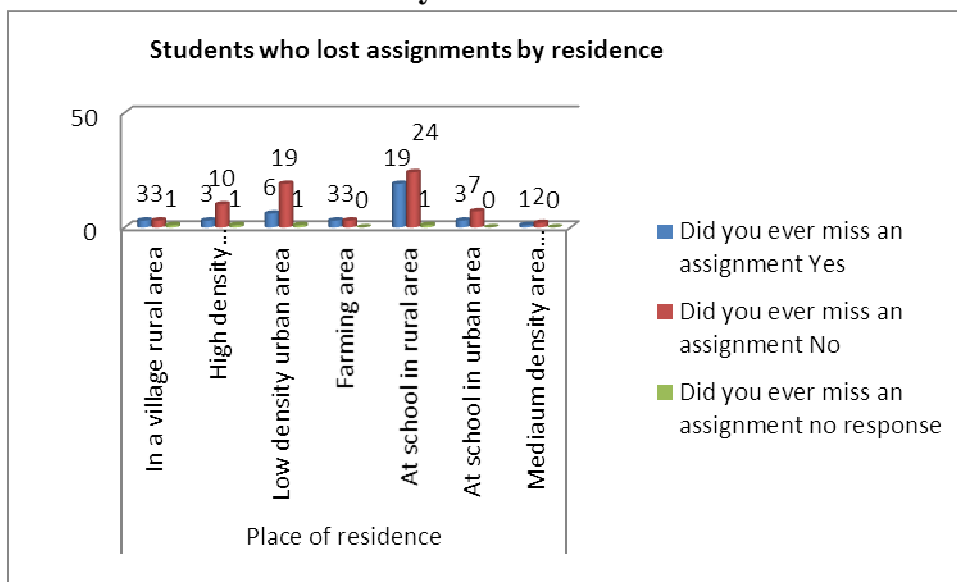
Figure 5.5.3

Data obtaining from figure 5.5.3: shows that respondents from **the rural area**: in a village 3 agreed, 3refused and 1 did not respond to the question, of having ever missed an assignment. Those in a farming area, 3 agreed and 3 refused, having ever missed an assignment/letter sent to the institution; and those at a school, 19 agreed and 24 refused to have lost an assignment/letter sent to the institution, while 1 respondent had no response. *In total from the rural area, 25 respondents agreed and 30 respondents refused to have ever missed an assignment/ letter sent to the institution, with 2 respondents giving no response to the question.* In the same way it shows that respondents from **the urban area:** in high density areas,10 refused, 3 agreed to having ever missed an assignment/letter sent to the Institution, 1gave no response, in the medium density areas, 2 refused,1 agreed to have missed an assignment/letter sent to the Institution. In the low density areas, 19 refused, 6 agreed and 1 had no response. Those at a school in urban areas, had 3

respondents agreeing, and 7 not agreeing to have ever missed an assignment/letter sent to the Institution.

In total from the urban area, 13 respondents agreed and 38 respondents refused to have ever missed an assignment/ letter sent to the institution, with 2 respondents giving no response to the question.

Figure 5.5.4: Gives data responses by Percentage, of respondents to a question with four preferences (Radio, Newspaper, Television, Personal contacts) in the questionnaire Survey, "which is your most appropriate and favorite Media"
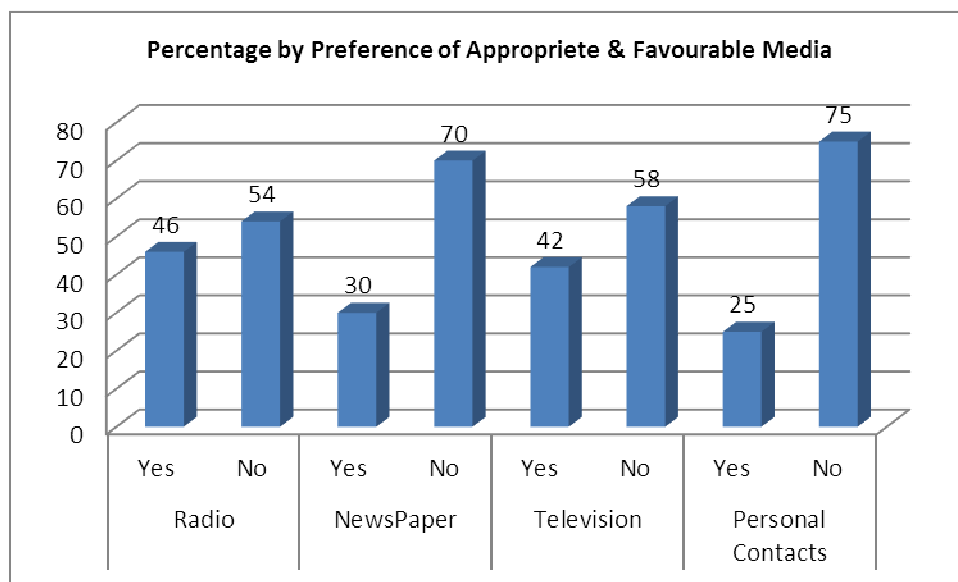
Figure 5.5.4

Data obtaining from figure 5.5.4, shows that, from the Respondents Radio had 46 percent preference and 54 percent none preference; Newspaper had 30 percent preference and 70 percent none preference. While Television had 42 percent preference and 58 percent none preference, and unexpected of Personal Contacts, there was only 25 percent preference with a 75 percent none preference.

Figure 5.5.5 gives data responses from the 12 in-depth interviews and the three focus group discussion, on media preference

Which One Is You Favourity Prefered Media

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Radio	9	21	21	21
	Newspaper	2	5	5	26
	Television	4	10	10	36
	Personal contacts	27	64	64	100.0
	Total	42	100.0	100.0	

Figure 5.5.5

Data obtained from figure 5.5.5, shows that there was 64 percent preference of personal contacts and 21 percent preference of Radio as favorite media among the interviewees and discussants. It also shows that, News Paper and Television had 5 and 10 percent preference each respectively.

5.6.0 Assessment of computer possession and its usage and interest for the internet, among students and lecturing staff at ZAMCOL, by age.

There is a growing need for ownership, and usage of Information Communication Technology (ICT) in ODL, especially now that e-Learning is almost introducing a real free education, or education for all campaigns, in the world of today. However for this study a question was asked to find out possession of these, ICTs at ZAMCOL's level only.

Figure 5.6.1: gives data responses to a question, "What communication systems do you own?" designed to assess student/teaching staff possession of some communication systems.
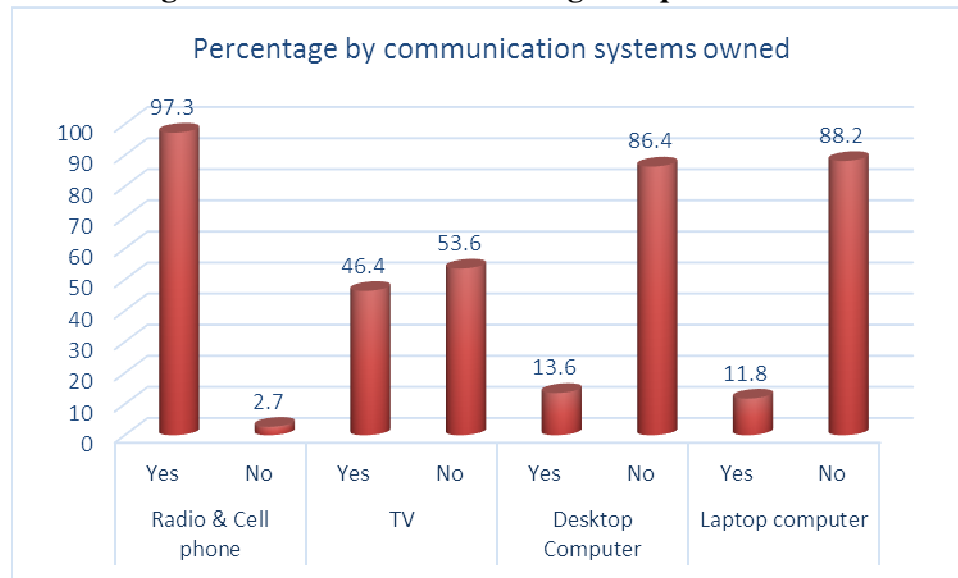
figure5.6.1

Data obtained from figure 5.6.1, shows that 97.2 percent of the respondents are radio owners and 46.4 percent of the respondents are Television set owner, and 13.6 percent of the respondents are Desktop owners and 11.8 percent of the respondents are Laptop owners.

Figure 5.6.2: is a cross tabulation of the age range and ownership of a Desktop computer
What was the age at last birthday * what type of communication systems do you own (c) Desktop computer Cross tabulation

	What type of communication systems do you own (c) Desktop computer		Total
	Yes	No	
What was the age at last birthday — 20 - 30	8	51	59
31-40	6	39	45
41 - 50	1	5	6
Total	15	95	110

Figure 5.6.2

Data obtained from figure 5.6.2, shows that, there were 8 of the 59 respondents between the ages of 20 to 30 years old, who own a desk top computer. There were 6 of the 45 respondents between the ages of 31to 40 years old, who own a desktop computer and that there was only 1of the 6 respondents, aged between 41and 50 years old who own a desktop computer.

Figure 5.6.3: is a cross tabulation of the age range and ownership of a laptop computer.
What was the age at last birthday * what type of communication systems do you own (d) Laptop computer Cross tabulation

	What type of communication systems do you own (d) Laptop computer		Total
	Yes	No	
What was the age at last birthday — 20 - 30	4	55	59
31-40	7	38	45
41 - 50	2	4	6
Total	13	97	110

Figure 5.6.3

Data obtained from figure 5.6.3, shows that, there were 4of the 59 respondents aged between 20 to 30 years old, who own a laptop computer. There were 7 of the 45 respondents between the ages of 31to 40 years old, who own a laptop computer and that there were only 2of the 6 respondents, aged between 41and 50 years old who own a laptop computer.

Figure 5.6.4: Shows how many in percentage of the respondents who own a computer has connection to the internet.

ARE ANY OF THE SYSTEMS YOU OWN CONNECTED TO THE INTERNET?

Yes 43%

No 57%
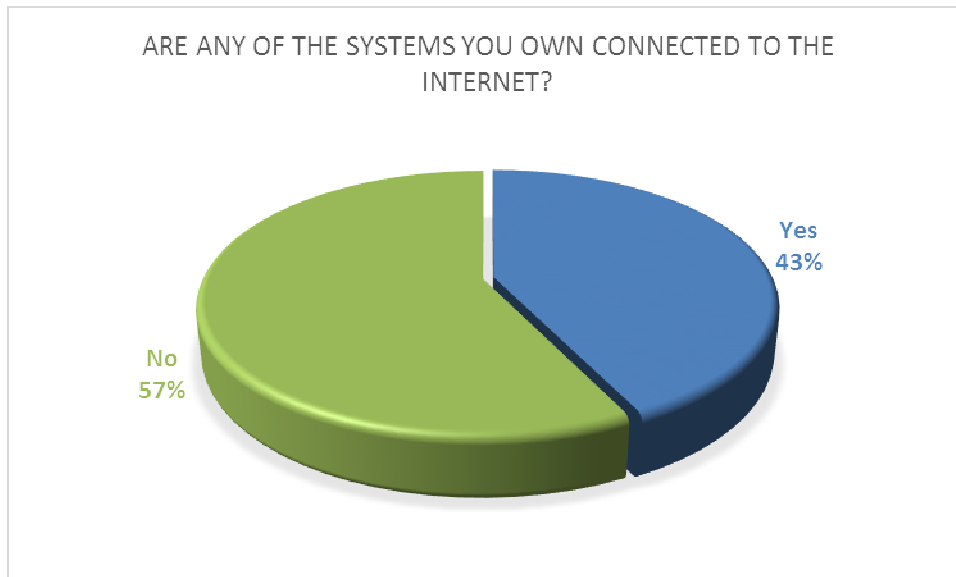
Figure 5.6.4

Data obtained in figure 5.6.4, shows that 57 percent of the respondents did not have their type of computer/communication system connected to the internet. Only 43 percent of the respondents had the type of their computer/communication system connected to the internet.

Figure 5.6.5; gives response data on a question: "How often do you access the internet?" asked in a move to find out the usage and interest in the internet, among students.

Data obtained from figure 5.6.5; below shows that 70 percent of the respondents access the internet only when need arises.

11 percent of the respondents access the internet twice per week, yet another 9 percent of the respondents access the internet once per week. It also shows that 10 percent of the respondents access the internet every day.

HOW OFTEN DO YOU ACCESS THE INTERNET

- Every day 10%
- Once per week 9%
- Twice per week 11%
- When need arises 70%
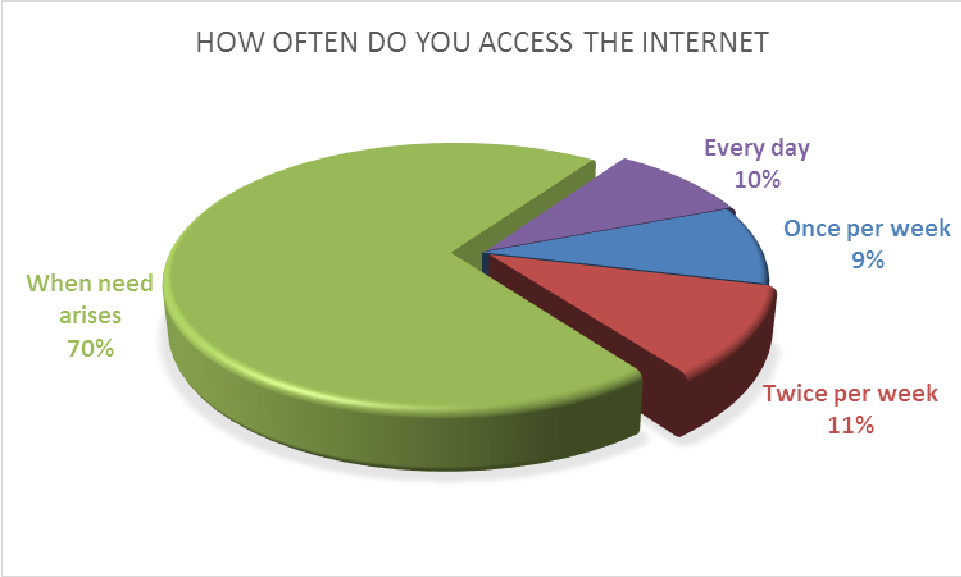
Figure 5.6.5

5.7.0 Investigation of the Factors Promoting Students reproducing and Sending for Marking, other Student's Assignments to the Institution, by Age and Region.

There has been growing need to check out some malpractice going on, among the student, as discovered by many assignment markers, that some assignment are just photocopies of other assignment. Although this malpractice is common even in the main stream education system, quality measures are very cardinal in ODL, education mode, to ensure standards and quality of the product, who in this case is a teacher, who will be handing the preparation of the generation of tomorrow, therefore stringent measures should be observed and adhered to.

Factors WHY STUDENTS REPRODUCE Other STUDENTS' ASSIGNMENT

	No/Yes	Value
LACKING SKILLS OF COM/ RESEARCH LAZINESS	No	32
	Yes	68
	No	52
	Yes	48
COM. WORK OVERLOAD BREAK DWN	No	49
	Yes	51
	No	57
	Yes	43
SENDING MODE	No	56
	Yes	44
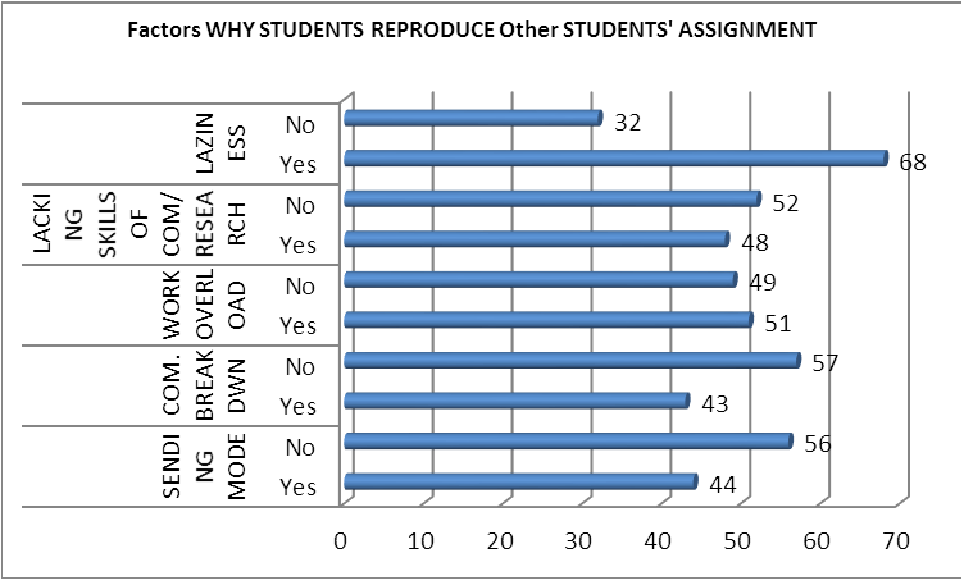
Figure5.7.1

Figure 5.7.1: above is response data, from a question in the questionnaire survey, "In your opinion, why do some students reproduce other students' assignments?" There were five possible answers to agree or refute to.

Therefore data obtaining from figure 5.7.1; are factors that lead to the production of other students' assignment. 68 percent of the respondents agreed to and 32 percent refused Laziness as the factor leading to reproducing other students' assignment. 48 percent of the respondents agreed to and 52 percent refused Lack of research and Communication skills as the factor leading to reproducing other students' assignment. 51 percent of the respondents agreed to and 49 percent refused Work Overload as the factor leading to reproducing other students' assignment. 43 percent of the respondents agreed to and 57 percent refused communication breakdown as the factor leading to reproducing other students' assignment. Yet still, 44 percent of the respondents agreed to and 56 percent refused mode of sending the assignment as the factor leading to reproducing other students' assignment.

Figures 5.7.2 and 5.7.3 are response data from the 12 in-depth interviews and the 3 focus group discussions, on factors leading to students reproducing other students' assignments.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Work overload	12	29	29	29
	Students' Laziness	22	52	52	81
	Mode of sending	4	9	9	90
	Way of helping	4	10	10	100.0
	Total	42	100.0	100.0	

Figure 5.7.2
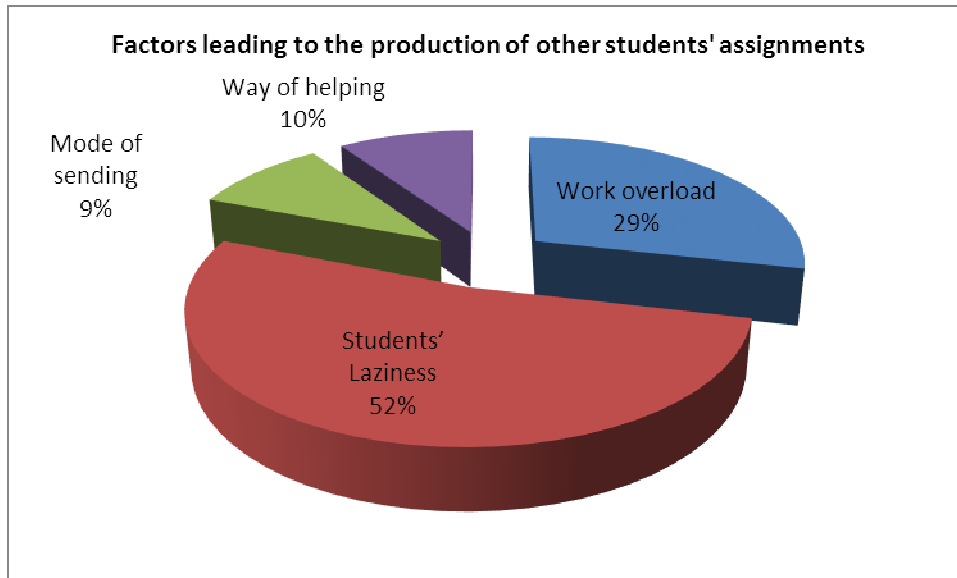
Figure 5.7.3

Data obtained from figure 5.7.2 shows that 12 or 29 percent of the interviewees/discussants said work over load is the factor leading to the reproduction of other students' assignment. Yet 22 or 52 percent of the interviewees/discussants said students' own Laziness is the factor leading to the reproduction of other students' assignment. However 4 or 9 percent of the interviewees/discussants put it on the mode of sending the assignments as the factor leading to the reproduction of other students' assignment. More interesting is that another 4 or 10 percent of the interviewees/discussants said male students especially did it for female students, as a way of helping with a view of befriending the female student is also a factor leading to the reproduction of other students' assignment.

5.8.0 Communication Strategies, used at ZAMCOL.

What is presented so far as communication modes or methods are the channels and strategies used at ZAMCOL, to communicate to its clients, who are enrolled, and prospective students, staff members both permanent and part time, the ministry of education, and the community at large? Outlined below, each at a time is channels and strategies, used in communication at ZAMCOL.

5.8.1 Strategies

The following are specific strategies ZAMCOL is using to inform and be informed to and from its students and others.

1. Production and Supply of study material which are appropriate and relevant to the study of each student, which gives the student equal opportunities with any other student studying with any other main stream college or the university.

2. Arranging for the announcement of new enrollment and graduation by the use of radio and television broadcast.

3. Ensuring that residential schools are carried out in conduce environment and that they are beneficial especially to the enrolled students.

4. Ensuring that the library is well stocked with modern books and making e-books available to the students and the teaching staff that is by the use of both print and electronic media.

5. Creation of mini libraries in all study centers equipped with a number of computers for the internet and e-books accession by the students and staff.

6. On the actual Graduation Days, drama as Falk media is used to transmit information on the teacher ethical conduct, which is expected and not expected of a teacher in the conduct.

7. Organizing annual, in house management and staff workshops, on communication and management, this brings out various aspects, on how to deal with student and the public, as they come to the institution.

8. Distribution and sale of golf T-shirt branded ZAMCOL

9. Receive and distribute for marking assignments sent by students to various subject lecturers, who submit the marked assignment with marks score sheets that make up for student's Course Assessment marks, which make up for their own final mark.

10. Host induction workshops for all new students which have a module they get for a fee for them to appreciate the induction material, which they have to refer to throughout their study at ZAMCOL.

11. Launch of the student alumnae who forms partnership with all past students and lecturers and the institution.

5.8.2 Channels: Radio

From the data obtained, radio has been underused by ZAMCOL, it accounts only for 16 percent of the overall communication channels used. That is why it is not surprising that it amounts only to 10 percent of the people who have come to know about ZAMCOL. However from the point of view of the students and others, it is the media through which 66 percent of them get connected, and it stands at 46 percent as their appropriate and favorite media.

5.8.3 The content, nature and the target of the messages

The content and nature of the radio messages are most of the time advertisements for new enrollments or announcement of a graduation to be held. These are often short messages.

The target of the message is short lived in time, just for the purpose of the advert, two weeks at most, running once or twice a day on the National broadcaster, and running 4 to 5 times a day on the local broadcasting network. The message is mostly for the would be students, that is for the public in case of an advertisement for new enrollments and in case of a graduation, the message focuses only on the graduating candidates and those who are very close to them.

5.8.4 Channels: Television

From the data obtained, puts television as another underutilized channel of communication at ZAMCOL, amounting to only 12 percent access by students and others who are beneficiaries of ZAMCOL's messages placed on Television. No wonder that it amounts only to 15 percent of all those who have come to know about ZAMCOL. However from the point of view of the students and others, it is the media through which 34 percent of them get connected with their surrounding world, and it stands at 42 percent preference as their appropriate and favorite media.

5.8.5 The content, nature and the target of the messages

The content and nature of the Television messages is most of the time advertisements for new enrollments or announcement of a graduation to be held. These are often short messages.

The target of the message is short lived in time, just for the purpose of the advert, two weeks at most, running once or twice a day on the National broadcaster, and running 4 to 5 times a day on the local broadcasting network. The message is mostly for the would be students, that is for the

public in case of an advertisement for new enrollments and in case of a graduation, the message focuses only on the graduating candidates and those who are very close to them.

5.8.6 Channels: Newspapers

Newspapers have not come out vividly as a channel of communication by ZAMCOL, although it has been used once or twice for advertising purposes only. It accounts for 2 percent of all those who have come to know about ZAMCOL as an institution of ODL, offering teacher education. However from the point of view of the students and others, it is the media through which 48 percent of them get connected with their surrounding world, and it stands at 30 percent preference as their appropriate and favorite media.

5.8.7 The content, nature and the target of the messages

The content and nature of the Newspaper messages is most of the time advertisements for new enrollments or announcement of a graduation to be held. These are often short messages.

The target of the message is short lived in time, just for the purpose of the advert, two weeks at most, placed on the three most popular papers, The Times of Zambia, Daily Mail and the Post Newspapers. The advert will be posted on each paper once a week in alternating days and running for two to three weeks. The message is mostly for the would be students, that is for the public in case of an advertisement for new enrollments and in case of a graduation, the message focuses only on the graduating candidates and those who are very close to them.

5.8.8 Channels: Personal contacts

Personal contacts rank the highest, standing at 93 percent during the residential school times and at 38 percent away from the institution through the DEBS offices. It has accounted for 60 percent of all those who have come to know about ZAMCOL as an institution offering teacher education by ODL. However from the point of view of the students and others, it is the media through which 35 percent of them get connected with their surrounding world, and it stands at 25 percent preference as their appropriate and favorite media.

5.8.9 The content, nature and the target of the messages

The content and nature of messages in Personal contacts is here classified in two categories formal and informal. Formal personal contacts range from official announcements to tutorials and student group discussions. Informal personal contacts are what can be termed as grape vine. These can be short or very long messages.

The target of the message is action based, the one communicating aims at the action of the receiver of the message, no regard of the time it takes to be effective but the purpose is to pass on the information for the good of the receiver of the message. The message can be anything from academic in nature, political, personal secrets, sports or social economical or anything else, leaving the receiver with the choice of what to take and return for use or action and what to discard as trash.

5.8.10 Channels: Other Channels

Other channels like the traditional correspondence communication strategy are the posting of printed material from the institution to the student and vice visa typed assignments and the internet. These have been used by ZAMCOL to communicate with students in Zambia. Print material and typed assignments sent through the post office accounts for 87 percent, of the communication channels used by ZAMCOL, so far. The internet has only been used for official communications with the Ministry of Education Directorate of Distance Education, other organizations and institutions offering or promoting ODL, the Copper belt University, study material writers, library and e-books publishers and distributors, and the local staff and Ministry of education officials. That is why it only amounts for 19 percent of the communication channels used at ZAMCOL.

5.8.11 the content, nature and the target of the messages

The content and nature of messages in the print material sent by post office, is mainly the academic in nature. These are modules in each student's study area, all education subjects, communication skills, computer basics and research skills. Students also send typed assignments in all subjects under study that term after each residential school time and a typed research report in their final year after their teaching practice experience.

The target of the message is three years from the year of each student's enrollment into the institution. The message or the information is for study to benefit the enrolled student. The study material or the modules are the teachers for the student in each study area they are enrolled on. Therefore care has been taken in the preparation and production of these study material. The internet messages are basically official notification, memos, letters, documents and data on demand by or from whoever.

5.9.0 Outcomes

As earlier alluded to, measuring the outcomes has been difficult because there has not yet been any documented research on which these findings can be compared to and be able to ascertain the impact of growth or decrease in the information flow. As much as there has been misplacement on which channels to use for what messages it is almost impossible to attribute the effectiveness of the messages sent. There is a serious need to do a national assessment on radio and internet user ship by the students at ZAMCOL. While the researcher acknowledges the financial burden of such a research, the benefits of such a research maybe far more beneficial and provide a new frontier that can help shape future better ODL provision to a wide clientele, in Zambia. These strategies can only yield any positive result with the understanding of peoples' behavior towards education and their own position in the world today.

These are some of the findings obtained using the self-administered questionnaire that was collected from the 110 enrolled and prospective students, staff members and others. While other findings came from 12 in-depth interviews with officials at various levels and 3 focus group discussions with ZAMCOL, enrolled first, second and third year students.

Hereunder the researcher presents the Discussions of this information which forms the core of this research.

5.10.0 Discussion of findings

The data obtained from this study will be discussed in the light of Communication Development, for this study will be of no use if it is not aimed, at helping the community to have a changed out look at their daily living, by the gain of new knowledge, gotten through learning.

The study was mainly looking at communications strategies used, at ZAMCOL in the learning process of its enrolled students by ODL. The connection between Educational Communication, as the one employed in ODL institutions and Development communication is that both are aimed at communicating information that could help the receiver to change their ways of living for the better. Furthermore once this person gets the learning information to improve their living through the educational communication, they will be better placed to get information from Development communication, for social and economic change in their lives and for their communities.

Helen Lentell, (2005:8), noted that, "learning is both part of the process as well as the means of implementing sustainable development and creating a culture of peace." Take for instance the situation in Chibolya high density compound in Lusaka, where it has become evident that most of the inhabitants have taken the law in their own hands, a culture of peace no longer exists in the location. In this case learning is an act of agency; it could enable people take control of, or to put in order their own lives. It has been evidently proven that the more people get involved in learning, the more developed their communities become (UNESCO, 2002).

The problem is that people in most of these high density compounds do not have equal opportunities of learning as their colleagues in low and medium density compounds, especially those in urban areas. This learning gap could easily be bridged by ODL institutions, in the use of favorable low cost opportune communication strategies which could both benefit their students and the communities where these students live.

5.10.1 ZAMCOL'S Key Communication opportunities

The communication problem at ZAMCOL, as pointed out in the statement of the problem in chapter one, is insufficient information flow, to and from the intended beneficiaries the Teachers, students and others intending to acquire a teaching qualification, by ODL mode. It is due to the use of Traditional communication strategies as an approach to the teaching and training method, which is in the use of correspondence communication methods and the residential school times only which has put the institution in an awkward situation. The use of these strategies only, have made it difficult for the institution to match the best practices of communication in ODL institutions world over, and it puts the students in an awkward and stressful situation as regards the process of learning communication.

Learning occurs through a communication Process. There is more to Learning than the internalizing of externally provided information. This is because knowledge is contestable and its usefulness could be debatable. Indeed, there is much evidence on opportunities of appropriate communication strategies and channels, which could be readily available to the institution and the students alike. The practice at ZAMCOL is that students receive their needed study material in the residential school they attend for three weeks each in April and August and two weeks in December. It means that the other months before the next residential, they have to study on their own, with the aid of material received in the previous residential school. Even if students attend these residential schools, what do they do in the months, they study alone, for effective learning is predicated upon interactivity among learners, learning objects, experimentation, learning environment, conducive learning surroundings, auxiliary staff and motivated motivating teaching and facilitation staff.

The scenario above could be possible when preferred appropriate media by students, will form part of ZAMCOL's communication priorities. For it has become common practice in most ODL institutions that Radio and e-Learning, give students the platform for interactivity. Through the use of Radio and internet, the teaching staff will contextualize and personalize the study material, to suit the learner, at their point of need. When these interact on phone in case of a radio program and on face book, Skype or interactive e-mailing when using the internet, effective learning will take place. Learning will take place because the teaching staff or facilitators know these learners and their academic needs, thus they know how to give them required answers or feedback that will enable the learner, become actively involved in their own learning.

Apart from all the media used to communicate at ZAMCOL, deduced from the study is that the institution has largely relied on personal contacts and print material sent through the post office. No harm in relying on these channels or strategies, more could be achieved at ZAMCOL as regards academic communication when radio, television and internet preferred channels by students are used.

What has been deduced from the study is that there has not been any coordination between ZAMCOL's most used channels and strategies with students' most used and preferred Channel or media of communication. It is true because as earlier alluded to there has not been any serious study   done in that regard.

Here under the researcher has put down five identified ZAMCOL's communication opportunities.

5.10.2 Commitment to establish and equip more study centres as an academic communication strategy.

All key participants in the in-depth interviews identified an urgent need to establish and equip, more study centres not only set at provincial levels but in strategic Districts around the country. These participants suggested an assessment of the communication strategies in use, to have a starting point of any action to be taken. However most of them pointed out the need of more study centres, which could cut down on the travel costs on students. This will eventually work as an answer to most of the queries like missing assignment and reproducing other students work for submission. It is a good opportunity for all ZAMCOL senior staff, at the main campus in Solwezi and centre managers from the five established centres (Mongu and Chipata, and the newly established centres in Mansa, Chinsali and Kasama) to come to together to identify needs and priorities of the institution. As a result there is a strong commitment to developing such centres and equipping them with supporting platforms that are needed for a centre; things will start happing, that the institution will be known and more people who are able will be provided an opportunity to train and obtain qualification to teach, thus it will increase the teacher pupil ratio which is standing at 1:8 (Executive Director ZAMIC, Stanley Muhango, on Chart back Radio Christian Voice, 3rd, June 2013).

5.10.3 Students' neighbourhood study groups

The scale and scope of these groups obviously will vary between communities but they offer an opportunity to provide and possibly improve on student performance and reduce on student laziness which is one of the causes that prompt plagiarism in assignments sent to the institution. As observed by the research during his time of attachment, students with outstanding performance, confided in him that they have study groups in their neighbourhoods which meet once every week. For it was pointed out that, since they are serving teachers, most of them, they are busy with their duties during the week and practically there is no time to spare on studying, apart from the time they have set as groups. This is understandable as most of them tend to

concentrate on studies only in the residential school time, and would like to do most of the given assignments during the same time.

These neighbouring communities study groups (which are student driven) offers another key communication opportunity for ZAMCOL, to organise and set outreach activities, through Radio and internet programmes on set days and times when these study groups can meet and follow a programme together and then do a write up or study or carry out a group discussion afterwards.

5.10.4 Presence of local and National Radio and Television Broadcasting stations which provides a national coverage.

Throughout Zambia, today there is a moderately developed infrastructure of public, civil and private sector radio and television stations, which could offer a considerable resource for a wider and integrated education communications strategy. Local and community-based radio and television stations can provide space to reach the neighbourhood study groups once an agreement is signed and programmes made. The programmes could be given in English for the study groups and could be repeated in local languages if need be, for the benefit of the local community.

This communication opportunity will meet, most of the students' communication preferences radio and television and is just in reach of their social economic status.

5.10.5 Creation of ZAMCOL's web site

To suit the current best communication practices, in ODL, mentioned by key interviewees was the need to establish ZAMCOL's web site, where vital information could be posted, for the benefit of the students and the public. Library e-books could be posted on the same site to be accessed only by those who have an active key, during their interaction period with the institution. This site could also offer inter institution networking as regards academics and social economic knowledge and information sharing.

There is a very rich repository of academic, development and participation knowledge and practices within the ODL sector world over. This could further be strengthened through local national networks and the mapping of national ODL institutions activities and their curriculum and programmes being offered. Education communication especially in ODL institutions requires concerted efforts from all players, for their students are found everywhere, and it only

helps the student and the institution to get help from any ODL institution, that has the required information or it is geographically close to the student.

5.10.6 Partnership with Mobile Phone service providers

Encouragement from DODE at the ministry of Education headquarters, Partnership with Cell Phone service providers is possible, and could enhance e-learning efforts. The use of mobile phones for learning purposes could ease the way learning by ODL and interaction should be taking place. It is noted that most of the participants have mobile/cell phones, and they make lot good use of them. As noted by Sir John Daniel, (2005:16) that using mobile phone "text messaging capabilities, which seems to be particularly powerful with respect to mobile Learning. Using text messaging to transmit information from teacher to learner concerning assignments and content can vastly speed up communications".

When students use text messaging it allows them to communicate to each other, therefore creating a learning community similar to a neighbourhood study group. These learning communities extend far beyond the life and confines of traditional or even computer based learning environments. More practically, mobile learning devices allow users to literally lighten the load. Further more mobile phones are small enough to carry around even for a very busy person, than the desk top and laptop computers. One can send and receive a text message anytime anywhere, and could add on to the grocery of knowledge on the topic under study, without waiting for a right place and opportune time to study.

5.10.7 Context in which ZAMCOL's communication Strategies are as regards social economic status of enrolled and prospective students.

The researcher found a considerable miss match around communication strategies and channels, used by ZAMCOL and its enrolled students, such that there was a variable understanding why there is very little communication flow between the institution and its enrolled and prospective students. This was underpinned by an over reliance on traditional methods of communication, like the use of residential schools and posting print material to the learner, and typed assignments from the learners to the institution.

Communication strategy at ZAMCOL demonstrated a lack of integrated communication strategies and channels mostly preferred and in use by majority of the student and those being used being used by the institution. In this case the students' social economic status is not being taken care of in this regard. Most of the enrolled students at ZAMCOL are primary school teachers serving in the rural area, where radio is the most preferred medium of communication.

5.10.8 Communication Strategies used in Contact Sessions and Feedback for Study Material Obtained from the Institution.

The communication strategies in use at ZAMCOL during contact or residential school times are Registration, Induction, Lecturing, Social and Academic interaction among students or with staff members and the student support services. Although many students appreciated, lecturing and the induction of new students, as a well prepared communication strategy, there is need o explore the efficacy of the remaining strategies during the contact sessions. This will need a properly done research which will identify key messages; appropriate communication channels and recommends participatory approaches in these strategies.

AS mentioned earlier that there has not been any serious documented research done, so far. Therefore feedback on material received from the institution by the students has not been given before, apart from the individual appreciations or dislikes in some modules to their Lectures. But this cannot be relied on, as they are only individual informal sentiments.

5.10.9 Putting development and communication theories learnt in class in real institutional life situations.

Despite attachment time being short with the institution, the research put into practice the theories of social change and communication, in the students learning context, by the use of development communications theories the researcher involved a group of student leaders, to pass on some messages that could bring change in the living conditions of the students.

Development Communications

Development Communications is a specialist field of communications that has been emergent over the last decade. It is characterised by an interdisciplinary approach and is a fusion of contemporary social, anthropological, developmental, communication and

marketing theory and practice. Development Communications puts knowledge and choice at the centre of the agenda and is distinguished by:

People's rights to a voice

People's rights to information

Freedom of all communication channels

Participation

Ownership of knowledge

Accountability of governments and societies

People's improved ability to put informed choices into practice

(Kent Sidel, 1993)

The messages to the group of leaders included motivation talks, time management, housekeeping roles, being focused on studies, HIV and AIDS, malarial and entrepreneurship. The first day talking to the group of leaders seemed as though nothing was done, but the number of other students wanting to know more about these topics was huge and terrifying. They came in their entire number with other leaders wanting to join the group on the second day of meeting with them.

Tested was the use of already recognized leadership, to pass on information to a larger community, and that social marketing needs skills and some connectivity of some kind with the community you want to communicate to.

Therefore sustainable learning for development requires participatory approaches, partnerships and collaboration. What was captured through this, despite the testing of theories learnt in class, by the researcher was that learning institutions in which learners are involved there is not only the internalization of information got from outside, and the solving of problems only but they are also involved in the investigation of finding the origin of the problem. This mode of learning is what could be termed as "connective learning" or "expanded learning" and is found in community development approaches (AjitMaru, 2005).

5.10.10 Integration of People's Knowledge, Attitudes and Practices

ODL employs a range of appropriate media and technologies, which includes radio, teleconferencing, video, audio and computers to enable both the delivery of information and communication between communities of learners and learners and their teachers. For instance radio in Zambia, like other developing countries is being used to inform and educate communities about maternal health, malaria, and HIV and AIDS (Helen Lentell, 2005).

It is true that ODL, institution could be channels of development, if only appropriate communications strategies are used. Obtained from the study, People's knowledge about ZAMCOL, being an institution offering Teacher Education by ODL, is quite enough coming from their communication practices. It seems many people are comfortable with personal contacts, as a means of getting connected to their surroundings. This could be true for those communities where its members are mostly illiterate. But this could not be true for a learning institution where most of its learners have gone up to a college certificate level. What is true is not the communication practice of close range communication through personal contacts, by the people but the absence of Learners' preferred appropriate communication channels. From the data presented shown is 70 percent of respondents had prior knowledge of ZAMCOL. Shown also is 70 percent of respondents giving no response to what has attributed to their lack of knowledge of the institution, beating the assumption that it is due to less publicity of the college, at 17 percent, that has led to the communication problem at ZAMCOL.

It is true that personal communications help in passing on information on education and social development, especially on a small local homogeneous community, but the use of radio, television and the internet, does it on a larger heterogeneous community.

It is no doubt that people's attitude about ZAMCOL's communication problem, is as a result of mal media appreciation by management. This is shown in the 54 percent media and 47 percent management as the cause of ZAMCOL's communication problem.

5.10.11 Students of what age and from which region (urban or rural) have been losing assignments/letters sent to the institution.

As much as e-learning could cut down on losing or missing posted assignments/letter sent to the institution, there has been more talking than doing at ZAMCOL in this regard. Although best practices in e-learning requires less talking and more delivery, it caters for people in real world, than people in real world having to alter their existence to at times ill matching communication technology made in other parts of the world, to suit them. What it means is that without real preparation and skill acquisition, technology used in e-learning, to cut down on losses/missing of assignments will only result in a lot of problems. The best practice in ODL is the principle of learner centeredness. Therefore the method of learning, the learning content, and in the case of e-learning, the technologies implemented should suit the learner and not vise visa, as is in the case of ZAMCOL's communication channels and strategies.

Obtaining from the research data is that due to the number of the respondents, of the 59 respondents who are 20 to 30 years old, only 20 have lost or missed an assignment/letter sent to the institution before. In the same way of the 45 respondents who are 31 to 40 years old, only 18 have lost or missed an assignment/letter sent to the institution before. Consequently none of the 6 respondents who are 41 to 50 years old, have ever lost or missed an assignment/letter sent to the institution before.

The data obtained therefore could mean that there are more students aged between 20 to 40 years enrolled at ZAMCOL, than those above 41 years of age. It is right to mention here that students in mature age groups are better prepared for the study by ODL than those below this age group. It is also worth mentioning here that students in the age group ranging from 20 to 40years old are in formal employments, and are quite busy with the works which are bringing them food on the table and are just doing the study as a byway thing.

Just because most of the enrolled students at ZAMCOL are serving teachers, in the rural area, most of the lost assignments are from students coming from the rural region of Zambia.

5.10.12 computer possession, its usage and interest for the internet, among students and lecturing staff at ZAMCOL, by age.

While there is significant urge for the possession and ownership of modern communication gadgets like mobile phones, personal digital assistants (PDAs), Desk top and Laptop computers that are connected or get connected to the internet. There is still an overlap in priorities for sustained usage and elimination; of these gadgets due to skill possession and complication that comes with the additional application and management software, which needs to be upgraded or replaced with a completely new one.

The researcher used the word possession in a manner that it means that one is by any way able to either access a computer (desktop or laptop), owned by themselves or from their work place, or from a friend or a family member. Even in this way there is still more a small number of laptop and desk top computer possession at ZAMCOL among students/staff of the age groups 20 to 30 years old, and those 31 to 40 years old. It is normal that most of the people in these age groups are employed and easily get hold of their work place computers too. In addition, the number of computer possession and ownership among students and their lecturers is not as expected of students and lecturers of an institution of ZAMCOL's magnitude. Of the 28 computers (both laptop and desktop) possessed or owned by the 110 respondents in the questionnaire survey, only 3 computers (both laptop and desktop), were possessed by respondents aged between 41 and 50 years old. This could mean that most of the people in this age group, who are students, have no interest in computers or just have some people who do their work which requires the use of these gadgets, or technology.

As there is still a very small number of computer ownership, among students and lecturers at ZAMCOL; its usage on average is also very small. In this regard there is still need for more possession and computer empowerment. Skills in computer usage and ownership have to be priority, from the institutions and individual capacities.

5.11.0 factors promoting students reproducing other student's assignments

The rate at which this malpractice is growing is actually alarming; because it is almost all assignment markers in all study areas, complain about the same malpractice. Students' laziness and work overload were pointed out in both the questionnaire survey and in the focus group discussions. Among these two factors which came out strongly, students' laziness stands out the

highest. As earlier mentioned in the communications opportunities, most enrolled students are in active employment, and practically find it difficult to find time to study or do the assignments. However most of the students with outstanding performance either do their assignments in study groups in their neighbourhoods or during the residential school period or immediately after. It is no wonder that work overload comes as the second factor. Imagine that one has in total about nine (9) assignment due in two months' time from the close of the residential school period, and that is not all, the same person has his/her own duties and assignments to be carried out at his/her work place in the same period of time. It is obvious that assignments from ZAMCOL will suffer less or no attention at all, until when the residential school time is due, that is when they will get busy trying to do them. This is also the reason why most assignments are not received by or on the due dates, as observed by the researcher during the attachment period.

CHAPTER SIX

6.0.0 Conclusion

A key aspect to harness communication strategy in ODL institutions is in the use of mediated appropriate technologies by the institutions, the teaching/facilitating staff and the learners in learning and solving development problems in the end.

Research data included in this study was collected from the self-administered questionnaire that was collected from the 110 enrolled ZAMCOL students, staff members and others. While other findings came from the 12 in-depth interviews with officials at various levels and 3 focus group discussions with ZAMCOL, enrolled first, second and third year students and the researcher's own observations during his attachment period.

The findings were that it is not yet clear to tell whether information flow to and from the intended beneficiaries of ZAMCOL's learning process by ODL, is insufficient or it is only delayed. A lot still remains to be done in terms of communications research and getting feedback from the learners on the study material.

From the data of this study, it was clear that ZAMCOL has made serious strides in reducing the communication problem, by opening more new study centers, improvement in the library services which lightens up the communication burden on students in the country.

To counter blows directed towards management as the cause of communication problem at ZAMCOL; it should have a listening and dynamic mind which could implement the use of appropriate favourable communication strategies, which can offer a unique opportunity to, students and their communities by providing chance to learn for those who do not have it, go all the way up to certification. It will make a major effort in enlightening a larger number than expected, in communities around the country, thereby help develop the nation. Currently there are many communities which are illiterate in Zambia, in all regions whether urban or rural, that are in need of learning, and experience has it that the more communities learn the more developed they become; which is possible by ODL.

If this is done, a question raised in this study's literature review, on (2.1.1) the role of technology in ODL, "will the technology chosen enhance social learning, or will it simply make the educational transaction more efficient by enhancing individualized learning?" is answered.

Thus information flow within and outside ZAMCOL as an institution of ODL, should not be seen as working just because students carry the information to and from the institution but should be seen as a matter of urgency and priority as it borders on the functioning of other aspects of student life with the institution.

6.1.0 Recommendations

The researcher highly recommends that ZAMCOL should seriously consider taking the following measures in their strategic planning:

1. Support the already student driven study groups by the provision of prerecorded voice study material which could be used by these groups as they study and carry out some discussions.

2. At National level establish programs and activities, to be aired on National and local radio or television stations, and encourage formation of neighborhood study groups.

3. Upgrade the computer basics lessons offered to all students to an examinable course, to help the students improve on their computer skills.

4. Communication activities must begin with listening to the people, i.e. ascertaining how people look at education within their cultural contexts.

5. At induction students should write their own expectations and promise to do their own assignments, to be kept by management for reference in case of a malpractice by the student.

6. Include communication process and outcome indicators in all communication strategies to be employed at ZAMCOL, for they will be essential for monitoring and evaluation of their activities.

7. Communication has a critical role to play since it is at the center of all activities of the institution, for if it fails or is misplaced there are various problems taking place, from missing assignments, to reproducing others students assignment.

8. Take into consideration the size, location and nature of students' residential locations, in coming up with new communication strategy.

9. Communication activities are best designed and built with participatory processes, working with existing social platforms and networks. Step-up ZAMCOL's social marketing activities in a more proactive and competitive way.

10. The role of communication professionals is important in the design and management of communication activities and programs.

11. Pace the amount of assignments each residential school, either by courses or carrying out other ways of assessment, to reduce on work overload and encourage self-study among students.

6.1.1: Areas for Further Research.

There is need for future research to apply more rigorous quantitative methods of evaluating how ZAMCOL has been communicating and how it can pass on learning and social information to its clientele in a more competitive manner.

There should be a rigorous quantitative research on the appropriate favorite communication channels in the reach of the learners and to get feedback on learning material from the learners.

It is equally important for a broader future quantitative and qualitative research which will get the views of the general public who have the services of the teachers produced at ZAMCOL.

There is also need of a qualitative and quantitative research in the performance of Teachers who have gone through ODL training at ZAMCOL, by checking their student performance against that of students taught by primary certificate holder teacher at primary school.

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APPENDICES

APPENDIX 1

QUANTITATIVE RESEARCH, INSTRUMENT. (QUESTIONNAIRE)

No.	QUESTION	RESPONSE	SKIP	CODE
ANSWER THE QUESTION BY CIRCLING THE APPROPRIATE ANSWER/S OR FILLING IN WHERE NECESSARY
Section A: Demographic Characteristics
1	Age of the respondent (record age in completed years)			
2	What was the age at you last birthday	1. Bellow 19 2. 20 – 25 3. 26 - 30 4. 31 - 40 5. 41 - 50 6. 51 - 55 7. Above 56		
3	Marital status	1. Single 2. Married 3. Divorced/separated 4. Widowed 5. Otherwise		
4	Highest Level of education attained	1. Primary 2. Junior Secondary 3. Senior Secondary 4. College 5. University 6. Never been to School		
5	Place of residence	1. Village 2. High density compound 3. Low density compound 4. Farming area 5. At a school in rural area 6. At a school in urban area 7. Any other		
6	Religion's affiliation	1. Christian 2. Islam 3. Hinduism 4. Others		
7	Christian Denomination	1. Catholic 2. Reformed Church 3. Pentecostals 4. Seventh Day Adventist 5. Jehovah's witness 6. Others		

8	Nationality	1. Zambian 2. Non Zambian		
9	Are in employment?	1. Yes 2. No		
10	If you have said No in question nine 9, then how do you earn a living?	1. Self-employment(registered) 2.self-employment(un registered) 3.Formal employment 4. Any other		
11	Which monthly income do you fall in?	1. Below five hundred thousand kwacha 2. Six hundred to 1 million kwacha 3. 1 to 2 million kwacha 4. 2 to 3 million kwacha 5. 3 to 4 million kwacha 6. 5 million and above		
SECTION B:Own Ship Of Communication Equipment and its reliable usage				
13	What type communication systems do you own	1. Radio and Cell Phone 2. Television and Desk top computer 3. Land phone and iPod 4. Any other, specify?................................ (circle all that is applicable		
14	From your answer in question 13, what system do you use the most?	1. Radio and Cell Phone 2. Television and Desk top computer 3. Land phone and iPod 4. Any other, specify?................................ (circle all that is applicable		
15	From your answer in question 14, what do you use the system for most of the time?	1. Entertainment 2. Sports 3. Music 4. News 5. Current affairs 6. Commercials 7. Highlights 5. **Any other, specify?**...............................		
16	Is any of the systems you own in question 13, connected to the internet?	1. Yes 2. No 6. **Any other,**		

		specify?.........................		
17	If yes, how often do you access the internet?	1. Once per week 2. Twice per week 3. When need arises 4. Every day 5. **Specify?**.........................		
18	If no, how then do you get connected to your surrounding and the outside world?	1. Through Radio 2. Through Newspapers 3. Through Television 4. Through personal contacts 5. **Specify?**......................... (**circle all that is applicable**)		
19	If you answered 18, what programs do you, like following, on these systems?	1. Entertainment 2. Informative 3. Fictions 4. Magazines 5. commercials		
20	According to your answer in 18, if your get connected through various media, which one is your most appropriate?	1. Radio 2. Newspapers 3. Television 4. Personal contacts 5. Any other.........................		
21	How often do you access your favorite media according to 20 per day?	1. Once 2. Twice 3. Three times 4. Several times 5. When I feel like 6. **Specify?**.........................		
22	Do you get most of your required news on your favorite media?	1. Sometimes 2. All the times 3. Most of the times 4. It is supplemented by other media		
23	How would you describe the performance of your favorite media	1. Very efficient 2. Efficient 3. Fair 4. Not as expected 5. Very poor 6. **Specify?**.........................		
SECTION C: AVAILABILITY AND USE OF OTHER COMMUNICATION/MEDIA				
24	How accessible is your place of residence to the administrative offices	1. Very accessible 2. Accessible 3. Could be accessed 7. **Specify?**.........................		

25	How do you access your area?	1. By road 2. By water 3. By train 7. **Specify?**………………………		
26	By what mode of transport do you access your area?	1. Public transport 2. Government transport 3. Mission transport 4. PTA/Community transport 5. Private transport 6. **Specify?**………………………		
26	How would you describe the frequency of this mode of transport to the administrative center near you?	1. Many times every day 2. Some times every day 3. Three times every day 4. Once every day 5. Some times in a week 6. Twice a week 7. Specify? ………………………….		
27	Say how helpful is this type of communication with the type of information that you need to acquire?	……………………………………………….. ………………………………………………... ……………………………………………….. ,………………………………………………. ……………………………………………….. ……………………………………………….. ……………………………………………….. ……………………………………………… ………………………………………………..		
SECTION D: Information flow between ZAMCOL and you				
28	Are you familiar with ZAMCOL as an institution offering Teacher education by open and distance learning?	1. Yes 2. No 8. Specify? ………………………….		
29	If your answer is no in 28, would you describe your lack of familiarity to information:	1. Information breakdown 2. Less publicist of the institution 3. Bad information systems within 4. Lack of personal interest 5. Self-less exposal 7. Specify? ………………………….		
30	How did you know about ZAMCOL, if your answer in 28, was Yes.	1. By radio 2. By television 3. By internet 4. Told by a friend 5. Through the educations offices		

			6. Specify? …………………………		
31	How would you describe the information you got about ZAMCOL.	1. Relevant 2. Timely 3. Currently 4. Irrelevant 5. Out dated			
32	Was it because of the information got, that you decided or not to send someone or yourself to pursue a course at ZAMCOL.	1. Yes 2. No 6. Specify? ………………………….			
33	If your answer in 32 is yes, how would you describe information flow, with the institution since enrollment?	1. Very good 2. Good 3. Fair 4. Poor 5. Very poor			
34	If your answer in 32 is No, would you kindly put down your displeasure and give suggestions!	………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… …………………………………………………			
35	What are some of your academic needs which you would like ZAMCOL to provide	………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… ………………………………………………… …………………………………………………			
36	What do you feel is the communication problem at ZAMCOL	1. Failure to maintain continuance communication 2. Missing submitted assignment 3. Record keeping 4. Inappropriate teaching and learning material 5. Specify			
37	What channels would be more	1. Radio and television			

	appropriate for you to access information from ZAMCOL	2. Brochures and posters 3. Newspapers and magazines 4. Internet and other ICTS 5. Friends and trusted people 6.		
38	How would you rate the type of communication that you are experiencing with ZAMCOL, now	1. Very good 2. Good 3. Faire 4. poor 5. Very poor 6. specify		
39	How would you rate the level of communication ability of ZAMCOL, as an institution offering ODL	1. excellent 2. very good 3. good 4. poor		
40	How would you rate the teaching models from ZAMCOL as your teacher?	1. excellent 2. very good 3. good 4. poor		
41	Would you say the residential, time and the face to face lectures are helping you?	1. yes 2. no 3. specify		
42	Would you rate the teacher education at ZAMCOL through ODL, as being appropriate and timely	1. yes 2. no 3. specify		
43	What could you relate, ZAMCOL's communication problems to:	1. management 2. type of media used 3. students 4. technology 5. specify		
44	What could be your suggestions, to end ZAMCOL's communication problems, as regards; a) access many teachers to obtain a diploma, b) missing assignments	……………………………………………………. ……………………………………………………. ……………………………………………………. ……………………………………………………. ……………………………………………………. ……………………………………………………. ……………………………………………………. ……………………………………………………. ………………………………………………….... ……………………………………………………. ……………………………………………………. …………………………………………………….		

APPENDIX 2

<u>**In-Depth Interview with Officials at Various Levels**</u>
<u>**For at Least One Hour Recorded.**</u>

1. 'Please tell me about what you know and your involvement in ZAMCOL?
2. 'Could you say some more about that?'; 'What do you mean by that . . .?' even 'Yes?'
3. What has been the practice from inception to present as regards communication?
4. What has been the greatest challenge to communication at ZAMCOL, in your own opinion?
5. Has ZAMCOL management done anything to solve that challenge? What is your perception?
6. 'How accessible is ZAMCOL's ODL management?
7. 'What do you know students at ZAMCOL, think of the ways management handles communication with students, the world out there and with its staff? And 'what do you feel too?'
8. 'I would now like to move on to other different topics'?
9. In your view, are the approaches used by ZAMCOL as regards communication during residential school times to effect learning effective?
10. If you think they are effective, what are some of the things you can point out as successes?
11. There are reports about missing assignments, and in isolated cases reproduced assignments, what do you know about this?
12. Have there been any monitoring and evaluation on funded projects in these organisations?
13. What would you say are some of the peoples, attitudes, practices and knowledge about ZAMCOL's communication strategies?

APPENDIX 3

Focus Group Discussions (FGD) With 10 Members of Each of the three Student Intakes, Selected from Different Study areas.

For forty five minutes to One Hour Recorder

1. It is practically impossible to learn if there is no communication between teacher and student. Different communication strategies have to be utilised to reach students in any form of learning either the main stream on campus or the ODL mode of learning. Discuss these strategies as you have experienced them in your case used by the.

2. There are reports on sent assignments going missing; this causes gaps in the student's course assessments marks. What do you think is the main problem in this regard? And who is at fault students or ZAMCOL management?

3. Once in a while Lecturers have reviewed that they have come across reproduced assignments. Measures have been taken, up to the extent of calling the people involved, others have been reported to management, but it seems the malpractice is still going on. Discuss the causes of students reproducing assignments of other students?

4. How has ZAMCOL integrated your learning with your personal and community wellbeing by the use of communications programs that are inclusive and could attract community interest?

5. Has there been any research to show the effectiveness of these strategies and what has been the basis of measuring this effectiveness.