INFORMATION COMMUNICATION TECHNOLOGY USE AND
EFFICIENCY IN MANAGEMENT OF RECORDS IN SELECTED
PRIVATE AND PUBLIC SECONDARY SCHOOLS
IN SELECTED URBAN DISTRICTS
IN CENTRAL UGANDA

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In Partial Fulfillment of the Requirements for the Degree
Master of Business Administration and Management in Information
Technology

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November, 2012
DECLARATION A

This thesis is my original work and has not been presented for a degree or any other academic award in any University or Institution of Learning.

Name and Signature of Candidate

Date
DECLARATION B

I confirm that the work reported in this thesis has been done by the candidate under my supervision.

[Signature]

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15th October 2017

Date
DECLARATION

This book is dedicated to dear mother Hajati Sarah Namuddu and my children Mujitaba, Muktar and Moutassim for their patience and understanding during the period of the study.
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ABSTRACT

This study intended to establish the relationship between ICT use and efficiency in management of records in selected private and public secondary schools in selected urban districts in central Uganda. The study employed cross sectional descriptive comparative and correlational survey designs. A sample of 161 teachers and 36 school administrators was taken. The questionnaire was used to answer 5 research questions which included; profile of respondents; level of ICT use terms of availability, accessibility, ability to use and frequency of use; extent of records management in terms of; financial records, students’ records and communication; difference in level of ICT use and efficiency in records management as regards to school type and the relationship between level of ICT use and extent in management of records. Data analysis was done using frequencies, percentages, means, t-test and Pearson’s linear correlation coefficient. The findings showed that there were more male teachers (53.3%) compared to females (46.7%). Most teachers were 20-39 years (49.2%) followed by those of 40-59 (44.2%) and very few (6.6%) were in their late adulthood. Majority had a bachelors’ degree (74.4%), Masters (23.6%) and only 2.3% had Diplomas. Majority (31%) had taught for 11 years and above and 5-7 years (31%). And most them were from Government schools (64.0%). There was a generally high level of ICT use in terms of availability of ICT facilities (average mean =2.94), accessibility of ICT facilities (average mean =2.53), ability to use of ICT facilities (average mean =2.74) and frequency of use of ICTs facilities (average mean = 3.03); although the extent of records management was generally good (overall mean =3.27), it was very good in terms of financial records (average mean=3.26) and communication (average mean=3.50); Although the overall level of ICT use significantly differed between private and public secondary schools (t=2.360, sig. =0.021), the level of availability (t=0.089, sig.=0.929) and accessibility of ICTs (t=1.280, sig.=0.204) did not significantly differ. However, there was a significant difference in the level of ability to use ICTs (t=2.198, sig.=0.031) and frequency of use of ICTs (t=3.254, sig.=0.001). In all cases, private schools were better in ICT use than public schools; The extent of records management was equally good in both private and public secondary schools and no significant difference was found. The level of ICT use and extent of records management were found to be significantly correlated (r=0.494, sig. = 0.000). It was concluded that the level of ICT use is generally high and the extent of records management is generally good. Private are better in ICT use than public. The extent of record management does not significantly differ between the two types of schools. The higher the levels of ICT use, the better the extent of record management. The researcher concluded that schools should stock more ICT facilities like computers, printers to improve records.
CHAPTER ONE
THE PROBLEM AND ITS SCOPE

Background of the study

Computers are increasingly being used for management or administrative tasks at all levels of education. Most organizations today use computers to assist in management functions. Computers may improve efficiency in many of the tasks required in the operation of organizations. In the same way educational organizations can use computers to operate more efficiently. Schools involve large numbers of people which leads to the need to create efficient management and administrative functions. Computers can be used in a variety of ways to support the operation of schools. They can be used as a tool by the classroom teachers for course preparation, students and resource management, and record keeping as well as by the school administration for many of the tasks which are required in the running of a school. Databases are maintained to include a large amount of information about each student which can be easily retrieved and analyzed when required (Campione et al., 1990).

Well managed records are a foundation for good governance in educational institutions. They serve both to document policies, transactions and activities of institutions and to provide a trusted source of information to support decision-making and accountability. Many institutional operations that traditionally depend on information derived from paper records have become partially or wholly automated. As educational institutions migrate to an online environment, records in electronic form are providing the basis for conducting business, serving the public, managing institutional resources, measuring progress and outcomes, and protecting their own and students' rights. Records management is becoming increasingly dependent on technology. It is important therefore to have objective means of assessing the strengths and weaknesses of records systems and determining whether they are capable of capturing, maintaining and providing access to records. Over time, Schools and educational institutions are now more dependent on information in electronic systems to carry out their day-to-day functions and decision making. Some of the areas where
computers have been used for effective educational administration include but are not limited to student records, payroll and financial accounting records, school inventories, personnel records and library system records. (Ben –Zion et al, 1995)

While there has been recognized growth of the ICT sector (Uganda National Council for Science and Technology report, 2001) in Uganda in recent years, there is still long way to go. Certain levels of basic infrastructure as well as organizational activities are generally required for the direct benefits of the information society to be realized in schools. Despite the obvious benefits of information and communication technology infrastructure, uncertainty exists about their implications and impact on effectiveness of school administrations and in particular records management. Against this background therefore, this study seeks to establish how efficient ICT use is in the management of school records in selected urban schools in central Uganda.

**Statement of the problem**

The implementation of ICT to enhance administrative processes has proved challenging to many schools in Uganda, and understanding the issues regarding support and infrastructure required to achieve this has proved to be complex. In a similar study carried out by Matovu (2009) on the use of ICT in management of students' academic affairs in Makerere University an educational institution in Uganda, it emerged that there was a problem at the university of mismanagement of students' academic records despite the technological advancement that had attained in the University. Such problems include loss of marks and, miscalculation of marks. These studies clearly show that there is a pervasive problem in the use of ICT in management of educational institutions. Because no study of this nature has been carried out in secondary schools in Uganda, this study seeks to explore the level of success of ICT use for records management in secondary schools in Uganda and the underlying reasons for this. It is anticipated that once this question is better understood, appropriate help and support can be provided for schools trying to implement ICT effectively in school records management.
Purpose of the Study

This study is set to establish the level of ICT use and efficiency of records management in selected private and public secondary schools in Uganda. In addition, the study identified the strength and weaknesses of respondents and schools in terms of ICT use and records management. It also tested the null hypotheses of no significant difference in ICT use and efficiency of records management between private and public secondary schools and no significant relationship between ICT use and records management. Furthermore, the study also intended to validate the theory of Adaptive Structuration Theory, identify and bridge gaps in existing literature there by contributing to knowledge generation.

Objectives of the Study

1. To determine the profile of teachers in terms of:
   1.1. Age
   1.2. Gender
   1.3. Position
   1.4. Education level
   1.5. Type of school
   1.6. Experience

2. To determine the level of ICT use in the selected secondary schools in terms of availability, accessibility, ability to use and frequency of use.

3. To determine the extent in records management of the selected secondary schools in terms of:
   3.1. Financial records
   3.2. Students’ exam
   3.3. Communication

4. To determine if there is a significant difference in the level of ICT use and efficiency in records management as regards to:
   4.1 School type
   4.2 ICT qualification
5. To determine if there is a significant relationship between the level of ICT use and extent in management of records in the selected schools

Research Questions

1. What is the profile of respondents in terms of;
   1.1. Age
   1.2. Gender
   1.3. Position
   1.4. Education level
   1.5. Type of school
   1.6. Experience
   1.7. ICT qualification

2. What is the level of ICT use in the selected secondary schools terms of availability, accessibility, ability to use and frequency of use?

3. What is the extent in Records management of the selected secondary schools in terms of;
   2.1. Financial records?
   2.2. Students’ records?
   2.3. Communication?

4. Is there a significant difference in the level of ICT use and efficiency in records management as regards to;
   4.1 School type
   4.2 ICT qualification

5. Is there is a significant relationship between the level of ICT use and extent in management of records in the selected schools?

Hypothesis

1. There is no significant difference in the level of ICT use and efficiency in records management as regards to;
   4.1 School type
4.2 ICT qualification

2. There is no significant relationship between the level of ICT use and extent in records management of the selected schools
Scope of the Study

Geographical scope

This study was conducted in four selected secondary schools per district which included; St Mary’s Kitende Boarding SS in Wakiso, Kajjansi Progressive SS in Wakiso, Kitende SS in Wakiso, Trinity College Nabbingo in Wakiso; Kololo Secondary School in Kampala, Makerere College School in Kampala, Agkhan International Schools in Kampala, Taiba High School in Kampala, Bishops School in Mukono, Seeta High in Mukono, Mukono High School and Mukono King’s SS in Mukono District. These schools were selected by the researcher because they had ICT structures such as computers, database management systems and internet despite the fact that such ICT tools may not be in efficient use.

Theoretical Scope

This study was based on the Adaptive Structuration Theory (AST) of DeSanctis and Poole, (1994). This theory is based on Anthony Giddens' (1984) structuration theory which is applicable in the study of the use of new technology in organizations like schools.

Content scope

This study focused on ICT use in terms of availability, accessibility, ability to use and frequency of use of ICT facilities and records management in terms of managing students’ examination records, financial records, communication and teaching.

Significance of the Study

It is hoped that the results from this study will expose school administrators and managers the role of ICT in the financial management, examination management and information flow in secondary schools in Uganda. This research will accumulate knowledge for use by future researchers about the role of ICT in management of records in secondary schools.
**Operational Definitions of Key Terms**

**ICT Use** [Information and Communication Technology] is a diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information.

**Records management** is a process of ensuring the proper creation, maintenance, use and disposal of records to achieve efficient, transparent and accountability.
CHAPTER TWO
REVIEW OF RELATED LITERATURE

Concepts, Ideas, Opinions From Authors/ Experts

ICT Use

ICT stands for Information and Communication Technologies and it can be defined as a diverse set of technological tools and resources used to communicate, create, disseminate, store, and manage information (Tinio, 2003).

UNESCO (2000:12) defines ICTs as the "scientific, technological and engineering discipline and management techniques used in information handling and processing." The use of ICTs provides quality services to users. Moreover, ICTs have revolutionized activities in all spheres of life, especially in management and information services in education institutions, (Bertin et al, 2003). However, the application of ICT is not a matter of being imported and used. Instead, it requires a specific level of knowledge and skills before one would be able to operate the equipment properly and it will depend on a specific level of applicability. This research therefore rose to establish the levels of usability of ICTs in record management in secondary schools.

Examples of ICT include radio, television, video, digital versatile device (DVD), telephone, radio, satellite systems, management information systems, computer and network, hardware and software, as well as the services associated with them, such as videoconferencing and electronic mail. In this research ICT use meant availability, accessibility and use of ICT facilities like computers, computer networks (Internet), in "management of records" in secondary schools.

According to Luyombya (2010) ICTs are instruments that facilitate communication, processing, and transmission of information by electronic means and they (ICTs) embody a full range of old and new technologies such as radio, television, computers and Internet, telephones – both fixed and mobile, fax, printers, scanners
and the print media. Thus ICTs are tools that can enable the creation and management of records in any institute including schools.

Management refers to organizing and managing resources in such a way that the task is completed within defined scope, quality, time and cost constraints (Taylor, 1911).

In respect to this study, management means organizing and managing records in terms of “finance, students’ exams, teaching and communication” as a means of achieving efficiency. Management of finance means recording of fees payment, fees payment status and fees payment lists are managed. Students’ examinations considers how examination exercises like setting, directing exam /invigilation, assessment, grading, reporting, accessibility of exam results are managed. Communication considers how school administrators collaborate with teachers and to themselves via e-mails, face book, printed notes and news electronically. And teaching considers typing notes, research from the internet and classroom teaching carried out electronically.

Records Management

Record Management is the planning, controlling, directing, organizing, training, promoting, and other managerial activities involving the life cycle of information, including creation, maintenance (use, storage, retrieval), and disposal, regardless of media. Record management procedures are used to achieve adequate and proper documentation of an organization’s policies, transactions, economical and operations. “John 2007”. Records management has types for example; Files Management which is applying records management principles and techniques to filing practices in order to organize and maintain records properly, retrieve them rapidly, ensure their completeness, and facilitate appropriate disposition.

A record is defined by the ISO 15489 (2001) as “information created, received and maintained as evidence and information by an organisation or person, in pursuance of legal obligations or in the transaction of businesses. Records provide the corporate memory of the state and evidence of its policies and activities (International Records
Management Trust (IRMT) (1999). Records are further defined as sources of evidence, information and artifacts (Shepherd & Yeo, 2003). They are sources of evidence when users want proof that a particular activity took place or that it took place in a particular manner. Records provide evidence not only in courts of law but in any situation requiring confirmation that something was done or that it was done correctly (Luyombya, 2010). Records are also sources of information. They are objects when users are interested in their aesthetic qualities, tangibility, physical form, saleroom value or associations (Otoole, 1993).

Records management refers to the practice of creating and maintaining records by an organisation (Luyombya, 2010). Management of records, as an integral part of school processes, is associated with workflow, and is based on administrative and quality necessity (Smith, 1986). According to ISO 15489 (2001), records management is a field of management responsible for the efficient and systematic control of the creation, receipt, maintenance, use and disposal of records, including the processes for capturing and maintaining evidence of and information about business activities and transactions in the form of records.

Managing records is one of the cornerstones for effective delivery of public services. Barrett observed that “records are an indispensable element of transparency both within government institutions and externally in the private sector institutions (Barrett, 2005). Records must be accurate and complete, with appropriate access and effective maintenance. It is due to this that ICTs are needed to achieve these virtues.

According to Shepherd (2006), there are three key values which can be met by good records. First, organisations use records in the conduct of current business, to enable decisions to be made and actions to be taken. Secondly, organisations use records to support accountability, when they need to prove that they have met their obligations or complied with best practices or established policies. Thirdly, records may also be used for cultural purposes: to promote awareness and understanding of corporate history (Shepherd, 2006). Records, therefore, need to be captured, managed and safeguarded in an organised system in order to retain their value as formal corporate records (Luyombya, 2010).
Previous surveys of records management in Ugandan institutions have revealed a number of problems, such as the lack of suitable premises to house the paper records in adequate repositories, the paper records are often incomplete with inaccurate data and difficult to retrieve (Luyombya, 2010). There has been no establishment of a Records Centre repository in secondary schools.

A records centre is a facility which would house the vast quantities of records which are no longer required for active use in schools but which need to be retained for administrative, legal, financial or historical reasons. Absence of the records centre implies that full physical and intellectual control of paper-based records cannot be achieved to cover all phases of the record continuum (International Records Management Trust, 1999).

Archival records are records selected for permanent preservation because they have been determined to have permanent or enduring value. State of Florida writes, "Archival records are often referred to as historical records, but their value can be historical, administrative, legal, or financial." An archives is the agency responsible for collecting, preserving, and making available records determined to have archival value. "Archives" also refers to the building in which an archival institution is housed.

Archival records are an invaluable source of information on the history and development of the state, its government, and the lives of its citizens. Archival records document our personal lives, our businesses and professions, our government, our environment, and our society and culture. Historical records need to be preserved because our government is obligated to maintain them and because they tell us where we have been, offer insights into where we are now, and provide vision for our future. Historical records are used to provide information on the programs and functions of government, to prove ownership of property, and to document family history. Archival records document and therefore protect our rights and privileges as citizens and the responsibilities, duties, and limitations of our government.

Archivists and records managers work together to identify, select, and preserve historical records. Records managers, through the application of standard records management practices, ensure that records and information are properly identified and
managed in the office and that, through the scheduling and disposition process, archival records are preserved. Archivists in the Division of Library and Information Services review retention schedules and State Records Center disposition notices for records of archival value. Agencies are notified if records stored in the State Records Center are determined to have archival value.

When archivists appraise records to determine archival value, they consider a number of factors in addition to age and format. Records and information being created today can have archival value equal to that of records created over 100 years ago. Information maintained electronically can have archival value equal to that of records on paper or bound in a volume. The characteristics of records that justify their continued retention as archives include such values as: Evidential value – the value of the evidence records provide of the origins, structure, functions, and operations of the agency that created them. Informational value – the research or reference value of the information contained in the records. Financial, legal, and administrative value – the value of the records for the conduct of current and future agency business.

A well-run records management operation has many benefits to the administrators, students, managers, parents and other supervisory bodies such as the ministry of education and sports. Some of these benefits are:

**Space savings.** Space savings is the most immediately realized benefit of a records management program. By implementing retention schedules and systematically destroying records that have met their retention requirements, an education institution can significantly reduce the space occupied by records.

**Reduced expenditures for filing equipment.** Appropriate disposition of records can greatly reduce the need for filing cabinets, file folders, electronic storage media, etc.

**Increased efficiency in retrieval of information.** Retrieval of information is made more efficient through improved management of paper records systems and through cost-effective and efficient implementation of non-paper systems, such as electronic document imaging and micrographics. An added benefit in improving filing systems is the reduction of misfiles and lost records, which can result in costly searches to locate needed records.
Compliance with legal retention requirements and the establishment of administrative, fiscal, and historical retention requirements. The hallmark of a good records management program is the establishment of retention requirements based upon an analysis of the records’ legal, fiscal, administrative, and historical requirements and values. In the absence of such requirements, many education institutions either destroy records that should be retained or retain everything, thereby taking a legal risk or assuming unnecessary operating costs.

Protection of vital records. Records management’s involvement in identifying vital records and in preparing a carefully designed disaster recovery plan can help an organization reduce its vulnerability. The destruction of important records can cost an organization millions of dollars and threaten the organization’s ability to function, thus jeopardizing its existence.

Control over creation of new records. A significant percentage of the cost of information is in records creation. Records management, forms management, and reports management can help reduce the proliferation of unnecessary reports, documents, and copies, and at the same time improve the effectiveness of those reports and documents that do need to be created.

Campione et al (1990) contend that networked systems provide the opportunity for a range of people (teachers, administrative staff, parents and students) to access these records where appropriate (security can be maintained using levels of access). Particularly in secondary educational institutions the use of software to support record keeping has become important. Similarly the financial management of an educational institution can be very complex and therefore the use of appropriate software including databases and spreadsheets is required. This allows accurate financial records to be maintained and supports budgetary decision-making at all levels with the organization. This is particularly important in schools which have a high level of autonomy in their financial management (e.g. private schools). Communications within an organization is always important, and also efficient communication with those outside the organization is often crucial. As with other organizations, schools are increasingly using computers to
support communications. This may be simply broadcasting notices to staff, providing bulletin boards and chat facilities. Electronic mail facilities have allowed staff to easily communicate with each other and relevant people outside the school. Teachers or administrators may also use computer communications to transmit or receive data files on students, administrative tasks, policies and so on. School libraries use computers to maintain records of items, borrowings and borrowers. Many use bar-code readers to improve efficiency. Increasingly libraries are providing access to electronically stored information through both local disk-based reference material and online materials available using the Internet.

Setareki & Opeta (2005) argued that ICT presents opportunities for recordkeeping in developing countries, such as enhanced retrieval systems and online search facilities. Opportunities for compact storage through electronic and digital storage devices are becoming more enticing to those responsible for records as they offer an alternative to bulky paper records that need a considerable amount of space for storage. However, there are challenges and issues that need to be considered; for example increased usage of ICT decentralizes recordkeeping more and more. There is almost no need for proven manual systems as individuals are building their own empires on their computers, creating official records as their own and managing them in their private recordkeeping system that is out of bounds to everybody else.

Theoretical Perspective

This study is based on the Adaptive Structuration Theory (AST) of DeSanctis & Poole (1994), which is based on Anthony Giddens' (1984) structuration theory. AST is viewed appropriate for this study because it examines the change process from two vantage points: (1) the types of structures that is provided by advanced technologies, that is, management information systems, internet and electronic databases; and (2) the structures that actually emerge in human action as people interact with these technologies (efficiency, quality, consensus, commitment and effectiveness). Proponents of AST contend that developers and users of these systems (ICT) hold high hopes for their potential to change organizations for the better, but actual changes
often do not occur, or occur inconsistently. Likewise, secondary schools which have access to information technology have invested greatly in technology to ensure widespread access to their networks, applications and productivity for examination and registration process but the actual impact has not greatly been realized.

It should however be noted that information plays a distinctly social, interpersonal roles in organizations, Felman & March (1981). Perhaps for this reason, development and evaluation of technologies in supporting the exchange of information among the organizational members and its productivity is paramount.

DeSanctis and Poole (1994) add that the past decade has brought advanced information technology, which include electronic messaging systems, executive information systems, collaborative systems, group decision support systems, to mention but a few which enable multiparty participation in organizational activities through sophisticated information management and this has seen schools also embracing technology for management issues.

However many researcher believe that the effect of advanced technologies are less a function of the technologies themselves than how they are used by people (Huber, 1990, Huseman and Miles, 1988, Rice, 1984). The researcher concurs with Huber et al’s argument that the impact of technology can only be realized in the interaction between technological tools and the human are effective; it is not only technology itself that brings change in the schools. In this context of advanced technology, the actual behaviors of technology users often differ from the intended impact of the technology and consequently technology fails to yield any effect or the effect unnoticeably happens (Kiesler, 1986, and Siegel, et al, 1986). Upon such an argument, it therefore requires for research to carry out to establish the actual levels of technology application and its use in examination and registration management in secondary schools. This will help to realize technological effects in management of students' academic affairs.

In Adaptive Structuration Theory (AST) it is pointed out that people adapt systems to their particular work needs, or they resist them or fail to use them at all;
and there are wide variances in the patterns of computer use and consequently their
effects on decision making and other outcomes. The set up of the information systems
to be used in record management in schools cut across all departments that is students’
records, finances and administrative purposes.

However, it is not clear whether administrators and students use ICT to their
particular needs or just resist it because the intended impact since its inception has not
greatly been realized-for example there are delayed production of school report forms,
missing results, corroding time tables to mention. Some schools of thought such as “the
decision-making school” that have studied information technology and organizational
change emphasize “system rationalism” (Perrow, 1986); they have a view that
technology should consist of structures (data processes and decision model) designed
to overcome the human weaknesses. Once applied, the technology should bring
productivity, efficiency, and satisfaction to the individual and the school at large.

Related Studies

Availability of ICT for Records Management in Secondary Schools

Luyombya (2010) revealed that the problems with ICT in records management
are largely due to the absence of ICT facilities with recordkeeping functionality, a lack
of clear policies, guidelines and procedures.

Any modern institution of learning requires a smooth operation of the new
innovations of Information and Communication Technology (Tusubira, 2005). It is this
trend that secondary schools in Uganda need for improving their management. It
should however, be noted here that if ICT facilities like computers and internet
connections are put in place, they can result in more efficient management of records
such as students’ examinations, finance, communication and teaching (Sibangani,
2006). However ICT use depends on the existence of ICT infrastructure, people’s skill
and knowledge but for the case of most secondary schools in Uganda, such
infrastructures are generally missing. Even in the few schools where they exist, their
level of applicability in facilitating records management needs to be examined.
Kirsti (2005) observed that teachers today find it easy to pick up any available new electronic device and learn how to communicate with it easily. This is however somehow contrary to what is happening in secondary schools where such ICT electronic devices are inadequate. Taking an example of Lubugumu Jamia High School where the researcher is well versed with, many teachers are computer illiterate, it is very surprising that majority of teachers who join the school to teach ICT often do not know how to use computers and internet (a computer lab administrator from school revealed). Though if results could be uploaded on the school’s website with a fully functional MIS, students would find it easier to access them unlike today where they have to flock director of studies’ office and others learn the missing of their marks at the end of the term. Recording data electronically, storing it centrally, and sharing it with colleagues are vital to reducing workloads through available ICT structures (Devon, 2004). As seen above, this would have a big impact because it was indicated that most of teachers” offices, they have some ICT facilities and therefore, ICT would have impact on the management of education institutions; it increases efficiency and accountability to institutional resources. For cases of missing marks in the various class levels, if efficient MIS is developed and fully put to utilization, such problems would be eliminated.

Devon (2004) points out that in respect to management of students’ examinations; there are various types of information systems that can be available in making informed decisions at all levels and in improving efficiency of operations, such as executive decision making management information system, collaborative information systems, electronic messaging systems, group decision support system. These would enable multiparty participation in the schools activities through sophisticated information management (Huseman and Miles, 1988). For this case secondary schools developed ARIS to handle records, so a call for research to establish at what levels are such ICTs applied in managing records in schools.

Considering making end of year reports, which determines the ability of students for promotions, the process is a disaster. After completion of exams of the year, many
students look forward to getting their reports in the nearby future but their dreams get shattered most times (Auma, 2006). If ICT is applied there effectively, speed in processing such documents will become easier. In addition, marks for assessed work can be recorded within the virtual learning environment (VLE). JISC (2001) puts across the fact that assessment marks recorded at a class level may be automatically transferred to another class level without rekeying. Schools that provide well-integrated facilities for providing online information about programs, lessons and assessed results in which VLEs for individual lessons are embedded can work it better.

Level of Access to ICT for Record Management in Schools

Accessibility to ICT facilities ensures accuracy, timeliness and effectiveness of managing records that is; the whole process of examinations, financial, communication and teaching, it allows easy flow of information and risk monitoring systems that are appropriate (BECTA, 2000). Kololo Secondary School being a model leading school in ICT would greatly be benefiting from the fruits of investing in ICTs if what (BECTA, 2000) put forward was mandatory. It has however been observed contrary to that, the level of accuracy, timeliness, efficiency and effectiveness has not been fully realized despite the existing structures of ICT. Bearing in mind the tasks of manning a big number of students in school for example when they are doing exams in small examination rooms, the exercise becomes tedious and at times marred with examination malpractices, consequent loss of exam marks yet with application of an electronic set exam, there could be an easy monitoring of students and marking coupled with security for results—with electronic databases.

Software for managing records in Secondary Schools has been developed for use by administrators to play roles for administrators, teacher and students. However the level of accessibility to the possible platforms need to established, thus a necessity for this study. For example a teacher can make question banks (also upload them) and can assign tasks to students in their particular groups or individuality for a particular term. A student can login take the assignment. The automatic timer submits the responses after the time is over and displays the score (this is very possible with the application of electronic blackboard). However, in discussing the assessment of
learning, it is valuable to consider the types of learning which can be measured, and particularly, which types currently lend them to computer assisted assessment. There has been a growth of computer-aided assessment over recent years. It is widely accepted that Bloom provides a sensible taxonomy of educational objectives that apply to most academic subjects (Bloom, Englehart et al., 1956). In current practice, e-assessment can be applied to test the so-called lower order skills (knowledge, comprehension, and application) (Korabinski, 2005). However possible this would be, it is not clear whether all secondary schools teaching staff have got the required skills to apply ICTs in teaching and assessment of students, it also not clear whether they can all have access to the software that can perform such a function and whether all individual teachers and administrators could have access to required platforms to put to use the e-assessment, so the level of accessibility of ICTs for record management need to be ascertained.

Educational institutions are under increased pressure to do more with less and optimize management through the use of innovative technologies. It is thus unfortunate that in the world of ICT-led innovation, record management usually fails to raise much enthusiasm, (Harding and Raikes, 2002). However in secondary schools ICT is much in typing exams than record management, yet record management is a vital component of education as a whole. It is therefore believed that with the use of ICT, record management can be more effective. However, Sangwin, (2002) observed that computer aided assessment only takes certain form of questions. Computer aided use (CAU) is widely used in higher classes in secondary schools.

Levels of Use of ICT for Record Management in Schools

The proliferation of technology especially that of the ICT has significantly changed the social order and interpersonal relationship, Bertin (2006). Bertin adds that the flexibility and advance of this technology has proved its role as the supportive measures in human’s life activities in the quest to promote productivity. This therefore is line with the intent of secondary schools’ introduction of ICTs in management issues;
it was to support individual human activities and increase productivity. Unlike such an idea, the schools would not significantly have benefited from the same as it has been observed that many school administrators and teachers could not have adequate skills to use the software for record management and others could not get access to some facilities like computer thus failing full operation of ARIS.

Faulkner (1998:4) asserts that the use of ICTs builds strong and effective information system. For years, academic institutions such as secondary schools used manual systems to gather, manage, process, and disseminate information to users. The advent of ICTs, however, has changed this practice and made information management services, as well as information access, much faster and easier. Due to the diffusion of ICT innovations in education institutions, work radically changed, ICTs offered tremendous possibilities in improving and developing administrators’ professional capability (Plummer, 2003). This strengthened institutional capacity to handle administrative work since tasks can be accomplished effectively and efficiently.

In secondary schools, records management is one of the tedious exercises but considering the ICT infrastructures like management information systems, internet and intranet, and computers available, work would be made simpler to make it easy for all school administrators and teachers to maintain records if such facilities do exist. ICT is helpful in supporting record management functions, for example E-registration enables management of attendance of teachers and students via analysis of data and can be supported by automatic communication to parents via SMS messaging and email (BECTA, 2000). Some secondary schools outside Uganda have tried similar systems to offer similar services and have realized better improvement. For example Utrecht school developed a system called OSIRIS; it is a student registration web based system offering students’ information and allowing them to register for courses (Studion Support and Student Affairs 2006-2007). With OSIRIS, student can access and change their personal information, check for their course schedule and register for courses and exams and it can be accessed at from any computer with an internet connection.
Effective management information systems (MIS) provide a tool for leaders to achieve their institutional vision, (Walsh, 2002).

Similar results can be realized even here at secondary school if the concerned people are acquainted with the skills required to use those innovative ICT structures. In their research (Geoff, Daniel, Dimitra, and Sue, 2006), realized that Electronic registration could play an important role in helping schools with high rates of absence to improve attendance, it saved time, lesson monitoring was particularly beneficial however initially a significant minority of schools experienced substantial difficulties. To my observation e-registration might be beneficial especially to ICT developed institutions because they have enough facilities, but to developing ICT institutions secondary schools inclusive, it might not be beneficial because a few people can have access to ICT structures like internet and computer. Nevertheless, once well established a lot of benefits can be yielded.

Iwhiwhu (2010) contends that poor records management has caused serious impediments in several aspects of public sector management. This has negatively affected prompt payments and employment practices, revamping of institutional functions and organizational structures, and strengthening of financial management. In the absence of a culture of records management, monitoring and evaluation, quality control, and verification cannot proceed as a well-kept record provide the basis for all these, which also engender the rule of law and accountability. They are the foundation upon which institutions build programs for good governance, equitable justice, and financial accountability etc. It is imperative, therefore, for government officials to adopt good records keeping practices, since this will support effective, transparent and accountable institutions. Accessible and reliable records show what decisions were made, actions taken, people who were involved and the responsibilities that exist. He further notes that adopting integrated electronic information systems in government and organization’s transactions, electronic records management policy formulation and implementation, establishing more training outlet for records managers, developing metadata for locating records, etc. will go a long way in adequately managing electronic records in Africa (Iwhiwhu, 2010).
Krishnaveni & Meenakumari (2010) state that integration of ICT helps to reduce the complexity and enhance the overall administration of higher education. They further state that enhancing the usage of ICT in functional areas and especially for general administration enables enhancement of overall information administration in higher education institutions in the realm of global competitive environment. The findings of their study therefore serve as a base for education administrators to deploy Technology based administration in education Institutions for records management. According to the Education Ministry in Malaysia has been using computers in schools to improve efficiency in for many years. Legacy systems such as Educational Management Information System (EMIS), Students information System (Sistem Maklumat Murid – SMM), Students Discipline System (Sistem Salahlaku dan Disiplin Murid –SSDM) have been the back bone of the data gathering systems in schools. This is supported by many other systems such as Textbook Loans Management Systems, school time table systems, and various other systems either procured by the states or district education departments or built by the schools themselves. The report points to the fact that ICT as a productivity tool in Educational organizations can be used to improve efficiency in records management. Computers can be used in a variety of ways and situations in support of operations in schools such as maintaining institutional records.

The Government of India Action Plan, IT-Taskforce, Report (1998) notes that records form the basis for governance, control and decision making. A lot of information is generated each year by various departments of the central and state governments in India, sometimes in the duplicate and triplicate form. Relevant information is difficult to locate from the existing records and sharing of information between departments is non-existent. Seen in this context, the central and state governments are perhaps the largest repositories of information that is collected to meet the statutory requirements, information for decision making, control and governance. It is in this context that the management of large volumes of data using ICTs in institutions including secondary schools makes a good sense. The storage of this information using large capacity storage devices can reduce the need of storage space by a factor of at least one ten thousandth. The access and retrieval time, the savings in terms of time and money is
considered enormous. The trade-off from the application of high storage and retrieval devices are thus enormous as compared to the manual systems and yet governments are still responding slowly despite the immense benefits from the application of IT for storage, retrieval and maintenance of office records. Digital information could form an essential component of the service records and can be maintained at various levels.

Aduwa-Ogiegbaen & Okhion (2006) believe that what is wrong with education management records can be fixed with technology. They note that it is not uncommon to find that many establishments in Nigeria, including educational institutions, still keep records in files and tuck them away in filling cabinets where they accumulate dust. Many of these files are often eaten up by rodents and cockroaches thus rendering them irretrievable. A great deal of routine administrative work in educational establishments is still done manually with few schools showing interest in embracing ICT. The official administrative drudgery in education institutions can be better managed through ICT. They point out that in most Nigeria schools, school officials still go through the laborious exercise of manually registering students, maintaining records of pupil, performance, keeping inventory list of supplies, doing cost accounting, paying bills, printing reports and drawing architectural designs. The huge man-hours spent on these exercises can be drastically reduced with ICT to enhance overall management procedure. He adds that computers bring great speed and accuracy to each of these tasks, along with the convenience of storing large quantities of information on 'small disks or tapes'.

Similarly, Kumar & Kumar (2005), identified a comprehensive set of functional areas of Information technology in school administration. They noted that enhancing the usage of ICT on these functional areas and especially for general administration of school records enhances the overall information administration in higher education institutions in the realm of global competitive environment. This study could well serve as a base for education administrators to deploy Technology based administration in the management of higher education institutions.

Although electronic records of educational institutions are becoming increasingly important for accountability, managing electronic records has proved to be difficult
since information and communication technologies confront organizations with not only opportunities but also challenges. A report by the Global E-Schools and Communities Initiative notes that institutions which purchase ICT technology often budget for immediate ICT costs and seldom, if ever, consider the long term costs of purchasing, deploying and maintaining ICTs. For example, costs for replacements, disposal or even operating costs for refresher training, maintenance and technical support are often ignored. The sum of all this costs is called the TCO (Total Cost of Ownership). Even when there are computers available, there are few or no incentives to use the computer in managing institution records. Sometimes the equipment has been installed but it is seldom used. This might be due to staff not being adequately trained or not having enough time to dedicate to incorporate records to the use of these new resources. Inattention to monitoring and evaluation, that do not allow the benefits being obtained and the mistakes incurred in when introducing ICTs in schools. These problems manifest themselves in many ways but the classic and often seen cases where computers sent to the school never leave their boxes because school personnel are afraid to break them! A school may be equipped with computers does not use the computers because they lack trained personnel. Computer labs seem to have most of their computers broken all the time.

In a study that investigated the use of information communication and technology (ICT) for effective management of secondary schools in Ekiti State, Nigeria Adeyemi & Olaleye in addition to finding that the level of provision of ICT equipment to secondary schools in the State was low, established that the level of principals' management of schools was also low. The intermittent disruption of electricity and inadequate funding were found as major problem inhibiting the usage of ICT equipment for the management of schools in the State. The study concluded that the State government was not fully ready to imbibe (ICT) for the effective management of secondary schools in the State and recommended that the State government supply the necessary ICT equipment to all secondary schools in the State and also improve the training of principals, teachers and computer personnel in the use of computers if computers were to enhance management capacity in the schools.
A study on ICT developments in Uganda and management of digital records in the Uganda Public Service by Luyombya (2011) revealed that despite attempts to improve ICT capabilities and infrastructure in Uganda, a critical gap exists in the approach since the management of public sector records is not being addressed as part of this initiative. Other weaknesses identified related to gaps and poor linkages between Records management and the Information Technology Department, as it failed to address the requirements for Digital records management.

There is no doubt that secondary school education has become more complex and its management demands more from the managers. The enormous rise in the number students in schools as well as the multiplicity of programmes have made school heads to handle large quantities of data which they must process speedily to provide information for the Education Service Commission and Ministry of Education for effective management and decision making. Hence the use of ICT in the management process is imperative for sustainable development.

A number of public and private secondary schools in Uganda have introduced ICT tools like computers, internet and other telecommunication technologies that can aid school records management. However basing on studies reviewed which indicate that ICT can improve records management but implementation of which is characterized by inefficiencies, this study seeks to examine, in the Uganda secondary schools context, the level of ICT use and its efficiency in record management in secondary schools in Uganda.
CHAPTER THREE
METHODOLOGY

Research Design

The designs used for this study included descriptive comparative, descriptive correlation and cross sectional survey designs. Correlation design was used to establish the relationship between ICT use and management of records. On the other hand the researcher used a cross sectional survey design because data was collected at once from a large number of the sampled respondents who were the teachers and administrators in charge of school affairs.

Population

Secondary schools administrators and teaching staff were the target population for the study. The total population was 307 school administrators and teaching staff in nine selected secondary schools in urban central districts of Uganda because, they were deemed knowledgeable about ICT use and records management. Administrators and teachers provided information about the levels of ICT and records management.

Sample size

The sample size for this study was 197 teachers and administrators, computed using Slovene’s formula. Table 1 shows the population and sample size distribution.

<table>
<thead>
<tr>
<th>Category</th>
<th>Parent size</th>
<th>Sample size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers</td>
<td>270</td>
<td>161</td>
</tr>
<tr>
<td>School administrators</td>
<td>36</td>
<td>36</td>
</tr>
<tr>
<td>Total</td>
<td>307</td>
<td>197</td>
</tr>
</tbody>
</table>

Source: Computed from records of the relevant schools

Purposeful sampling for the case of administrators was used in this study. Only school administrators responsible for managing records were selected and simple random sampling was used to select the teaching staff. A list of teachers was accessed
and a simple random sampling fraction was used, which gave each teacher an equal chance to be selected.

Research Instruments

There were three sets of researcher made questionnaires directed to secondary teachers in the 9 selected secondary schools. The first questionnaire helped the researcher to collect data on the profile characteristics of respondents as mentioned in the first objective of this study.

The second questionnaire had questions on the independent variable, ICT use (broken into questions accessibility, ability and frequency of ICT facilities in the schools). All questions in this questionnaire were closed ended based on a four point Likert scale ranging from 1= strongly disagree, 2= disagree, 3= agree and 4= strongly agree.

The third questionnaire had questions on the dependent variable (Record Management), broken into questions on finance records, examination records and communication records. All questions in this questionnaire were also closed ended based on a four point Likert scale ranging from 1= strongly disagree, 2= disagree, 3= agree and 4= strongly agree.

Validity and Reliability

Content validity of the instruments was ensured through use of valid concepts and/or words which measure the study variables. The instruments were given to content experts to evaluate the relevance, wording and clarity of questions or items in the instrument, after which a content validity index was computed. A content validity index of 0.83 was greater than 0.7 which was the minimum CVI used to declare an instrument content validity, as per Amin (2005). The Cronbach alpha coefficient was used to ensure reliability of the instrument, using SPSS. A Cronbach Alpha stated by Min (2005) of 0.8 was got, which is greater than 0.75, and so the instrument was declared reliable.
Data Analysis

Data on profile of respondents was analysed using simple frequencies and percentage distributions. Means were used to determine the level of ICT use and record management. An item analysis helped to identify the strengths and weaknesses of teachers in terms of ICT use in managing records conclusions were derived. The following numerical values and response modes were used to interpret the means:

<table>
<thead>
<tr>
<th>Mean range</th>
<th>Response range</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.26 - 4.00</td>
<td>Strongly agree</td>
<td>Very high</td>
</tr>
<tr>
<td>2.51 - 3.25</td>
<td>Agree</td>
<td>High</td>
</tr>
<tr>
<td>1.76 - 2.50</td>
<td>Disagree</td>
<td>Low</td>
</tr>
<tr>
<td>1.00 - 1.75</td>
<td>Strongly disagree</td>
<td>Very low</td>
</tr>
</tbody>
</table>

The t-test was used to determine whether there is a significant difference in the level of ICT use and record management. The Pearson’s Linear Correlation Coefficient (PLCC) was used to determine the significant relationship between the level ICT use and record management, and to test the second null hypothesis of the study.

3.8 Ethical Considerations

The researcher sunk respondents’ consent before involving them in the research. This included briefing the respondents about the research objectives and roles of the respondents and how they were to benefit from the research. Researcher assured the respondents about the degree of confidentiality in the information that was gathered from them.

Ethical Consideration

Ethics relating to correspondents were enhanced by keeping information given confidential. Self esteem and dignity was maintained to eliminate fear and anxiety among respondents. Subjects were told the truth about the research in order to give
reliable information. Letters seeking approval to carry out research were obtained from relevant institutions and consent of respondents were acknowledged.

**Limitations of the study**

The following threats to the validity of the findings were identified by the researcher, however measures were put to minimize them.

1. **Intervening variables**, like lack of honesty on the side of respondents and their personal biases which are beyond the researcher’s control. These were minimized by requesting respondents to be honest as much as possible and avoid bias in answering the questionnaires.

2. **Testing time**, of the instrument which may affect the understanding of the items in the questionnaire and explanations were given to the respondents could vary for various respondents in the different schools. To resolve this threat, the researcher self administered the questionnaire and ensured that she gave the same explanation to the different respondents in the different schools.
Profile of respondents

Respondents in this study were the teachers and administrators of the selected secondary schools in Mukono, Wakiso, Kampala and Mpigi. Respondents’ provided information about their gender, age, level of education, years of teaching experience and type of school and district. Table 2 provides a summary of frequency counts and percentage distributions.
Table 2A
Profile of Respondents

<table>
<thead>
<tr>
<th>Category</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>105</td>
<td>53.3</td>
</tr>
<tr>
<td>Female</td>
<td>92</td>
<td>46.7</td>
</tr>
<tr>
<td>Total</td>
<td>197</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Age group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-39 (early adulthood)</td>
<td>97</td>
<td>49.2</td>
</tr>
<tr>
<td>40-59 (middle adulthood)</td>
<td>87</td>
<td>44.2</td>
</tr>
<tr>
<td>60 and above (Late adulthood)</td>
<td>13</td>
<td>6.6</td>
</tr>
<tr>
<td>Total</td>
<td>197</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Level of education</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diploma</td>
<td>4</td>
<td>2.1</td>
</tr>
<tr>
<td>Bachelors</td>
<td>145</td>
<td>74.4</td>
</tr>
<tr>
<td>Masters</td>
<td>46</td>
<td>23.6</td>
</tr>
<tr>
<td>Total</td>
<td>195</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Teaching Experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Below 1</td>
<td>3</td>
<td>1.5</td>
</tr>
<tr>
<td>2-4</td>
<td>28</td>
<td>14.2</td>
</tr>
<tr>
<td>5-7</td>
<td>61</td>
<td>31.0</td>
</tr>
<tr>
<td>8-10</td>
<td>33</td>
<td>16.8</td>
</tr>
<tr>
<td>11 and above</td>
<td>72</td>
<td>36.5</td>
</tr>
<tr>
<td>Total</td>
<td>197</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Type of school</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>71</td>
<td>36.0</td>
</tr>
<tr>
<td>Government</td>
<td>126</td>
<td>64.0</td>
</tr>
<tr>
<td>Total</td>
<td>197</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>District where the school is located</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wakiso</td>
<td>68</td>
<td>34.5</td>
</tr>
<tr>
<td>Kampala</td>
<td>50</td>
<td>25.3</td>
</tr>
<tr>
<td>Mukono</td>
<td>79</td>
<td>40.1</td>
</tr>
<tr>
<td>Total</td>
<td>197</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 2 results showed that male respondents (53.3%) were slightly more than female respondents (46.7%). This suggests a smaller gender gap in the staff of secondary schools in the selected districts. The fact that male teachers in secondary schools surpass their fellow female teachers is partly due to ongoing gender equality struggles.

Results for age, showed that most teachers in the sampled were in their early adulthood of 20-39 years (49.2%) followed by those in the middle adulthood age of 40-59 (44.2%) while very few (6.6%) were in their late adulthood. These results imply that most teachers in secondary schools of the study area are in early and middle adulthood. In Uganda, the retirement age is 65 years that is why few teachers are in 60’s or above. The age structure of Uganda also indicates that very few Ugandans are in 60’s, majority are between 20 and 50 years, so these results are not a surprise.

Concerning respondents’ education level, results indicated that a great majority of the teachers in the sample have a bachelors degree (74.4%) followed by Masters Degree holders (23.6%) and only 2.3% were Diploma holders. This implies that teachers in the sampled schools are adequately qualified. Although the minimum qualification for secondary teachers is a Diploma, the pay for graduates is higher, which motivates many to go for further education so that they can earn the higher graduate salary. It is also nowadays a common preference that most students enroll for bachelors’ of education Degree straight away, which has increased the number of graduate teachers in secondary schools.

As regards teachers’ teaching experience, majority (31%) had taught for 11 and above years, followed by those with a teaching experience of 5-7 years (31%) followed by those with 8-10 years of experience (6.8%). These findings indicate a highly experienced staff in schools. The results indicate that more than 80% of the teachers have taught for 5 or more years, which indicates a high level of experience. These results are however expected especially in government schools, where do not easily change to other schools.
Concerning the type of school, results as indicated in table 2B majority of the teachers in the sample, came from Government schools (64.0%) as compared to only 36.0 from private schools. The reason why the number teachers from government schools surpassed that from private schools is very simple, private schools always minimize staff to cut costs.

Finally, the findings in Table 2 suggest that most teachers who responded to this study were from Mukono (40.1%), followed by those from Wakiso (34.5%) while Kampala lagged behind (25.3%).

**The Level of ICT Use in the Selected Secondary Schools**

In investigating the level of ICT use in schools, a number of ICT facilities were identified to be examined. The level of use of ICT for each school under study was then measured on each of these facilities basing on four features, that is, availability, accessibility, ability to use and frequency of use of the ICT facilities in question. To measure the level of ICT use on each of the four dimensions, teachers were asked rate their schools on each of the facilities listed in the questionnaire, using a four point Likert scale, where 1= strongly disagree, 2= disagree, 3= agree and 4= strongly agree. Responses were analysed using means as shown in table 3 A to D.
<table>
<thead>
<tr>
<th>Availability of ICT Facilities in the school</th>
<th>Mean</th>
<th>Interpretation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>You have a school e-mail address</td>
<td>3.40</td>
<td>Very high</td>
<td>1</td>
</tr>
<tr>
<td>You have a computer lab.</td>
<td>3.38</td>
<td>Very high</td>
<td>2</td>
</tr>
<tr>
<td>You have a cycle styling machine</td>
<td>3.37</td>
<td>Very high</td>
<td>3</td>
</tr>
<tr>
<td>You have a printer</td>
<td>3.31</td>
<td>Very high</td>
<td>4</td>
</tr>
<tr>
<td>You have a school website</td>
<td>3.28</td>
<td>Very high</td>
<td>5</td>
</tr>
<tr>
<td>You have computer storage devices like CDs and DVDs</td>
<td>3.15</td>
<td>High</td>
<td>6</td>
</tr>
<tr>
<td>You have a photocopying machine</td>
<td>3.14</td>
<td>High</td>
<td>7</td>
</tr>
<tr>
<td>All computers have antiviruses</td>
<td>3.06</td>
<td>High</td>
<td>8</td>
</tr>
<tr>
<td>You have a project</td>
<td>3.06</td>
<td>High</td>
<td>9</td>
</tr>
<tr>
<td>Each office has a computer</td>
<td>2.99</td>
<td>High</td>
<td>10</td>
</tr>
<tr>
<td>You have an ICT Personnel or expert e.g. a computer technician</td>
<td>2.98</td>
<td>High</td>
<td>11</td>
</tr>
<tr>
<td>Most teachers have e-mail addresses</td>
<td>2.91</td>
<td>High</td>
<td>12</td>
</tr>
<tr>
<td>You have a Scanner</td>
<td>2.89</td>
<td>High</td>
<td>13</td>
</tr>
<tr>
<td>You have internet connection</td>
<td>2.86</td>
<td>High</td>
<td>14</td>
</tr>
<tr>
<td>You have examination software (“end of term report card” software)</td>
<td>2.79</td>
<td>High</td>
<td>15</td>
</tr>
<tr>
<td>You have accounts software for managing school finances</td>
<td>2.50</td>
<td>Low</td>
<td>16</td>
</tr>
<tr>
<td>You have an intranet (networked computers)</td>
<td>2.47</td>
<td>Low</td>
<td>17</td>
</tr>
<tr>
<td>You have a computer(s) in the staff room</td>
<td>2.37</td>
<td>Low</td>
<td>18</td>
</tr>
<tr>
<td>You have a list of teachers’ e-mail addresses displayed</td>
<td>2.20</td>
<td>Low</td>
<td>19</td>
</tr>
</tbody>
</table>

**Average mean**

<table>
<thead>
<tr>
<th>Mean</th>
<th>Interpretation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.94</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>
Table 3A results showed that the level of availability of ICT facilities was rated to be high (average mean =2.94). Results indicated that the most available ICT facility is school e-mail addresses, whose availability was rated to be very high (mean=3.40). This was followed by four other ICT facilities which were also rated very high, including availability of a computer lab (mean=3.38), cycle styling machines (mean=3.37), printer (mean=3.31) and school website (mean =3.28). The least available ICT facility in the sampled schools was displayed teachers' e-mail address list, which was rated low (mean=2.20). And on average availability of four ICT facilities were rated, including computers in staff rooms (mean=2.37), intranet (mean=2.47), accounts software (mean =2.50).

Although it was not expected, the high level of availability of ICT facilities in secondary schools is attributed to the recent change in curriculum, where computer studies are not only highly encouraged but almost made compulsory at senior five for students with pure arts combinations. Since the beginning of this year, 2012, the Ministry of Education and Sports released a ruling that any senior five student doing arts should either stroke it with sub math or computer studies as a subsidiary. This has made many schools with A-level to stock some ICT facilities like computers inevitably.

**Level of Accessibility of ICT Facilities in selected secondary schools**

The researcher also measured the extent to which the ICT facilities are accessible. Table 3B shows the level of accessibility of the various ICT facilities.
Table 3B
Level of Accessibility of ICT Facilities in selected secondary schools
Item Analysis (n=197)

<table>
<thead>
<tr>
<th>Accessibility of ICT Facilities in the school</th>
<th>Mean</th>
<th>Interpretation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>You can easily access computers in general</td>
<td>3.18</td>
<td>High</td>
<td>1</td>
</tr>
<tr>
<td>You can easily access CDs, DVDs or other storage devices like a flash</td>
<td>2.82</td>
<td>High</td>
<td>2</td>
</tr>
<tr>
<td>You can easily access internet facilities</td>
<td>2.76</td>
<td>High</td>
<td>3</td>
</tr>
<tr>
<td>You can easily access the computer expert or technician</td>
<td>2.74</td>
<td>High</td>
<td>4</td>
</tr>
<tr>
<td>You can easily access computer teachers</td>
<td>2.74</td>
<td>High</td>
<td>4</td>
</tr>
<tr>
<td>You can easily access your e-mail address to send &amp; receive messages</td>
<td>2.65</td>
<td>High</td>
<td>6</td>
</tr>
<tr>
<td>You can easily access the school printer</td>
<td>2.55</td>
<td>High</td>
<td>7</td>
</tr>
<tr>
<td>You can easily access a photocopying machine</td>
<td>2.48</td>
<td>Low</td>
<td>8</td>
</tr>
<tr>
<td>You can easily access the cycle styling machine</td>
<td>2.47</td>
<td>Low</td>
<td>9</td>
</tr>
<tr>
<td>You can easily access antivirus softwares.</td>
<td>2.45</td>
<td>Low</td>
<td>10</td>
</tr>
<tr>
<td>You can easily access the projector</td>
<td>2.38</td>
<td>Low</td>
<td>11</td>
</tr>
<tr>
<td>You can easily access software like accounts &amp; examination or reports</td>
<td>2.29</td>
<td>Low</td>
<td>12</td>
</tr>
<tr>
<td>You can easily access the scanner</td>
<td>2.10</td>
<td>Low</td>
<td>13</td>
</tr>
<tr>
<td>You can easily access the school website and e-mail address</td>
<td>1.94</td>
<td>Low</td>
<td>14</td>
</tr>
<tr>
<td><strong>Average mean</strong></td>
<td><strong>2.53</strong></td>
<td><strong>High</strong></td>
<td></td>
</tr>
</tbody>
</table>

The results in Table 3B indicate that the level of accessibility of ICT facilities generally high (average mean =2.53). The most accessible ICT facility is access to
computers in general, whose access level was rated high (mean=3.18). This was followed by six other facilities whose accessibility was rated high, including accessibility to CDs, DVDs or other storage devices like a flash (mean=2.82), internet facility (mean=2.76), computer experts, technicians and teachers (mean=2.74) and so on. The least accessed ICT facility was school websites and e-mail address (mean=1.94) whose access was rated low, followed by six other facilities which included access to the scanner (2.10), accounts and examination software (2.29), projectors (2.38), computer antiviruses (2.45) and so on. Similar reasons can be given for the high level of accessibility to ICT facilities as those given above to account for the high level of availability of ICT facilities.

The results also indicated that since they are available and policies favour their usability, that is why accessibility level is high. It is also true that some of the ICT facilities may be accessed even if they are not available at the school. For example, scanners, printers, telephones, e-mail addresses and so on can be accessed even if the school does not have computers at school.

**Level of Ability to Use ICT Facilities in selected secondary schools**

The researcher also measured ICT use by measuring the level of ability to use the various ICT facilities. Table 3C shows the mean scores of respondents on ability to use ICTs.
### Table 3C

**Level of Ability to Use ICT Facilities in selected secondary schools**

**Item Analysis (n=197)**

<table>
<thead>
<tr>
<th>Ability to Use ICT Facilities in the school</th>
<th>Mean</th>
<th>Interpretation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to use e-mails and websites (send and receive messages)</td>
<td>3.44</td>
<td>Very high</td>
<td>1</td>
</tr>
<tr>
<td>Ability to use computers in general</td>
<td>3.42</td>
<td>Very high</td>
<td>2</td>
</tr>
<tr>
<td>Ability to connect a computer if it is disconnected</td>
<td>3.35</td>
<td>Very high</td>
<td>3</td>
</tr>
<tr>
<td>Ability to use internet (e.g. for research, etc.)</td>
<td>3.33</td>
<td>Very high</td>
<td>4</td>
</tr>
<tr>
<td>Ability to save &amp; open files saved from other computers (intranet)</td>
<td>3.31</td>
<td>Very high</td>
<td>5</td>
</tr>
<tr>
<td>Ability to use a CD, DVD or flash disk for saving and retrieving data</td>
<td>3.27</td>
<td>Very high</td>
<td>6</td>
</tr>
<tr>
<td>Ability to use MS word</td>
<td>2.99</td>
<td>High</td>
<td>7</td>
</tr>
<tr>
<td>Ability to use teach a friend how to use a computer</td>
<td>2.94</td>
<td>High</td>
<td>8</td>
</tr>
<tr>
<td>Ability to use a printer</td>
<td>2.70</td>
<td>High</td>
<td>9</td>
</tr>
<tr>
<td>Ability to use a projector</td>
<td>2.66</td>
<td>High</td>
<td>10</td>
</tr>
<tr>
<td>Ability to use a photocopying machine</td>
<td>2.59</td>
<td>High</td>
<td>11</td>
</tr>
<tr>
<td>Ability to use MS excel</td>
<td>2.55</td>
<td>High</td>
<td>12</td>
</tr>
<tr>
<td>Ability to use accounts and exam softwares</td>
<td>2.55</td>
<td>High</td>
<td>12</td>
</tr>
<tr>
<td>Ability to use MS power point</td>
<td>2.33</td>
<td>Low</td>
<td>14</td>
</tr>
<tr>
<td>Ability to use a scanner</td>
<td>2.25</td>
<td>Low</td>
<td>15</td>
</tr>
<tr>
<td>Ability to use antiviruses (installing and updating them)</td>
<td>2.14</td>
<td>Low</td>
<td>16</td>
</tr>
<tr>
<td>Ability to use a cycle styling machine</td>
<td>1.52</td>
<td>Very low</td>
<td>17</td>
</tr>
<tr>
<td><strong>Average mean</strong></td>
<td>2.74</td>
<td>High</td>
<td></td>
</tr>
</tbody>
</table>

**Guide to interpretation of means**

<table>
<thead>
<tr>
<th>Mean range</th>
<th>Response mode</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.26-4.00</td>
<td>Strongly agree</td>
<td>Very high</td>
</tr>
<tr>
<td>2.51-3.25</td>
<td>Agree</td>
<td>High</td>
</tr>
<tr>
<td>1.76-2.50</td>
<td>Disagree</td>
<td>Low</td>
</tr>
<tr>
<td>1.00-1.75</td>
<td>Strongly disagree</td>
<td>Very low</td>
</tr>
</tbody>
</table>
Results in Table 3C indicated that there is a generally high level of ability to use ICT facilities, indicated by a high mean score of 2.74. Ability to use most of the ICT facilities was found to be except on four items, with ability to use a cycle styling machine scoring the least and very low ability (mean=1.52). Ability to use e-mail addresses (e.g. sending and receiving messages) scored the highest level of ability with a mean of 3.44 and so on.

This high level of ability to use ICTs is attributed partly to the high level of availability and accessibility to ICTs already indicated in Tables 3A and B. It can also be attributed to improvement in technology in institutions of higher learning. So it is so possible that most teachers leave these institutions when they have knowledge of computer use.

**Level of Frequency of Use of ICT Facilities in selected secondary schools**

The level of ICT use was also measured by the level of frequency of use of the selected ICT facilities. Table 3D shows mean scores on level of frequency of use of ICTs.
### Table 3D
Level of Frequency of Use of ICT Facilities in selected secondary schools
Item Analysis (n=197)

<table>
<thead>
<tr>
<th>Frequency of Use of ICT Facilities in the school</th>
<th>Mean</th>
<th>Interpretation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of a photocopying machine</td>
<td>3.88</td>
<td>Very high</td>
<td>1</td>
</tr>
<tr>
<td>Use of MS excel (e.g. to record students marks)</td>
<td>3.86</td>
<td>Very high</td>
<td>2</td>
</tr>
<tr>
<td>Use of MS word (e.g. to type)</td>
<td>3.54</td>
<td>Very high</td>
<td>3</td>
</tr>
<tr>
<td>Use of e-mails and websites (sending or reading messages)</td>
<td>3.47</td>
<td>Very high</td>
<td>4</td>
</tr>
<tr>
<td>Use of internet</td>
<td>3.34</td>
<td>Very high</td>
<td>5</td>
</tr>
<tr>
<td>Use of computers in general</td>
<td>3.31</td>
<td>Very high</td>
<td>6</td>
</tr>
<tr>
<td>Use of CDs, DVDs or flash disks</td>
<td>3.29</td>
<td>Very high</td>
<td>7</td>
</tr>
<tr>
<td>Connecting a computer</td>
<td>3.19</td>
<td>High</td>
<td>8</td>
</tr>
<tr>
<td>Use of printers</td>
<td>3.09</td>
<td>High</td>
<td>9</td>
</tr>
<tr>
<td>Use of MS power point</td>
<td>2.92</td>
<td>High</td>
<td>10</td>
</tr>
<tr>
<td>Use of the intranet (e.g. to open or save a document)</td>
<td>2.85</td>
<td>High</td>
<td>11</td>
</tr>
<tr>
<td>Use of antiviruses (e.g. to clean a device or computer)</td>
<td>2.59</td>
<td>High</td>
<td>12</td>
</tr>
<tr>
<td>Teaching a friend or a student how to use a computer</td>
<td>2.44</td>
<td>Low</td>
<td>13</td>
</tr>
<tr>
<td>Use of accounts and examination softwares</td>
<td>2.22</td>
<td>Low</td>
<td>14</td>
</tr>
<tr>
<td>Use of a cycle styling machine</td>
<td>2.02</td>
<td>Low</td>
<td>15</td>
</tr>
<tr>
<td>Use of a projector</td>
<td>2.00</td>
<td>Low</td>
<td>16</td>
</tr>
<tr>
<td>Use of scanners</td>
<td>1.70</td>
<td>Very low</td>
<td>17</td>
</tr>
<tr>
<td><strong>Average mean</strong></td>
<td><strong>3.03</strong></td>
<td><strong>High</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Overall mean</strong></td>
<td><strong>2.74</strong></td>
<td><strong>High</strong></td>
<td></td>
</tr>
</tbody>
</table>

Results in Table 3D revealed that on average, respondents rated their frequency of use of ICTs to be generally high (average mean=3.03). Of all ICTs considered in this study, the most frequently used was found to be photocopying machine, with a mean score of 3.88, which is rated as very high according to the interpretation guide. Other ICTs which were rated very high in frequency of use include, use of MS excel
Those ICTs which were found to be rarely used include use of scanners (mean=1.70), use of projectors (mean=2.00), cycle styling machine (mean=2.02) and so on.

The overall mean score for all measures of ICT use in secondary schools indicates that the level of ICT use in the selected secondary schools was found to be high (overall mean=2.74). This high level of ICT use is attributed to the introduction of ICT related subjects in schools, introduction of computer studies as a subject examined at national exams and so on.

**Extent of Records Management in Selected Secondary Schools**

Records management was the dependent variable in this study. The researcher, having cited the problem of poor records keeping in secondary schools wanted to ascertain this thinking by measuring the extent of records management in the sampled schools. Three kinds of records were examined namely, financial records, records related to communication and examination records. Each of these three was measured qualitatively with several Likert scaled questions ranging from 1 to 4, where 1= not available at all, 2=hand written copies available, 3=printed copies available and 4=both printed and computer soft copy. Responses rated the extent of records management in their respective schools as shown in table 4A to B.
Table 4A
Extent of Financial and Examination Records Management of the Selected Secondary Schools
Item Analysis (n=197)

<table>
<thead>
<tr>
<th>Financial records</th>
<th>Mean</th>
<th>Interpretation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies of school expenditures for different terms</td>
<td>3.56</td>
<td>Very good</td>
<td>1</td>
</tr>
<tr>
<td>Employees/teachers’ salary payment lists</td>
<td>3.48</td>
<td>Very good</td>
<td>2</td>
</tr>
<tr>
<td>Lists of students fees payment status</td>
<td>3.21</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>Copies of external bills (e.g. electricity, water, etc.)</td>
<td>3.16</td>
<td>Good</td>
<td>4</td>
</tr>
<tr>
<td>Records of school fees payment</td>
<td>3.12</td>
<td>Good</td>
<td>5</td>
</tr>
<tr>
<td>Lists of teachers’ salary structures</td>
<td>3.04</td>
<td>Good</td>
<td>6</td>
</tr>
<tr>
<td><strong>Average mean</strong></td>
<td><strong>3.26</strong></td>
<td><strong>Very good</strong></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Students Exams</th>
<th>Mean</th>
<th>Interpretation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies of examination past papers for previous terms</td>
<td>3.88</td>
<td>Very good</td>
<td>1</td>
</tr>
<tr>
<td>Lists of all previous candidates and their performances</td>
<td>3.70</td>
<td>Very good</td>
<td>2</td>
</tr>
<tr>
<td>Copies of students’ tests and examination marks for different terms</td>
<td>3.45</td>
<td>Very good</td>
<td>3</td>
</tr>
<tr>
<td>Copies of examination time tables</td>
<td>3.34</td>
<td>Very good</td>
<td>4</td>
</tr>
<tr>
<td>Copies of invigilation schedules</td>
<td>3.11</td>
<td>Good</td>
<td>5</td>
</tr>
<tr>
<td><strong>Average mean</strong></td>
<td><strong>3.05</strong></td>
<td><strong>Good</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Guide to interpretation of means**

<table>
<thead>
<tr>
<th>Mean range</th>
<th>Response mode</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.26-4.00</td>
<td>Both printed and computer soft copy</td>
<td>Very good</td>
</tr>
<tr>
<td>2.51-3.25</td>
<td>Printed copies available</td>
<td>Good</td>
</tr>
<tr>
<td>1.76-2.50</td>
<td>Hand written copies available</td>
<td>Poor</td>
</tr>
<tr>
<td>1.00-1.75</td>
<td>Not available at all</td>
<td>Very poor</td>
</tr>
</tbody>
</table>

Results in Table 4A indicated that management of financial records in schools was rated as very good (average mean=3.26). Financial records management was best in
maintenance of school expenditures for different terms, which was rated very good (mean=3.56), followed by management of employees/teachers’ salary payment lists (mean=3.48) while the least although good was lists of teachers’ salary structures (3.04) and records of school fees payment (mean=3.12) and so on.

These findings have shown that the management financial records is good. This good management of records is due to the requirements by the ministry of education for all schools to systematize their records. Good financial management is the blood of any organizations, so schools have to give it priority whether private or government. Table 4B shows extent of communication records management.

Table 4B
Extent in Management of Communication Records in Selected Secondary Schools
Item Analysis (n=197)

<table>
<thead>
<tr>
<th>Communication</th>
<th>Mean</th>
<th>Interpretation</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lists of all students in the school according to class, gender, etc.</td>
<td>3.80</td>
<td>Very good</td>
<td>1</td>
</tr>
<tr>
<td>Lists of all students and their houses, clubs or colours</td>
<td>3.70</td>
<td>Very good</td>
<td>2</td>
</tr>
<tr>
<td>Lists of all staff in the school</td>
<td>3.52</td>
<td>Very good</td>
<td>3</td>
</tr>
<tr>
<td>Lists of duties and responsibilities</td>
<td>3.50</td>
<td>Very good</td>
<td>4</td>
</tr>
<tr>
<td>Copies of BOD meetings and proceedings</td>
<td>3.49</td>
<td>Very good</td>
<td>5</td>
</tr>
<tr>
<td>Copies of staff meetings and minutes</td>
<td>3.48</td>
<td>Very good</td>
<td>6</td>
</tr>
<tr>
<td>Lists of prefects for different terms</td>
<td>3.43</td>
<td>Very good</td>
<td>7</td>
</tr>
<tr>
<td>Copies of all school assets (e.g. chairs, desks, etc.)</td>
<td>3.31</td>
<td>Very good</td>
<td>8</td>
</tr>
<tr>
<td>Lists of teachers’ teaching loads</td>
<td>3.22</td>
<td>Good</td>
<td>9</td>
</tr>
<tr>
<td>Lists of all parents and their contacts</td>
<td>3.21</td>
<td>Good</td>
<td>10</td>
</tr>
<tr>
<td>Copies of school annual and term program of activities</td>
<td>3.20</td>
<td>Good</td>
<td>11</td>
</tr>
<tr>
<td>Copies of students attendance records</td>
<td>3.07</td>
<td>Good</td>
<td>12</td>
</tr>
<tr>
<td>Copies of prep supervision schedules</td>
<td>3.06</td>
<td>Good</td>
<td>13</td>
</tr>
<tr>
<td>Copies of letters sent to different stake holders (e.g. parents, other schools, teachers, Ministry of education and sports, district, etc.)</td>
<td>3.04</td>
<td>Good</td>
<td>14</td>
</tr>
<tr>
<td>Copies of teaching syllabi for different subjects</td>
<td>3.02</td>
<td>Good</td>
<td>15</td>
</tr>
<tr>
<td>Copies of teachers’ individual time tables</td>
<td>2.98</td>
<td>Good</td>
<td>16</td>
</tr>
<tr>
<td>Lists of staff telephone contacts.</td>
<td>2.98</td>
<td>Good</td>
<td>17</td>
</tr>
<tr>
<td>Teaching notes for some teachers</td>
<td>2.81</td>
<td>Good</td>
<td>18</td>
</tr>
<tr>
<td>A copy of visitors book</td>
<td>2.69</td>
<td>Good</td>
<td>19</td>
</tr>
<tr>
<td>Copies of lesson time tables for different terms</td>
<td>2.67</td>
<td>Good</td>
<td>20</td>
</tr>
<tr>
<td>Copies of students’ cases and how they are managed</td>
<td>2.61</td>
<td>Good</td>
<td>21</td>
</tr>
<tr>
<td>Copies of all notices issued to students &amp; staff</td>
<td>2.20</td>
<td>Poor</td>
<td>22</td>
</tr>
<tr>
<td>Lists of text books and pamphlets in the school</td>
<td>2.15</td>
<td>Poor</td>
<td>23</td>
</tr>
</tbody>
</table>
Lists of staff e-mail addresses 1.61 Very poor 24

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average mean</td>
<td>3.50</td>
<td>Very good</td>
</tr>
<tr>
<td>Overall mean</td>
<td>3.27</td>
<td>Very good</td>
</tr>
</tbody>
</table>

Guide to interpretation of means

<table>
<thead>
<tr>
<th>Mean range</th>
<th>Response mode</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.26-4.00</td>
<td>Both printed and computer soft copy</td>
<td>Very good</td>
</tr>
<tr>
<td>2.51-3.25</td>
<td>Printed copies available</td>
<td>Good</td>
</tr>
<tr>
<td>1.76-2.50</td>
<td>Hand written copies available</td>
<td>Poor</td>
</tr>
<tr>
<td>1.00-1.75</td>
<td>Not available at all</td>
<td>Very poor</td>
</tr>
</tbody>
</table>

Results in Table 4B discovered that management of records related to communication is generally very good (average mean = 3.50), suggesting that schools are very good in communication and records management. The best aspect of records to be managed happened to be students' lists according to class gender etc., with a mean of 3.80, followed by lists of all students and their houses or clubs (mean=3.70), etc. The worst managed records lists of staff e-mail addresses (mean=1.61=very poor), followed by lists of textbooks and pamphlets in the school (mean=2.15=pOOr) and Copies of all notices issued to students and staff (mean=2.20=pOOr). The overall mean for extent of records management showed that there is a very good records management in the sampled schools (mean=3.27=very good).

Significant Difference in the Level of ICT Use Between Private and Public Secondary Schools

To establish whether there is a significant difference in the level of ICT use between private and public secondary schools, a null hypothesis was tested that the level of ICT use does not significantly differ between the two types of schools. The t-test was used to test this null hypothesis and the results are shown in table 5.

Table 5
Results in Table 5 indicate that the level of availability of ICTs does not significantly differ between private and public secondary schools (t=0.089, sig. =0.929). Both types of schools proved to have the same level of ICTs. Results also showed no big difference in the level of accessibility of ICTs (t=1.280, sig. =0.204). However, though no big difference, private schools were slightly higher (mean=2.64) than public schools (mean=2.47).

Results revealed a significant difference in the level of ability to use ICTs (t=2.198, sig. =0.031), level of frequency of use (t=3.254, sig. =0.001) and overall level of ICT use (t=2.360, sig. = 0.021). In all the three cases where significant differences were found, private schools proved to be better with higher mean scores than public schools.

The reason why private schools excel in ICT use as compared to public schools is that teachers in public schools are more aged than teachers in private schools. According to Bakkabulindi (2007), more aged people tend to have a low level of ICT use compared to less aged people. Teacher retention is higher in public schools as compared to private schools. Again most teachers who have just completed their
courses get their first jobs in private schools and so private schools tend to have a relatively young workforce as compared to public schools.

**Significant Difference in the Extent of Records Management Between Private and Public Secondary Schools**

To establish whether there is a significant difference in the extent of records management between private and public secondary schools, a null hypothesis was tested that the extent of records management does not significantly differ between private and public secondary schools. The t-test was used to test this null hypothesis and the results are shown in table 6.
Table 6
Significant Difference in Extent of Records Management Between Private and Public Secondary Schools

<table>
<thead>
<tr>
<th>Type of school</th>
<th>Mean</th>
<th>t</th>
<th>Sig.</th>
<th>Interpretation</th>
<th>Decision on H₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Records</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>3.29</td>
<td>.474</td>
<td>.636</td>
<td>No significant difference</td>
<td>Accepted</td>
</tr>
<tr>
<td>Government</td>
<td>3.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication Records</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>3.07</td>
<td>.431</td>
<td>.667</td>
<td>No significant difference</td>
<td>Accepted</td>
</tr>
<tr>
<td>Government</td>
<td>3.04</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination Records</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>3.53</td>
<td>.961</td>
<td>.338</td>
<td>No significant difference</td>
<td>Accepted</td>
</tr>
<tr>
<td>Government</td>
<td>3.48</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall records</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>3.30</td>
<td>.831</td>
<td>.407</td>
<td>No significant difference</td>
<td>Accepted</td>
</tr>
<tr>
<td>Government</td>
<td>3.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to the findings in Table 6, there is no significant difference in the extent of records management between private and public secondary schools (t=0.831, sig. 0.407). There were no significant differences for all the three measures of records management. Based on these results, the null hypothesis was accepted and a conclusion made that the goodness or poorness in records management does not depend on school type. However, for all cases, private schools proved to be better record managers as compared to public schools, although the difference is not statistically big. The reason for no significant difference in extent of records management is that both types of schools are offering the same services and are governed by the same principles. So their needs and requirements are the same.

Significant relationship between the level of ICT use and extent of records management

The final objective was to establish whether the level of ICT use and extent of records management are significantly correlated. In this the researcher tested a null hypothesis that the two variables are not significantly correlated. The Pearson's Linear Correlation Coefficient was used to test this null hypothesis. Results are indicated in table 7.
Table 7

Significant correlation between the level of ICT use and extent in records management

<table>
<thead>
<tr>
<th>Variables Correlated</th>
<th>r-value</th>
<th>Sig.</th>
<th>Interpretation</th>
<th>Decision on $H_0$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Availability of ICT facilities Vs Extent of records management</td>
<td>0.529</td>
<td>.000</td>
<td>Significant correlation</td>
<td>Rejected</td>
</tr>
<tr>
<td>Accessibility of ICT facilities Vs Extent of records management</td>
<td>0.630</td>
<td>.000</td>
<td>Significant correlation</td>
<td>Rejected</td>
</tr>
<tr>
<td>Ability use ICT facilities Vs Extent of records management</td>
<td>0.337</td>
<td>.002</td>
<td>Significant correlation</td>
<td>Rejected</td>
</tr>
<tr>
<td>Frequency of use of ICT facilities Vs Extent of records management</td>
<td>0.345</td>
<td>.000</td>
<td>Significant correlation</td>
<td>Rejected</td>
</tr>
<tr>
<td>Overall Level of ICT use Vs Extent of records management</td>
<td>0.494</td>
<td>.000</td>
<td>Significant correlation</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

As indicated in Table 7, the extent of records management was significantly correlated with ICT use and this is indicated by a significant correlation between the overall level of ICT use and extent of records management ($r=0.494$, sig. =0.000). The results showed that the two are positively related, implying that an increase in the level of ICT use, is likely to improve records management in secondary schools, at a confidence level of 95%.

Based on these results, the null hypothesis is rejected in all aspects and a conclusion is made that the more ICT facilities are available in schools, the more they are accessed, the more the teachers are able to use them and the more frequently these ICTs are used, the better will be the records management and vice versa.

Regression Analysis Between the Level of ICT Use and Extent of Records Management

Regression Analysis helped to determine the strength of relationship between the independent and the dependent variables and to determine which of the four components of the independent variable has the strongest influence on the dependent variable. Table 8 shows the results of the linear regression analysis.
Table 8
Regression Analysis Between the Dependent and Independent Variable

<table>
<thead>
<tr>
<th>Variables Regressed</th>
<th>Adjusted R²</th>
<th>F</th>
<th>Sig.</th>
<th>Interpretation</th>
<th>Decision on H₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>CT use Vs extent of records management</td>
<td>.444</td>
<td>14.779</td>
<td>.000</td>
<td>Significant effect</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
<th>Interpretation</th>
<th>Decision on H₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>4.545</td>
<td>.000</td>
<td>Significant effect</td>
<td>Rejected</td>
<td></td>
</tr>
<tr>
<td>Availability of ICTs</td>
<td>.317</td>
<td>2.452</td>
<td>.017</td>
<td>Significant effect</td>
<td>Rejected</td>
</tr>
<tr>
<td>Accessibility of ICTs</td>
<td>.596</td>
<td>4.167</td>
<td>.000</td>
<td>Significant effect</td>
<td>Rejected</td>
</tr>
<tr>
<td>Ability to use ICTs</td>
<td>-.410</td>
<td>-1.854</td>
<td>.068</td>
<td>No significant effect</td>
<td>Accepted</td>
</tr>
<tr>
<td>Frequency of use ICTs</td>
<td>.150</td>
<td>.669</td>
<td>.506</td>
<td>No significant effect</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Results in Table indicate that the level of ICT use positively influences the extent of records management in the sampled schools (F=14.779, sig. = 0.000). All the four components of ICT use taken together contribute over 44.4% towards variations in proper records management (Adjusted R² = 0.444). Considering the coefficients section of Table 8, results indicate that of all the four aspects of ICT use, accessibility of ICT facilities (Beta=0.596, sig. =.000) has got the strongest influence over records management, followed by availability (Beta=0.317, sig. =.017). These results suggest that ability to use and frequency of use of ICTs do not significantly influence proper records management in a school. These results also imply that proper records management depends greatly on availability of ICTs and their accessibility.
CHAPTER FIVE
FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Findings

This study wanted to establish the relationship between ICT use and records management in selected secondary schools in Mukono, Wakiso and Kampala districts. It was based on five specific objectives, which included determining the i) profile of respondents in terms of age, gender, education level, teaching experience, school type and district where the school is located; ii) determining the level of ICT use; iii) the extent of records management; iv) significant difference in the level of ICT use between teachers in private and public secondary schools and v) significant relationship between the level of ICT use and extent of records management. The following were the findings from this study;

a) There were more male teachers (53.3%) compared to females (46.7%). Most teachers were in their early adulthood of 20-39 years (49.2%) followed by those in middle adulthood age of 40-59 (44.2%) and very few (6.6%) were in their late adulthood. A great majority of teachers had bachelors’ degree (74.4%), Masters Degree holders (23.6%) and only 2.3% had Diplomas. Majority (31%) had an experience of 11 years and above and 5-7 years (31%). And most teachers were from Government schools (64.0%).

b) The level of ICT use was found to be high on availability of ICT facilities (average mean =2.94), accessibility of ICT facilities (average mean =2.53), ability to use ICT facilities, (average mean=2.74) and frequency of use of ICTs (average mean=3.03).

c) The extent of records management was also found to be good in terms of financial records very good (average mean=3.26), records related to students’
examination (average mean = 3.05) and records related to communication (average mean = 3.50).

d) The level of ICT use did not significantly differ between private and public secondary schools in terms of availability of ICTs (t = 0.089, sig. = 0.929) and accessibility of ICTs (t = 1.280, sig. = 0.204). The level of ICT use differed significantly between private and public secondary schools in terms of ability to use ICTs (t = 2.198, sig. = 0.031) frequency of use (t = 3.254, sig. = 0.001) and overall level of ICT use (t = 2.360, sig. = 0.021). In all cases, private schools were better with higher mean scores than public schools. There was no significant difference in the extent of records management between private and public secondary schools (t = 0.831, sig. 0.407).

e) The extent of records management was positively and significantly correlated with ICT use (r = 0.494, sig. = 0.000).

Conclusions

Basing on the findings of the study, the following conclusions and generalizations were derived;

A. Strengths

The level of availability of ICT facilities as an indicator of ICT use was found to be very high on having a school e-mail address, having a computer laboratory, having a cycle styling machine, having a printer and a school website.

The level of accessibility of ICT facilities was found to be highest on accessing computers in general, accessing CDs, DVDs, and other storage devices, access to internet and computer experts/teachers.

Teachers’ ability to use ICTs was found to be very high on use of e-mails and websites for example to send and receive messages, computer use in general, ability to connect a computer if disconnected, ability to use internet for research and intranet as well as ability to save work on CDs, DVDs and other storage devices.
The use of the following ICT facilities was found to be very high; use of a photocopying machine, MS excel MS word, e-mails and websites, internet, computers in general and use of CDs, DVDs or flash disks.

The extent of records management was found to be very good on the act of keeping copies of the school expenditures for different terms and employees/teachers’ salary payment lists, copies of examination past papers for previous terms, lists of all previous candidates and their performances, copies of students’ tests and examination marks for different terms, copies of examination time tables, lists of students according to class and gender, houses/clubs and so on.

Most teachers in these schools are still very productive since they are in their early and middle adulthood ages of 20-59 (over 93%) and majority have the required academic qualifications of bachelors’ degree with enough experience of 5 years and above.

B. Weaknesses

The level of availability of ICT facilities was found to be low on having; an intranet (networked computers), accounts software for managing school finances, computers in staff room and having lists of teachers’ e-mails displayed.

Accessibility of ICT facilities was also found to be low on; accessing the school website and e-mail address, accessing the scanner, softwares like for accounts and reports, accessing a projector, antiviruses, photocopying and cycle styling machines.

Teachers were found to have a very low ability in use a cycle styling machine and low in installing and updating antiviruses, using a scanner and MS power point.

The frequency of use of a scanner was found to be very low, while use of the following ICT facilities was found to be generally low; use of projectors, cycle styling machines, accounts and examination software and teaching others how to use computers.

The extent of records management was found to be poor on keeping copies of all notices issued to staff and students, lists of all books and pamphlets in the school and having lists of teachers’ e-mail addresses.
There are more male teachers than females in Mukono, Kampala and Wakiso secondary schools.

C. Testing of Hypotheses

a) The null hypothesis of no significant difference in the level of ICT use between private and public secondary schools was rejected and a conclusion was taken that private schools are better in ICT use than public schools. However, while the overall level of ICT use significantly differs between private and public secondary schools, the level of availability and accessibility of ICTs does not significantly differ between the two types of schools.

Also the null hypothesis of no significant difference in the extent of records management between private and public secondary schools was accepted, although still private schools are slightly better than public schools.

Lastly, the null hypothesis of no significant relationship between the level of ICT use and extent of records management was rejected. The extent of records management positively and significantly correlates with ICT use and so an increase in ICT use is likely to greatly improve records management.

Of all the aspects of ICTs, accessibility and availability of ICT facilities are the most important in improving records management.

Recommendations

From the findings and conclusions of this study, the following recommendations were generated;

1) There is still a need to recruit more female teachers in secondary schools, since the number of males still surpasses that of females. This will help to inspire the girl child to go for education, since more female teachers act as a catalyst for more educated girls. This is in line with the government gender equality drive.
b) There is need for secondary schools to introduce intranets by bringing experts to connect all the computers at the school. However teachers also need how to use the networked computers for example retrieving and saving data from different computers.

c) There is also a need for secondary schools to buy and stock those computer softwares which can help in improving their records management. Key in this regard are the things like accounts software for managing school finances, softwares for processing end of term reports, antiviruses and so on.

d) Secondary schools administrators and directors need to make sure that they buy some computers and put in staff room. This will make it possible for teachers to learn how and use them for different purposes, which will also improve the way they manage their own records. In addition, lists of teachers’ e-mails addresses need to be displayed for proper communication. Teachers also need to be encouraged to open up e-mail addresses and also use them.

e) School administrators need to encourage teachers to always visit the school website and e-mail addresses. This can be done by administration providing the school website and e-mail addresses on all official documents and also use them to communicate to the staff.

f) School administrators should ensure that teachers have access to the following ICT facilities; the scanner, projector, antiviruses, photocopying and cycle styling machines. Computer experts should be hired to teach teachers how to use such facilities. Teachers also still need more training on how to use softwares like excel and MS power point. These are always useful in records and reports preparation.

g) School administrators should also ensure that for each notice they issue to the teachers and students, they should keep a file copy. The copies should be kept in both soft and print forms.
h) It is also a good practice of records management to always keep lists of all books and pamphlets in the school. This is done through the practice called stock taking every term and the resulting lists are kept in both printed and soft forms.

i) More attention should be put on putting in place the required ICT facilities and availing them to teachers, by letting them access the facilities for purposes of improving their records management.
Areas for Further Research

More studies need to be conducted on;

a) The use of ICTs and records management in different areas of Uganda.
b) The use of ICTs in teaching and learning
c) The use of ICTs and records management in different areas of Uganda using observation techniques.
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Dear Sir/ Madam,

RE: INTRODUCTION LETTER FOR MISS. NAIGA ZULAIKA REG. NO. MBA/32374/102/DU TO CONDUCT RESEARCH IN YOUR INSTITUTION

The above mentioned candidate is a bonafide student of Kampala International University pursuing a Masters Degree in Educational Management. She is currently conducting a field research for her thesis entitled **ICT Use and Efficiency In Management of Records in Selected Private And Public Secondary Schools in Selected Urban Districts in Central Uganda**.

Your school has been identified as a valuable source of information pertaining to her research project. The purpose of this letter then is to request you to allow her collect and avail her with the pertinent information she may need.

Any data shared with her will be used for academic purposes only and shall be kept with utmost confidentiality. Any assistance rendered to her will be highly appreciated.

Yours truly,

Novemberieta R. Sumil, Ph.D.
Deputy Vice Chancellor, CHDR
Greeting Dear Sir/Madam!

I am a Masters student in Business Administration and Management in Information Technology of Kampala International University. Part of the requirement for the award is a Thesis. My study is entitled **ICT Use and Efficiency In Management of Records in Selected Private And Public Secondary Schools in Selected Urban Districts in Central Uganda**. Within this context, I kindly request you to take part in my study by answering this questionnaire. Kindly answer all questions if possible. All data you provide shall be used for academic purposes only and none of your information shall be disclosed in any way to any other person or organizations in the same business with yours.

Please feel free to give your consent of answering this questionnaire by signing the informed consent at the end of this page. May the Almighty Allah Bless you!

Thank you very much.

Yours faithfully,

Naiga Zulaika
Appendix III
Clearance from Ethics Committee

Date _______________________
Candidate's data
Name ________________________
Reg. # ________________________
Course ________________________
Title of the study

Ethical Review Checklist
The study reviewed considered the following.

- physical safety of human subjects
- psychological safety
- emotional security
- privacy
- written request for author of standardised instrument.
- coding of questionnaires/anonymity/confidentiality
- permission to conduct the study
- informed consent
- citation/authors recognised.

Results of Ethical Review

- approved
- conditional (to Provide the Ethics Committee with Corrections
- Disapproval/resubmit proposal.

(Ethics committee). (name and signature)
Chairperson ____________________
Members _______________________

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Appendix IV  
INFORMED CONSENT  

I am giving my consent to be part of the research study of Naiga Zulaika that will focus on **ICT Use and Efficiency in Management of Records in Selected Private And Public Secondary Schools in Selected Urban Districts in Central Uganda.**

I shall be assured of privacy, anonymity and confidentiality and that I will be given the option to refuse participation and right to withdraw my participation anytime. I have been informed that the research is voluntary and that the results will be given to me if I ask for it.

Initials: ____________________________

Date ______________________________

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Appendix V A

FACE SHEET: DEMOGRAPHIC CHARACTERISTICS OF RESPONDENTS

Gender (Please Tick): (1) Male (2) Female

Age _______________________________

Level of Education
____ Certificate  ______ Diploma
____ Bachelors  ______ Masters

Experience (Please Tick):
____ (1) 1 year or less  ____ (2) 2-4 years
____ (3) 5-7 years  ____ (4) 8-10 years
____ (5) 11 years and above

Type of school
____ Private  ______ Government

District where the school is located
____ Wakiso  ______ Kampala
____ Mukono  ______ Mpigi
APPENDIX V B
RESEARCH INSTRUMENT

PART 1: QUESTIONNAIRE TO DETERMINE THE LEVEL OF ICT USE

Direction: Please write your rating on the space before each item or question which corresponds to your best choice. Kindly use the scoring system below.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Response Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Strongly Agree</td>
<td>You agree with no doubt</td>
</tr>
<tr>
<td>3</td>
<td>Agree</td>
<td>You agree with some doubt</td>
</tr>
<tr>
<td>2</td>
<td>Disagree</td>
<td>You disagree with some doubt</td>
</tr>
<tr>
<td>1</td>
<td>Strongly Disagree</td>
<td>You disagree with no doubt</td>
</tr>
</tbody>
</table>

A. Availability of ICT Facilities in the school

At your school...

1. You have a computer lab.
2. You have a computer(s) in the staff room.
3. Each office has a computer.
4. You have a printer.
5. You have a photocopying machine.
6. You have a type writer.
7. You have a cycle styling machine.
8. You have a Scanner.
9. You have a project.
10. You have computer storage devices like CDs and DVDs.
11. You have an ICT Personnel or expert e.g. a computer technician.
12. You have internet connection.
13. You have a school radio, TV set and Video player.
14. You have a school website.
15. You have a school e-mail address.
16. Most teachers have e-mail addresses.
17. You have a list of teachers’ e-mail addresses displayed.
18. You have an office telephone.
19. You have a school generator.
20. You have teachers who know how to use a computer.
21. You have accounts software for managing school finances.
22. You have examination software (“end of term report card” software).
23. You have an intranet (local area network, where all computers are networked).
24. All computers have antiviruses.

B. Accessibility of ICT Facilities in the school
At your school...

25. You can easily access computers in general
26. You can easily access the school printer
27. You can easily access a photocopying machine
28. You can easily access the typewriter
29. You can easily access the cycle styling machine
30. You can easily access the scanner
31. You can easily access the projector
32. You can easily access CDs, DVDs or other storage devices like a flash
33. You can easily access the computer expert or technician
34. You can easily access internet facilities
35. You can easily access the school radio, TV and video players
36. You can easily access the school website and e-mail address
37. You can easily access your e-mail address to send & receive messages
38. You can easily access the office phone whenever there is a school need
39. You can easily access the generator to use it for school activities
40. You can easily access computer teachers
41. You can easily access software like accounts & examination or reports
42. You can easily access antivirus softwares.

C. Ability to Use ICT Facilities in the school

Guideline. Please rate your own ability to use the following ICT related facilities by writing your score in the space prided before each item. Kindly use rating scales below; 1 = Very little or no ability at all; 2 = Little ability; 3 = Moderate ability; 4 = much ability; 5 = very much ability.

41. Ability to use computers in general
42. Ability to use a printer
43. Ability to use a photocopying machine
44. Ability to use a typewriter
45. Ability to use a cycle styling machine
46. Ability to use a scanner
47. Ability to use a projector
48. Ability to use a CD, DVD or flash disk for saving and retrieving data
49. Ability to connect a computer if it is disconnected
50. Ability to use internet (e.g. for research, etc.)
51. Ability to use a radio system, TV & video players
52. Ability to use e-mails and websites (e.g. to send and receive messages)
53. Ability to use the office phone
54. Ability to switch the school generator
55. Ability to use and teach a friend how to use a computer
56. Ability to save & open files saved from other computers (intranet)
57. Ability to use accounts and exam softwares
58. Ability to use antiviruses (e.g. installing and updating them)
59. Ability to use MS power point
60. Ability to use MS excel
61. Ability to use MS word

D. Frequency of Use of ICT Facilities in the school

Guideline. Indicate how often you use the following ICT related facilities by writing your score in the space prided before each item. Kindly use rating scales below: 1 = Very rarely or never; 2 = rarely used; 3 = fairly used; 4 = regularly used; 5 = very regularly.

61. Use of computers in general
62. Use of printers
63. Use of typewriters
64. Use of a photocopying machine
65. Use of a cycle styling machine
66. Use of scanners
67. Use of a projector
68. Use of CDs, DVDs or flash disks
69. Connecting a computer
70. Use of internet
71. Use of school radio, TV & video players
72. Use of e-mails and websites (e.g. sending or reading messages)
73. Use of the office phone
74. Use of or starting the school generator
75. Teaching a friend or a student how to use a computer
76. Use of the intranet (e.g. to open or save a document)
77. Use of accounts and examination softwares
78. Use of antiviruses (e.g. to clean a device or computer)
79. Use of MS word (e.g. to type)
80. Use of MS power point
81. Use of MS excel (e.g. to record students marks)
### PART 2: QUESTIONNAIRE TO DETERMINE EFFICIENCY OF RECORDS MANAGEMENT

**Direction:** The following questionnaire contains questions on records which may be kept by a school like yours (in print or soft form). Please indicate the form in which each of the given record is available at your school by writing your choice in the space before each item or record. Kindly use the scoring system below.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Response Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not available at all</td>
</tr>
<tr>
<td>2</td>
<td>Hand written copies available</td>
</tr>
<tr>
<td>3</td>
<td>Printed copies available</td>
</tr>
<tr>
<td>4</td>
<td>Both printed and computer soft copy</td>
</tr>
</tbody>
</table>

1. Records of school fees payment
2. Lists of students fees payment status
3. Employees/teachers’ salary payment lists
4. Lists of teachers’ salary structures
5. Lists of teachers’ teaching loads
6. Lists of duties and responsibilities
7. Lists of all staff in the school
8. Lists of staff telephone contacts.
9. Lists of staff e-mail addresses
10. Lists of text books and pamphlets in the school
11. Copies of examination past papers for previous terms
12. Copies of lesson time tables for different terms
13. Copies of examination time tables
14. Copies of school annual and term program of activities
15. Copies of teachers’ individual time tables
16. Teaching notes for some teachers
17. Copies of teaching syllabi for different subjects
18. Copies of invigilation schedules
19. Copies of prep supervision schedules
20. Copies of students’ tests and examination marks for different terms
21. Copies of students attendance records
22. Copies of all school assets (e.g. chairs, desks, etc.)
23. Copies of school expenditures for different terms
24. Copies of external bills (e.g. electricity, water, etc.)
25. Lists of all students in the school according to class, gender, etc.
26. Lists of all students and their houses, clubs or colours
27. Lists of all parents and their contacts
28. Lists of all previous candidates and their performances
29. Copies of students’ cases and how they are/were managed
30. A copy of visitors book
31. Copies of all notices issued to students and staff
32. Copies of letters sent to different stake holders (e.g. parents, other schools, teachers, Ministry of education and sports, district, etc.)
33. Lists of prefects for different terms
34. Copies of staff meetings and minutes
35. Copies of BOD meetings and proceedings
# APPENDIX VI

## BUDGET

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel</td>
<td>Shs. 150,000</td>
</tr>
<tr>
<td>Pilot study expenses.</td>
<td>Shs. 240,000</td>
</tr>
<tr>
<td>Cost of computer use</td>
<td>Shs. 210,000</td>
</tr>
<tr>
<td>Cost of stationery and preparation of questionnaires.</td>
<td>Shs. 450,000</td>
</tr>
<tr>
<td>Subsistence allowance during the research period.</td>
<td>Shs. 450,000</td>
</tr>
<tr>
<td>Cost of printing and binding final copies</td>
<td>Shs. 290,000</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>Shs. 210,000</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>Shs. 2,000,000</strong></td>
</tr>
</tbody>
</table>
CURRICULUM VITAE

Biodata

Name : Naiga Zulaika
Date of Birth : 28th April 1980
Place of Birth : Mperwerwe, Kampala
Residence : Zone, Buwate/ Najjera Sub-county, Kiira Town Council District, Wakiso
Nationality : Ugandan
Marital status : Married
Sex : Female
Postal Address : C/O. Ministry of Education and Sports P.O. Box 7063 Kampala (U) FAX: 234920
Mobile Tel. : +256-77-2-513162
E-mail : nzura2003z@yahoo.co.uk

Career objectives to obtain position that would allow me share my experiences, ability and make a contribution to education as it is a key aspect to the development of human mind and development of the country at large

Special abilities & Skills Special abilities: Hardworking, honest, analytical, assertive, result oriented, self motivated, integrity, dynamic, very adaptable, a great team player and a fast learner.
Skills: Excellent communication, organizational, report writing, facilitation & training and leadership skills.

Work experience summary The referred to skills and abilities have been built through out the eight (10) years of experience partly as a head teacher at Matugga Girls Secondary School for 03 years, then an Education Officer at the Ministry of Education and Sports to date this has helped me to build my capacity to work as a team with minimum supervision.
The job tasks formerly held focused on; strategic planning, service delivery, Behavior Change and Communication to include counseling, Training & Development, Performance measurement/Monitoring and Evaluation, Data collection, building & maintaining networks/partnerships and community care support systems at school level and in public office which is my current employment.

(i) July 2010 to Date — Education Officer — Secondary Department

- providing administrative support to the department of Secondary Education — government
- Maintaining data on the USE secondary schools in respect to bank account details and capitation grants in preparation of the proposed new system of Straight Through Processing [STP].
- Following up issues of the students' bursary scheme being implemented by FAWEU.
- Assistant departmental minute secretary.
- Develop annual work plans, progress reports and further support to the budgeting process.
- Follow up on all issues of soft components under ADB Education IV project.
- Liaising with the Private Department on the issues of the PPP Schools and periodically appraising both the USE focal officer and the Commissioner Secondary Government.

(ii) March 2010 — to date — Education Officer — Lubugumu Jamia High School Wakiso

- Classroom teacher of History, Computer and IRE
- Head of Department for Computer Studies
(iii) January 2006 — 2009: Personal Secretary Ministry of Education and Sports

- Compiling submissions of private secondary schools applying to partner with government
- Compiling list of private schools applying for grant aiding
- Processing appointment letters, posting and transfer instructions
- Processing departmental budgets
- Initiating/processing documentation related to USE
- Preparation of paper presentations for the department
- Developing and preparing submission of Secondary Education Department budget Framework Paper
- Processing Work plans for the Department of Secondary Education
- Processing Progress reports for the Department both Recurrent and Development
- Receiving and compiling schools’ submissions of East African Community Essay Writing Competition
- Providing overall programmatic, administrative and secretarial support to the Department of Secondary Education activities


- Carry out oversight and administrative functions of the school
- Regularly carrying out school based inspection, monitoring and support supervision
- In charge of developing and managing school programmes
- Secretary to BoG/PTA executive meeting i.e processing
Minutes of BoGs

- Ensure that the school is effectively staffed
- In charge of staff discipline
- Assessment of the teachers’ performance and students' performance
- Staff appraisals
- Linking the school to the community
- Head of the centre [school]
- Developing school budgets and approving payments
- Development plan for the school and developing strategies for its executions
- Chairing staff meeting
- In charge of staff welfare

(v) March 2002 — November 2002: Sales Executive Clay Agency

- Marketing and selling of products
- Research on customer satisfaction, knowledge attitude
- Proactively the customer needs and cater for those needs with customer delight

(vi) November 2001-to Feb 2002: Research Assistant, Case Western University — Makerere University (Hormonal Contraceptive Study)

Duties Held

- Screened clients eligible for the study
- Data collection
- Interviewing clients on the study
- Carried out home visits for clients recruited in the study.
Education Background

Professional Courses

- Pursuing a Masters degree in Business Administration / Information Technology, Kampala International University 2010 to 2012
- Post -Graduate Diploma in Information Technology, Sikkim Manipal University of Health, Medical & Technological Sciences, India (Uganda Learning Centre) April 2008 to April 2009
- Bachelor of Arts in Education- Makerere University Kampala 2000 to 2003

Short Courses Attended

- Certificate in Networking Training, UConnect Schools Project 2006
- Certificate in Computer Applications, Cyber School Technology Solutions, 2006
- Certificates in Research Methods and Techniques Makerere University Kampala March 2003.

Additional Capabilities

- Counseling and guidance
- Training Net Ball

Languages

- English
- Luganda

Responsibilities

- Youth Representative, Kyebando, Kikaya Zone Kawempe Division
- Guild Representative 2002, Makerere University
Interest/hobbies

• Games Prefect Kawempe Muslim SS
• Sanitary Prefect, Kawempe Muslim SS
• Reading
• Sports

Referees

• Mr. John M. Agaba
  Commissioner Secondary Education Department (Government Division)
  Ministry of Education and Sports

• Mr. R. Nsumba-Lyazi
  Commissioner Secondary Education Department (Private Division)
  Ministry of Education and Sports

• Mr. Kyaka Alfred
  Principal Education Officer
  Ministry of Education and Sports

I Naiga Zulaika acknowledge that the above information is true and correct to the best of my knowledge.

Signature ...................... Date....................

MAIN CAMPUS