A COMPARATIVE ANALYSIS OF A'LEVEL STUDENTS' ACADEMIC PERFORMANCE OF PUBLIC AND PRIVATE SECONDARY SCHOOLS IN KIGALI CITY, RWANDA

A Thesis

Presented to the School of

Postgraduate Studies and Research

Kampala International University

Kampala, Uganda

In Partial Fulfillment of the

Requirements for the Degree Master of

Educational Management and

Administration

By:

YANKURIJE Marthe

REG. N0: MED/10027/81/DF

May, 2011

DECLARATION A

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

YANKURISE Marthe

Name and Signature of Candidate

26-08-2011

Date

DECLARATION B

"I confirm that the work reported in this dissertation was carried out by the candidate under my supervision".

Dr J. S. Bumoye

Name and Signature of Supervisor

26. 08. 2011

Date

APPROVAL SHEET

This dissertation entitled "**A comparative analysis of A' Level Students' Academic performance of public and private secondary schools in Kigali city, Rwanda"** prepared and submitted by **YANKURIJE Marthe** in partial fulfillment of the requirements for the degree of Masters has been examined and approved by the panel on oral examination with a grade of PASSED.

DR (MRS) ANUMAKA, IJEOMA B

Name and Sig. of Chairman

Dr. J. S. Ovoenye

Name and Sig. of Supervisor

Dr. Joseph Wilberforce T.

Name and Sig. of Panelist

Dr (Mrs) Anumaka, Ijeoma B.

Name and Sig. of Panelist

Name and Sig. of Panelist

Date of Comprehensive Examination: _____

Grade: _____

_____

Name and Sig. of Director, SPGSR

_____

Name and Sig. of DVC, SPGS

DEDICATION

This work is dedicated to my Father HITIMANA Elie, my Mother NYIRANGWERA Eliana, my brothers and sisters.

ACKNOWLEDGEMENT

I glorify the Almighty God for the love and protection he has rendered to me till now and his provisions towards the accomplishment of this programme in my life time.

My sincere thanks are towards all those who have contributed to the success of my study in Kampala International University; without which this work would not have been produced.

I am particularly grateful to J.S. OWOEYE PhD for the wise guidance and encouragement as my supervisor, while carrying out this study. Without him, this work could not have been successful.

I would like to express my deepest gratitude to my sisters and brothers NIYITEGEKA Martin, NYIRASIKUBWABO Jacqueline, SIBORUREMA Joel and UWAMPINKA Christine. They have endured all the most of sufferance to support work and their efforts have made my work more successful.

I must also take record my appreciation to my friends with whom I shared academic challenges and a painful life during my stay at this university. Also, thanks go to all my friends who have directly or indirectly helped and rendered great moral encouragement to me.

Let me take this opportunity to thank my beloved HATEGEKIMANA Egide for his moral, financial and timely support when pursuing this academic program. Special thanks to my parents who mould me. I am what I am because of them.

Lastly, I wish to extend my sincere gratitude to my relatives and friends for their love, prayers and confidence in me.

ABSTRACT

This study made a comparison of academic performance between public and private secondary schools of Kigali City. It also determined the extent to which indicators such as the teachers' qualification, teacher student ratio, availability of school facilities, parents' contribution, affected the performance in such schools. The design of the study was a cross-sectional research design. The study was conducted using both quantitative and qualitative approaches. The sample size of the study included 380 students, and 8 head teachers from 8 schools. Questionnaires and interview guide were the main instruments used to collect data from public and private secondary schools of Kigali City. Findings showed that there was a great difference in performance between public and private secondary schools of Kigali City, during the period of 2005-2009. It was seen that public secondary schools performed better than the private secondary schools (the p-value 0.67570 far superior to 0.05). It was found that some factors affected the academic performance of students. That is: the qualification of teachers as one of important factors affecting academic performance was higher in public schools than private schools (p-value in 2-taled (0.203) is greater than alpha (0.025). Availability of school facilities and the contribution of parents to education were also found as improving the high performance of public schools while in private schools they were still at lower level. Teacher-students ratio did not affect the performance of students since it was almost the same in both public and private schools (The teacher student's ratio in private school is 23 while in public schools it is 25). These findings are very important to education planners, policy makers and both government and private sector concerned with education. It was recommended that all these factors should be taken in consideration by both the government and education planners while planning for education especially in secondary education to make sure of a good academic performance.

TABLE OF CONTENTS

TABLE OF CONTENTS

LIST OF TABLES

LIST OF APPENDICES

LIST OF ABBREVIATIONS

LDK: Lycée de Kigali

LNDC: Lycée Notre Dame de Citeaux

MINEDUC: Ministry of Education

MSS: Martyrs' Secondary School

NGO's: None Governmental Organizations

RNEC: Rwanda National Examination Centre

SES: Socio-economic Status

TOT: Total

CHAPTER ONE

THE PROBLEM AND ITS SCOPE

Background of the Study

In the context of this study, performance is the academic achievement in given test or examination. Poor performance means getting worse than a credit (WODIDI, 2007).

As it was explained by Ndabaga (2004) students from Rwandan Private Schools are the most to have poor school performance. Most of those schools admitted students who were rejected in public secondary schools after the national exams of primary six. The number of students enrolled in private schools increased after the 1994 genocide, since then both parents and children were sensitized on the role of education as the key for their development.

Due to the destruction of all infrastructures that schools could not receive all students so that some parents associations and other NGOs opened the doors for private schools. Most of them had not the required conditions for education. Poor school performance and not only results in the students with low self-esteem but also it causes the stress to teachers who teach them and parents who seem to pay school fees for nothing (Ndabaga,2004).

Education in Rwanda is considered to be among the main areas to invest in since the country has not much natural resources. Standards to improve the quality of education in both public and private schools have been put in place by Authorities of Kigali City. Beside administrative efforts to improve the quality of education and school performance, the problem of poor performance persists in both public and private schools.

Poor performance in secondary schools should be seen as a problem which results in severe damages such as loss of self-esteem by students, the rate of school enrolment falls down, parents are not yet motivated to send their children at school and the worse is that the students out of school are not qualified for job application. The work they do is not productive and this leads to under-development of the whole country.

It is therefore very important to analyze the problem of poor performance in Kigali City Secondary schools. This research reviews the factors that affect the performance of students of Kigali City secondary schools.

In general schools differ depending on persons who founded them, the resources they have, facilities and the quality of education they provide to students. In such a case, schools are classified in those which have high incomes to produce final products (students) with high performance, and schools which have low incomes to produce final products with low performance.

It is not the case of public schools; these ones are supervised by local authorities and all requirements are given by the Government through the Ministry of education. The continuous supervision of teachers, distribution of teaching materials at time in both schools, academic meeting and responsibility of parents in education of their children improve the quality of education in schools. In schools where the active participation of students in their learning process the performance goes up much more than the school where students just follow the teacher without any comment on what is being thought.

The school environment is another characteristic that has impact on the performance of students. In most cases schools which are well equipped and respect the sanitation standards, they are the ones to create a good learning environment and then student are motivated in learning which also increase the performance rate.

Differences in wealth between parents of different social classes are also likely to be important determinants of students' achievement. This is seen in some schools which require much money for school fees and families with high economic incomes will send their children in those schools whereas families with low economic incomes will send their children in schools which require a bit little money for school fees and are not well qualified in teaching.

Depending on the above statements we should make clear which type of schools are characterized by poor performance and which factors influence this poor performance. On basis of this background it is evident that the socio-economic differences in private schools are there and have impact on the performance of secondary school students.

Statement of the Problem

Kigali City secondary schools are nowadays promoting the quality of education they offer to their students. This effort improves the academic performance to finally produce well qualified employees. To do so, Kigali city school managers are required to follow and put in practice education policies which have been established by the ministry of Education, and Kigali City Council. In spite of all efforts made by the Kigali City Council to promote the performance of students in all secondary schools, it is still a big problem for learners to effectively perform in national examinations.

For instance, many secondary schools in Kigali have a poor performance in National examinations. Families with low socio-economic development tend to send their children in low-cost schools and most of time it is those schools which do not provide education with high quality.

With these poor end products of secondary schools whose number is increasing very fast in this decade, the country is all the time in a need of well qualified students able to go ahead with the tertiary education and become productive for their own development and the socio-economic development of their country.

It is also observed that some should do better than others even when the results are found to be poor. There is a source of concern for the researcher as many individuals would like to know the reason why. Therefore the researcher sought to know if there is really a significant difference between public and private schools in academic performance and if certain school characteristics such as teachers' qualification, teacher/students ratio, and school facilities are different in public and private secondary schools.

Consequently, this affects the economic development of the country since being familiar with new technologies; it requires some basic skills learnt at secondary level. In addition, this poor performance affects their competition on the international work market. Moreover, learners of non performing secondary schools will be discouraged since they will not easily find job, due to this poor performance.

Purpose of the Study

The purpose of this study was to compare the performance of students in national common entrance examination of private and public secondary schools in Kigali City. The study was also designed to determine the influence of the teachers' qualification, teacher-student ratio, school facilities and parents' contribution on the academic performance of students in both public and private secondary schools in Kigali City.

Research Objectives

1. To determine the profile of the secondary schools in Kigali City, Rwanda.
2. To determine the difference between students national examination results in public and private secondary schools in Kigali City, Rwanda.
3. To determine the difference between teachers' qualification in public and private secondary schools in Kigali City, Rwanda.

4. To determine the difference between, teacher/students ratio, in public and private secondary schools in Kigali City, Rwanda.
5. To determine the difference between school facilities in public and private secondary schools in Kigali City, Rwanda

Research Questions

1. What is the profile of the secondary schools in Kigali City, Rwanda?
2. What is the difference between student's national examination results in public and private secondary schools in Kigali City, Rwanda?
3. What is the difference between teachers' qualification, teacher/students ratio, and school facilities in public and private secondary schools in Kigali City, Rwanda?

Research Hypothesis

Ho1: There is no significant difference in students' national examination results between public and private secondary schools of Kigali City, Rwanda;

Ho2: There is no significant difference in teachers' qualification, teacher/students ratio, and school facilities between public and private secondary schools in Kigali City, Rwanda.

Scope of the study

Geographical scope

The study was carried out in Kigali City which is in central region of Rwandan Country. The study involves the senior six secondary school students of 8 schools, 4 public and 4 private schools, and the teachers of the same schools of Kigali City. A total number of 1080 students were used from 8 secondary schools; it covers students' performance for the past five years 2005 to 2009.

Content Scope

The research is entirely based on the school status, the teachers' qualification of ɔoth public and private secondary schools and the quality of education in secondary ɔchools. For example the qualification of teachers in schools, teaching materials ɜvailable, libraries and laboratories, and their influence on academic performance of ɔecondary schools.

Significance of the Study

This study is beneficial to the following persons:

For the school management in Rwandan Country it will enhance the education ıuthorities to measure the improvement of education quality in both private and public chools. It will help school managers to know how far they are progressing in students' ɔerformance and what they have to do in order to work better towards effective ɔerformance.

Results from this research will help the education planner at national level to escribe the role of the contribution of parents to the performance of students and thus ncourage them to participate actively to education of their children. The government ill know how the availability of school facilities in different schools affects the erformance of students, and be aware of the necessity to provide enough school

facilities. This will help the Government to take decision on how to plan for schools considering differences that occur and their impact on the end products (students) quality.

It will help parents to understand their responsibility to participate in education of their children by contributing in some requirements such as school construction, teaching materials, school fees and other kind of facilities to enable teachers to work effectively.

This research will help teachers to have a view on how their students are performing. They will be informed on differences in performance of their students and students from other secondary schools. This will help them to know what to change in their teaching manner and what to improve in order to maintain school performance on the desired level.

It will also help students to understand their school and parents facilities and management, and it will help them to understand what they are expected to know and to do so that their performance goes up.

The study will also be helpful to students of educational management in acquiring more knowledge on school management and socio-economic status of schools on which they can base the further research.

It is again helpful for me in more understanding on school management, educational quality, data collection and analysis for more academic qualifications.

Operational Definition of Key Terms

Public Schools:

In our study, we consider public schools as schools managed by the government, infrastructures built and rehabilitated by the government using its own funds, or those schools built by the population within the country the ground being given by the local government. In such school, all required expenses are paid by the local government even the salary of the teachers.

There are also non-government schools, called private schools. Private schools may be for children with special needs when the government does not supply for them; religious, such as Christian schools, hawses, yeshivas, and others; or schools that have a higher standard of education or seek to foster other personal achievements.

Private schools:

In our study private schools were considered to the schools built and managed by a private person or a group of people who are in charge of everything in relation with the good working of the school. In Kigali City, private secondary schools are built and managed by associations of people who established their own regulations but work with respect to the curricula prepared by the MINEDUC though they can teach other programs depending on their mission. At the end of year, students from such schools sit for the same national examinations as do students from public schools.

Academic performance

In this study, academic performance refers to the performance at a given level, high level or low level in comparison with the class mean at the end of a trimester or academic year. Here we consider the academic performance comparing the note which is high or low to the standard note taken by the Ministry of education in the yearly A' level national examinations.

School facilities:

School facilities are defined as all those materials enabling the well going of teaching activities. This study considers as school facilities such as desks, libraries with number of books available, laboratories, and computers that contribute to the effective teaching and learning activities.

Teachers' qualification:

In this research, teachers' qualification refers to the level of studies. Teachers may have certificate of secondary school, diploma, bachelor's degree or master's degree. Teachers who have got a university degree, bachelor's degree (A0) or at least a diploma (A1) are considered to be well qualified to teach in secondary schools of Kigali City.

Teacher-students ratio:

This refers to the average of students taught by a teacher within the school.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Concepts, Ideas, Opinions from Authors/ Experts

This part focused on the study of independent variables such as teachers' qualification, teacher-students ratio, school facilities and contribution of parents to education; and dependent variable which is the academic performance of public and private secondary schools of Kigali City.

The study is based on concepts and theories given by different authors about academic performance.

Students' academic performance

As said by Forrest W. (2010), quality teachers have a greater influence on pupil achievement than any other school-based factor. According to Teachers for a New Era, a teacher education reform effort led by the Carnegie Corporation of New York (2008). The author considers a highly qualified teacher as the one who has a bachelor's degree, full state certification, and knowledge of each subject he/she teaches.

Owour (1995) points out that poor performance is as a result of teachers not being dedicated to their work. They devote most of their time to their business giving little time to their students. This worsens when it comes to performance of students.

Teachers are the core to enhance the quality of science subjects they offer since they are the heart of any strategy to improve academic performance. Their commitment, competence and creativity continue to be central to the success of children, and thus their condition of service, their preparation and continuing support are fundamental to the achievement of the goals of education (Yadav, 2001).

Teachers' qualification

Niyonsaba A. (2010) defines the teacher' qualification as the quality of any person officially designed to participate to the teaching career in a public or private institution, and who has already finished successfully his/her studies in a formal institution. According to the same author, students from secondary schools always look for a model to follow, and then the teacher is not there to deceive students but to be a good model that will create a favorable climate for further improvement of their students' academic performance.

Niyonsaba A (2010). supported ideas from GIMENO, stating that teachers are responsible for school results, and then a good teacher is supposed to know what to teach and what students are supposed to know. He should have gone through a scientific training in psychology and pedagogy in a known high institution.

According to Blanc (2010), a well qualified teacher is able to give a good lesson though curricula and textbooks are not enough while the under qualified teacher could not teach well even when he has got curricula and enough and up to date textbooks.

An article of Medwell journals suggested that the present secondary school students' poor achievement in Mathematics could be improved if only qualified and experienced teachers handle Mathematics at the senior secondary school level but such teachers need be adequately provided with relevant instructional facilities.

The Federal Government of Nigeria had adopted education as an instrument par excellence for effecting national development. If education has been adopted as the only tool that can solve the socio-economic problems of Nigeria then the adequate supply of effective teacher becomes the core of the educational problems because there is a direct link between the quality of education and the quality of teacher

Teacher education will continue to be given a major emphasis in all educational planning because no education system can rise above the quality of its teachers.

The National Implementation Committee for the National Policy on Education commenting on the issue of professional roles of the teacher recommended that. The status and welfare of teacher is to become a matter of continuing national concern with additionally more community participation helping teachers to relate the school experience. Ukeje (1976) explained that indeed the quality of the school and that of the teaching personnel so permeate each other that a vicious circle is created in analysis of their inter-relationships for we cannot have good schools unless we have good teachers.

On the basis of the findings, the researcher is of the opinion that the poor performance of Kwara State secondary school students' in Mathematics may be alleviated by the government finding ways and means of increasing teacher-effectiveness in terms of allowing qualified and experienced teachers to handle Mathematics with adequately provided instructional materials. Such teachers to be maintained in schools have to be adequately remunerated.

The annual education report of 2009 done by the RNEC (2010) showed that in Republic of Rwanda many teachers especially those in lower secondary are still secondary graduate, some teachers do not prepare schemes of work, lesson plans, class plans, class diary, exercises for students; it is still a challenge for many teachers to use English as a new medium of instruction.

Teacher/student ratio versus academic performance

Asikhia (2010) states that the problem of too large population of students in classroom does not create a good condition for learning which can lead to poor academic performance of students. As he explained, secondary schools in Ogun State Secondary schools, in Nigeria, are experiencing astronomical increase in population to the extent that some classes use 3-5 registers for a class having up to 250 students. In such situations, teacher student ratio is 1:250. The recommended 1:50 ratio has gone

into oblivion. Knowing students by name is no longer in vogue in Nigerian secondary schools.

The Western Australian Aboriginal Child Health Survey found that Students attending schools where the student to teacher ratio was 20 or more were 1.8 times less likely to have low academic performance than students attending schools where this ratio was 10 or less.

The ratio of students to teachers is one measure of teacher and student interaction in the classroom. In this publication it has been calculated as the ratio of number of students attending a surveyed school to the number of full-time equivalent teaching staff at the school.

The student to teacher ratio has been analyzed in the context of student's academic performance. Almost half of students attending schools where the student to teacher ratio was 20 or more were rated at average or above average academic performance. This was significantly higher than the 28.9 per cent of students rated at average or above average academic performance who attended schools where the student to teacher ratio was less than 10.

The association between the student to teacher ratio and academic performance was most evident in the Perth metropolitan area.

Impact of School facilities on students' academic performance

Curriculum is defined by NIYONSABA as a series of subjects that a student is required to study along the process of learning in order to achieve a given number of objectives after a given period of time.

As said by Niyonsaba (2009), Avanzini (2009) noticed that curricula are most of time the source of poor academic performance since their content are often in advance considering potentialities of the learners. You'll hear people saying that curricula are larger so that they claim their allegation. But it is not of allegation the curriculum or

removal of some chapters from it. This will neither facilitate the teaching/learning process nor improve the academic performance. The strategic plan is not well done not because it is much more rigid but because it suggests earlier or later.

This implies that for any program to be fruitful, it requires a serious conception and an implementation that is relevant to people for which it was prepared, especially learners, taking into consideration their intellectual level.

As it was stated by Dr. Ndabaga, Prof.JosephG. Mr. Nyamurasha, and Mr. Kaleeba B. (2004), Rwanda secondary education was effective after the Second World War when the colonial Administration established some secondary schools to train primary school teachers. Since then, the school had the main purpose to train girls for nursing and boys for masonry and carpentry.

Secondary education in Rwanda especially in Kigali City was not much productive until 1994 genocide when almost all schools were destroyed including buildings and equipment. During that period a great number of human resources was killed or forced to seek exile in the neighboring countries.

It was after 1994 genocide that some schools opened the doors and the number of children in need of school was high, some Associations and NGOs established private schools. Until the year 2009, Kigali City had more than 20 strictly private out of 54 public and government aided secondary schools; and more people are still investing in education.

Wodidi (2007) in his study based on Skinner' motivational theory of learning stated that students' motivation to undertake a task depends on expected reward. As said by Skinner (1985) efficient learning will take place when there is strong motivation of the learner to learn, by the teacher.

As it was stated in Annex to the presidential order establishing quality standards in Education in Rwanda, given in 2010, among standards required in Rwandan

secondary schools there are school facilities such as Bursar's office; Secretary's office; Separate toilets for male and female staff; Staff room; Library with a reading space for students; Standard laboratories which correspond with the number of science subjects and time allocation for each subject taught; Standard science laboratory: at least one laboratory in lower secondary and at least 3 for upper secondary with science options; A computer room with a capacity of 46 students; Headteacher"s house; and play grounds.

The Rwandan Ministry of education elaborated an education sector strategic plan for the period of 2005-2009. Those were guideline to provide education of high quality in different sectors from primary to higher institution. In the ESSP published in 2006, MINEDU established main key performance indicators for Rwandan education system from nursery to high institution. The following table indicates some of key performance indicators of primary, O' level and upper secondary schools.

Table 1: Key performance indicators for Rwanda Education System

OUTPUT INDICATORS (TRONC COMMUN)	**2004**	**2005**	**2006 Baseline**	**2007**	**2008**	**2009**	**2010**
Pupil-Teacher Ratio	30		30	30	31	31	31
Number of teachers (Including non-public)	4381		5637	6186	6899	7883	9063
Pupil-Classroom Ratio	47		47	46	46	46	46
OUTPUT INDICATORS (UPPER SECONDARY)	**2004**	**2005**	**2006 Baseline**	**2007**	**2008**	**2009**	**2010**
Pupil-Teacher Ratio	26	26	26	27	27	26	26
Number of teachers (including non-public)	2885	3113	3278	3348	3415	3487	3615
Pupil-classroom ratio	40	40	40	40	40	40	40

Source: MINEDUC, Education Sector Strategic plan, retrieved on ttp://planipolis.iiep.unesco.org/upload/Rwanda/Rwanda%20Education%20Sector%20Plan%202006%202010.pdf

This motivation may be aroused by either extrinsic or intrinsic stimuli; both of which are important in directing and regulating the learners' behavior towards attainment of desired goals.

This implies that students should be motivated through various ways which may include advising them on careers choices, providing the required physical facilities like laboratories, and verbal encouragements. This would go a long way in improving the perception and performance in the subjects studied.

Kochhar (1996), in his writings reveals that classroom laboratories and subject rooms should be suitable for the correct postures of going students and that they should be convenient for work, well equipped with adequate furniture and this can make learners perform well in class. With absence of such facilities students will not have the opportunity to practice what they learn in classroom theory. Such factor has been responsible for the poor performance of students in science subjects.

The insufficient of materials in laboratory in scientific schools is due to the misunderstanding of theories learnt in classroom; learners forget easily what they learnt because of lack of attention, and the poor academic performance.

Insufficiency of materials in laboratory results in the following: one, since earners do not understand well what they learn in classroom, the degree of retention falls down and almost nothing is left in their memories and then the result is a poor performance. As said by Mialaret (1983), the pedagogy cannot be exercised in abstract, t deals with realities. At this point, Hitzke (1986) adds mainly in sciences, experience comes at the first grade. Once students did not practice the theories they learnt, they will not know all they are supposed to know. Thus they forget easily all they heard in classroom and as a final result the poor academic performance.

The importance of availability of enough materials in laboratory in eaching/learning process is that they facilitate the understanding of the subjects taught n classroom, and a rapid retention of the acquired knowledge since students use sense organs, they touch, they manipulate, they see and then fix whatever learnt in such experiences. It also enable students to be familiar with realities. On the other hand, eachers are enabled to be fast in teaching and then finish the curricula at time.

The annual education report of 2009 done by the RNEC (2010) despite the reform, schools still use the curricula that were used before 2009; teachers had a serious challenge of getting the content of the newly introduced subjects. The multiplication of the existing curricula in English was not done in time to facilitate schools to use them at the beginning of the year; some schools either bought or received books and other teaching materials as donation.

Equipment like projectors, laptops, and printers as well as a variety of textbooks were given to 11 schools that were chosen as science and mathematics training centers. Schools which were formerly teaching in French experienced difficulty getting students' books and teachers' guides in English; there are few lower secondary schools that have science laboratory equipment. NCDC allocated 1,099,773 books to lower secondary schools in 2009, books allocated to upper secondary schools were 85,600,

Some schools with science combinations have insufficient laboratory equipment, others do have equipment but some teachers do not know how to use them. Although the number of books distributed in schools is increasing, teaching aids especially books written in English are still few at upper secondary level.

The infrastructure facilities commonly found in secondary schools include, but not limited to classroom, libraries, laboratories in schools offering science, computer rooms, administrative offices, water and electricity, toilets and grounds.

Additional facilities such as dormitories, bathrooms, kitchen and dining halls also constitute part of infrastructure especially in boarding schools. Although there are some schools whose infrastructure meets the accepted standards in education, the existing number of infrastructure countrywide is inadequate to satisfy the big number of students that need to use them.

In addition, most of these schools have infrastructure that are not up to the required standards, their laboratories are no equipped, they use small bookstores as libraries and use playgrounds that are not enough for the big number of students.

In general, schools with science combinations have inadequate teaching materials (books, laboratory equipment...). In some cases, schools that have enough and adequate teaching materials do not utilize them; In school that do not have electricity, computers and laboratories, computer and science lessons are taught theoretically; some subjects are taught without curricula (history, computer science and management, entrepreneurship and general paper);

New combinations were introduced in schools in 2009 but the old curricula continued to be in use though time allocated to each subject in the combination was increased. In general there are very few libraries; the culture of reading has not yet been fully embraced by teachers and students.

UNICEF, 2011 had a talk on the positive impact of electronic materials on the acquisition of knowledge by students. They noticed that schools and colleges have recognized the potential of electronic media and made curricula more interactive. Education today is no longer restricted to textbooks and classrooms; children are encouraged to surf the net, use digital media in their presentations and expand their computer knowledge. Schools and parents are also aware of the worrying trend of cyber-bullying, whereby a child is tormented or threatened through interactive and digital technologies such as instant messages, email and mobile phones.

Family decisions and open lines of communication between parents, teachers and children can ensure that young people are given the proper guidance as they engage in this vast network of information and experience.

The Embassy of United States, as retrieved on 23 February 2011, explained the educational system of Rwanda. That system was established in order to ensure a good quality of education and a better performance of Rwandan Children. As noticed, Rwanda operates on a 6-3-3-4 system meaning 6 years of primary, 3 years of junior secondary, 3 years of senior secondary, and 4 years of university bachelor's degree.

At the end of senior secondary school, all students (both from public and private schools) take the final national examination in each of their six or seven subjects. These exams are given nationwide in November each year, but the results are not available until the following March. Grading is exceptionally tough: fewer than 3% of grades are A's, and 30% of students fail any given exam.

Table 2: Showing grading of students results by Rwanda System of Education

Percentage marks	Grade	Grade scale	Scale boundary	Performance
35-100	A	11	10.5-11	Excellent
30-84	A^-	10	9.5-10.4	
75-79	B^+	9	8.5-9.4	Very good
70-74	B	8	7.5-8.4	
65-69	B^-	7	6.5-7.4	
60-64	C^+	6	5.5-6.4	Merit
55-59	C	5	4.5-5.4	
50-54	C^-	4	3.5-4.4	
0-49	D^+,D,D^-	3 and 2	1.5-2.5	Pass

Source: Embassy of the United states, Resources>Rwanda System of Education

Insufficient and Unclassified students are not issued a certificate or diploma. The minimum university standard for admission to post-secondary education is a "C^-" in all subjects.

Parents' contribution to their children's education and academic performance:

Ogwu (2004) stated that though most parents do not know how to help their children with their education with guidance and support, they may become increasingly involved in home learning activities and find themselves with opportunities to teach, to be. Parents who read to their children, have books available, take trips, guide TV

watching, and provide stimulating experiences contribute to student achievement.(Michigan Department of Education, 2001)

The high socio-economic status parents are to provide their children with good books, and other scholastic materials and good environment at home which encourages their children to learn (Ogwu, 2004).

Schools supported by parents of low socio-economic status had fewer professionally trained teachers than the high achieving school. Professional qualifications are important in education. The professional skills of the teachers establish a productive classroom atmosphere from the start by means of good organization and carefully planned teaching structures (Farrank, 1998, p169).

Teaching style is a term that refers to the way that teachers attempt to educate their pupils; it is actually the way how a teacher behaves in classroom, their teaching styles or the methods used by a teacher. This entirely affect the performance if good better performance and if poor then poor performance (Jerome, 1915).

The idea that parents can positively influence their children's education is common sense. Children spend more time at home than they do at school, and parents have the opportunity for a number of interactions with their children in one-on-one situations. In addition, the home environment provides for more "teachable moments" between parent and child. There are three areas in which parents can have enormous control over a child' success in school: (1) controlling students absenteeism, (2) keeping a wide variety of reading materials available in the home, and (3) controlling the amount of the time the television is on.

Research says that when these three factors alone are controlled, it accounts for nearly ninety percent of the difference in test scores. What else can parents do? For one, they can provide a structure at home. Studies show that successful students have parents who establish a daily routine for doing homework, completing chores, and having a family meal together. These routines are important in making life predictable,

and in establishing a framework in which a child has security and a better chance of academic success (Israel, Beaulieu & Hartless, 2001).

Quality schools alone are not only part of the equation to enhance learning. Students themselves carry a major responsibility in the learning process. Self motivation, desire and intellectual capacity are among the few determiners that affect learning. These characteristics are influenced by genetic makeup and preschool environment (Owour, 1995)

According to Niyitegeka (2005), the factors such as school environment, students' factor, teacher factor and discipline and recruitment of students are the main ones that contribute to students' success in secondary national examination.

The researcher also found that there was mix feeling in relation to the factor that questioned parental influence. Majority of the respondents were of the view that parental influence through the feeding of their children were on the average. On the other hand the finding in relation to students feeding by the school authority was found insufficient.

Other factors affecting academic performance

There was again a finding that demands urgent upgrading of the teaching of Kinyarwanda language and its usage in secondary national examination. This as a result of the fact that many teachers were found to be using Kinyarwanda and French or Kinyarwanda and English, for concept explanation, whereas the examination question papers are normally written in English and French Languages.

In Education Watch, April-May 2007, the author explained that Ugandan Private schools have an edge over their counterparts as they are more organized in terms of pupil enrolment, teaching facilities and even staff remuneration enabling them to poach not only bright pupils from the public schools but also the more experienced teachers. The performance in the secondary school level examinations is still heavily skewed in

favor of the public schools. The private schools are yet to penetrate the exclusive top achievers cream set up by the old established government schools.

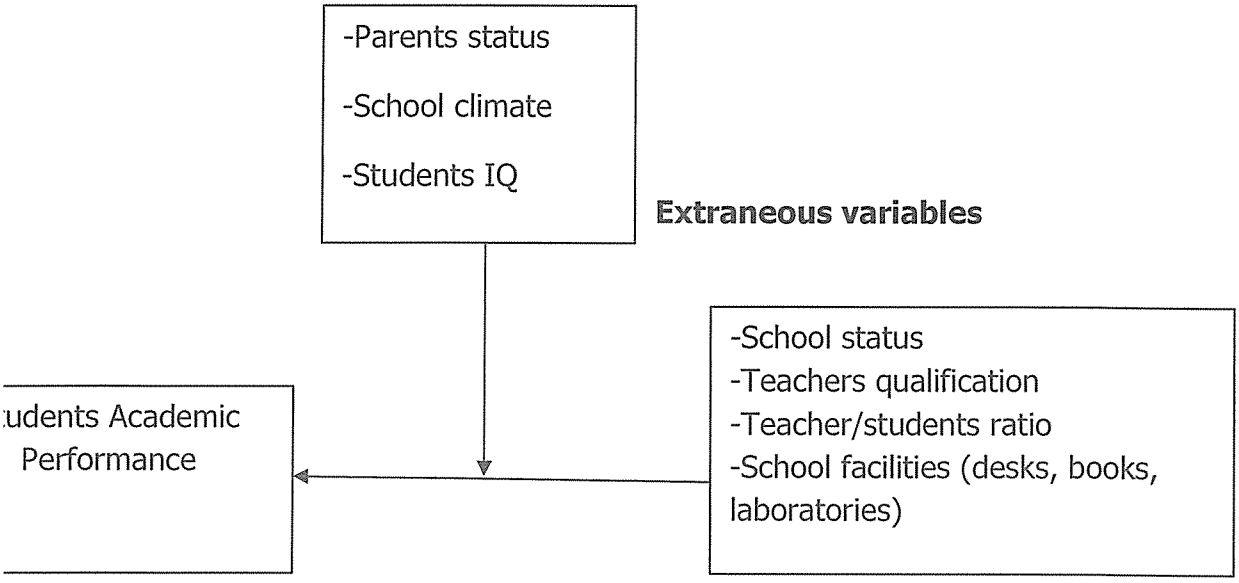
As it was explained by Mushimiyimana (2010), The Rwandan country knew changes in languages of teaching/learning process along years, depending on colonialists. During the period when Rwanda was colonized by Dutch people, the language of learning was Swahili. After 1916 when Rwanda was colonized by Belgium, the language of learning changed from Swahili to the mother tongue, Kinyarwanda and French.

The mother tongue was used to facilitate the communication while French anguage was used by some selected people who were not allowed to use the mother ongue. A student who by mistake was found speaking Kinyarwanda was punished. The eason for eliminating Swahili at school was justified by Kabayiza (2000) saying that at hat time Swahili was no longer a language of colonialists or a mother tongue for Rwandese.

After the independence of 1962, the national constitution of 24 November 1962 tated that the national language was Kinyarwanda while Official languages were rench and Kinyarwanda. Since then French and Kinyarwanda were used in teaching ctivities and this was not in favor of Rwandan pupils.

The same author noticed that after 1994 genocide especially in 1996 (as noted in he report of the seminary on teaching harmonization in 1996), English came to be the anguage of teaching in addition to French. Finally, in 2009, MINEDUC decided to use nglish as the only language of teaching in both primary and secondary schools.

Conceptual framework



Dependent variable **Independent Variables**

Related Studies

This study is related to the previous study done in October 2004. The study was entitled "The study on performance assessment of frontline providers". It was conducted by Prof.Joseph GAHAMA, Dr. NDABAGA Eugene, Mr. NYAMURASHA Moses, and Mr. Kaleeba.B, with the main purpose of finding out if Rwandan Schools are achieving the government' goal of quality education to improve the standards of its citizens through education.

The main findings that were found to be causes of poor performance and school dropout in primary and secondary schools were: lack of parental involvement, inadequate language of instruction, curriculum, lack of school facilities and scholastic materials, indiscipline, and lack of qualified teachers among others.

CHAPTER THREE

METHODOLOGY

Research Design

The research design for the study was the descriptive comparative survey design of the ex-post facto type. Qualitative and quantitative information were collected from schools and Governmental institutions such as Education Inspectorate in Kigali City, RNEC and Kigali City Council.

The researcher used questionnaires and government documents to get and analyze their data because those methods are compatible to the study. Documents Government institutions helped in carrying out investigation from the government document policy perspective. The documents involved in this study are second resources which are delivered from the Inspectorate of Education in Kigali City and Rwanda National Examination council. Going through these documents helped us to compare the academic performance between public and private secondary schools of Kigali City, Rwanda and factors affecting the academic performance in such schools.

Population

The population of this study is students of 74 secondary schools of Kigali City among them there are 10 public and 64 private schools. The total number of population is 33,903 students in both public and private schools of Kigali City, Rwanda.

Sample and Sampling Procedure

Sample size for respondents was determined by purposive sampling method. Out of the total of 35,903 students, a sample of 380 students was taken in 8 secondary schools among them four are public and 4 private secondary schools. The number of

students were identified according to the "table of sample size(s) required for the given population sizes (N)" (Amin, 2005).

For a school to be chosen it must have upper level of senior six and sat for A Level national examinations during the period of 2005-2009. Schools that have in common subjects which appear in national examinations were most eligible. It was found that more schools have as main subjects mathematics, chemistry, physics and biology. Three subjects were randomly chosen by the researcher: Mathematics, Physics and Chemistry. Only four public secondary schools were found to have these three subjects in national examinations during the period of 2005-2009.

Table 3: Population and Sampling

Categories	Type of categories	Target population	Sample	Justification
Schools	Public Schools	10	4	Only 4 schools had three subjects Mathematics, physics, chemistry
	Private schools	64	4	The number were randomly taken
Students	Public and private students	35,903 students	380 students	The number of students were identified according to the "table of sample size(s) required for the given population sizes (N)" (Amin, 2005).

Research Instruments

Researcher instruments were Questionnaires which were given to students in order to find the information they have about factors influencing academic performance in Kigali City. Factors studied were the teachers' qualification, teacher-students ratio,

school facilities such as textbooks, curricula, infrastructure, availability of laboratories and libraries.

The questionnaire was made up of three main parts. Part A was an introduction to the respondent. It was concerned with a letter written by the researcher to the respondent explaining the reason for such a questionnaire. This part was important for preparing the respondent psychologically so that he/she gives information as required.

The part B was concerned with proper questionnaire which also has two parts, one concerning the personal information of the respondent, in which students should inform about their age and sex and another part concerned with questions related to the study and which the respondent answer by stating if he/she strongly agrees, agrees, strongly disagrees or disagrees.

There was also the use of Observation checklist for schools results in A level national examinations in the period of 2005-2009 as given by Rwanda national Examination Council.

The study involved a sequence of methodological steps including literature review, visits to research site and questionnaires.

Besides the questionnaire was structured in such way that closed and open-ended answers were issued. The interview was a directed interaction between the researcher and the respondent. This means that the researcher used both structured and unstructured interview to get additional information from the school managers. This information complemented the information gathered from the questionnaires. The researcher himself conducted the interview.

Validity and Reliability of Research Instruments

Validity according to Gay (1976) is the degree to which a test measures what it is supposed to measure. The instrument used for the effect of interaction of teachers' qualification, teacher-students ratio and school facilities on academic performance of public and private secondary schools of Kigali City, Rwanda was constructed by the researcher to extract information on Teachers' qualification, school physical facilities such as school desks, libraries, laboratories, and records of students' results in A Level national examinations during the period of 2005-2009. Data collection was firstly carried out using a group of people from an area assumed to having similar characteristics as the sample of the study.

The reliability of both students' and teachers' instruments was established through a test-retest method. The researcher conducted a pre-test for the two sets of questionnaires in Martyrs Secondary School. A pretest was conducted again after one week to the same respondents in the same school and it gave the same results, showing that the questionnaires had consistency in reliability, hence the instruments were reliable.

Data collection procedures

Some important activities were done before data collection. Those are an introduction letter from the Director of the School of Post Graduates Studies Kampala International University to the local Government of Kigali City Council; The researcher took a visit the area of study before distributing questionnaires to sensitize the target population about the purpose of the research and to make an appointment on when to administer the questionnaires to the respondents.

The following step was the administration of questionnaires to the respondents and then data collection.

Secondary data were gathered from libraries, Rwanda National examination Council, Kigali City Council Offices, Districts of Kigali City and General Inspectorate of Education.

Methods for data presentation, analyzing and interpretation

Since the questionnaire combined both open and closed questions, it has been necessary to use two techniques of data presentation. Those are quantitative and qualitative techniques of data presentation, analysis and interpretation.

Data were presented in a tabular form and graphics in order to make clear all categories of answers and then make a generalization. For the sake of clarity and effective description, data were computed and the statistical tools like T-test and ANOVA were used to test all hypotheses on the problem being investigated. Figures were presented in tables as they were calculated.

Ethical consideration

During the research respondents were contacted and prepared before answering the questions in order to create in them a good mood so that they can freely answer questions as they agree. Respondents were not forced to answer to questions but motivated to participate in this research as its achievement is their own.

Limitations of the Study

Potential sources of bias in the proposed study might occur due to different factors. Sources may be: Lack of sufficient documentation, Budget for the whole work. In the country of Rwanda, the researcher could not find enough documentation since most sources of documentation were destroyed with the genocide of 1994.

The researcher was forced to give more than intended number of checklist to overcome those that might not be given back. Academic results of national examination during the period of 2005-2009 were not easily found. This is the reason why it took enough time and this required to spend much money to get possible results.

CHAPTER IV

PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA

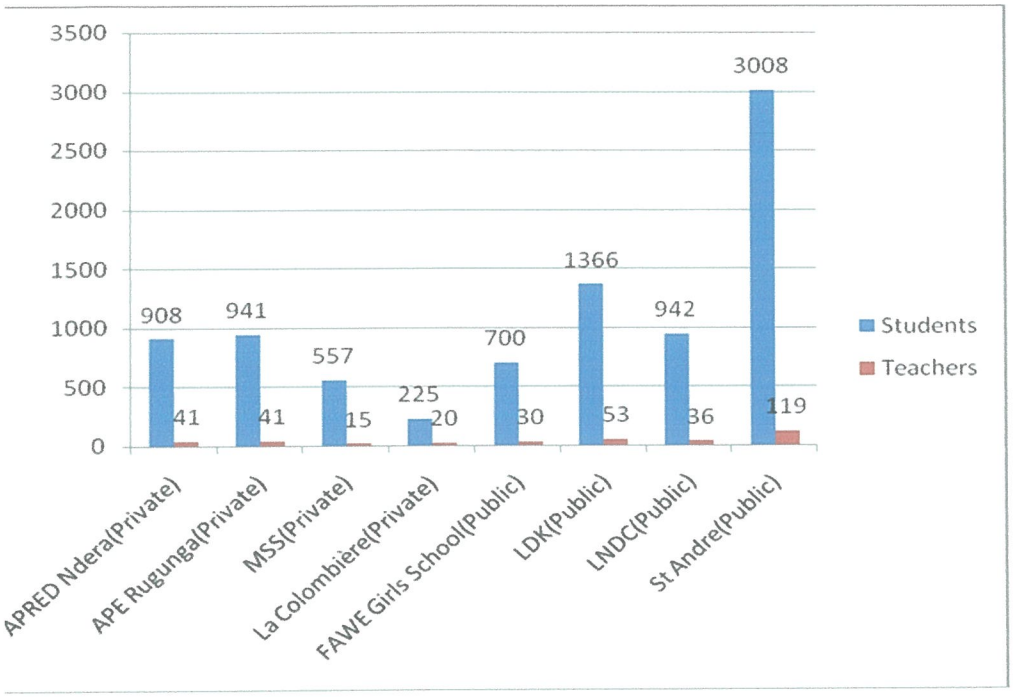
Chapter four is concerned with presentation, analysis and interpretation of data. Their analysis and interpretation were based on objectives and research questions that guided the study. On the other side data collected through the observation checklist were not ignored. They were presented using the tabular mode of data presentation. Every table is analyzed and interpreted with respect to the research questions of the study.

4.1 Profile of sampled schools

Table 4: The Profile of sampled schools and their school facilities

f	Status of the school	Students	number of teachers by qualification				teacher/ students ratio	Laboratories	Books in library	Computers	Desks
			Ao	A1	A2	TOT					
	Private	908	20	17	5	41	22	2	14,300	43	302
	Private	941	21	17	3	41	23	1	3,819	37	310
	Private	557	11	3	1	15	37	2	3,419	0	312
	Private	225	17	0	3	20	11	2	2,685	58	145
		2631	69	37	12	117	23	7	24,223	138	1069
	Public	700	26	4	0	30	23	3	10,158	55	395
	Public	1366	32	16	5	53	26	3	27,271	65	614
	Public	942	18	10	8	36	26	3	6,014	60	703
:	Public	3008	76	30	13	119	25	2	2,970	40	1009
		6016	152	60	26	238	25	11	46,413	220	2721

raph 1. The profile of sampled schools



The graph above shows the number of students and teachers in sampled private nd public schools secondary schools of Kigali City, Rwanda. It shows that the number f students in private schools is smaller than the number of students in public schools. t the same time, the number of teachers is larger in public schools than in private chools.

The table 4 above also shows the difference in availability of school facilities etween public and private secondary schools of Kigali City, Rwanda. It shows that ublic schools are well equipped with facilities than private schools.

4.2 Academic performance of students in public and private secondary Schools during the period of 2005-2009

The dependent variable of our study was the academic performance of public and private secondary schools of Kigali City. The researcher intended to answer the research question one that is "What is the performance of candidates that sat for the national examination in 2005-2009, in public and private secondary schools in Kigali City, Rwanda?"

When we consider the students results in three subjects, mathematics, chemistry and physics during the period between 2005 and 2009 in the area covered by the study, we see that public schools have continuously performed better than private schools. At the same time the numbers of students who succeeded and performed at higher level were from public secondary schools.

Table 5: Performance of students at high grade

	Chemistry			Math			Physics		
High Grade	N	Grade A-B⁻	%	N	Grade A-B⁻	%	N	Grade A-B⁻	%
Pubic	2434	569	23.3	3119	215	6.9	2198	217	9.8
Private	1357	58	4.2	2295	29	1.3	1301	18	1.4
Fillures	N	F-S	%	N	F-S	%	N	F-S	%
Public	2434	77	3.1	3119	364	11.6	2198	200	9.0
Private	1357	306	22.5	2295	630	27.4	1301	420	32.2

The table 5 above shows that students scored at high level as following: when considering grades A⁻B⁻, students of public schools have scored at 23.3% in chemistry, 6.9% in mathematics and 9.8% in physics while in private schools students scored at 4.2% in chemistry, 1.3% in mathematics and 1.4% in physics. Those percentages

represent people who scored at over 70%. Difference in performance is again shown by using statistical methods especially ANOVA as follows:

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	50072.33	2	25036.17	0.447983705	0.675708	9.552094
Within Groups	167659	3	55886.33			
Total	217731.3	5				

Since the p-value 0.675708 > 0.05, the value of the test statistics falls into rejection region. We reject Ho; that is there is a significant difference in performance between public and private school at grade A-B⁻ in three subject chemistry, mathematics and physics. Results show that public schools performed better than private schools.

At the same time, the difference in academic performance was tested considering the number of failures in public and private schools. The table below shows the number of students who failed in national examinations in both public and private schools. Students who scored at grades F to S have got less than 50% and then they have poor performance.

The table 5 again shows that the percentage of failures in private schools is greater than the percentage of failures in public schools. When taking into consideration three common subjects, in chemistry, out of 2434 candidates who sat for chemistry, only 77 candidates representing 3.1% failed while in private secondary schools out of 1357 candidates who sat for chemistry, 306 candidates representing 22.5% failed. In mathematics, out of 3119 public candidates who sat for examination,

364 representing 11.6% failed while in private schools out of 2295 candidates who sat for mathematics, 630 representing 27.4% failed.

The number of failures in physics is greater in private than in public schools. During 2005-2009 in public schools, out of 2198 candidate who sat for physics, 200 representing 9% failed while in private schools out of 1301 candidates who sat for physics 420 representing 32.2% failed.

4.3 Factors affecting academic performance in Kigali City secondary schools

Among different factors which impact on academic performance, the study was based on three main factors such as teachers' qualification, teacher/students ratio, availability of school facilities and parents' contribution.

4.3.1 Independent variable (1): Qualification of teachers

Research question Two: "How does the teachers' qualification influence the academic performance of students in Kigali City, Rwanda?"

Results from the study were supportive to the research hypothesis H2 stating that there is no significant difference in teachers' qualification between public and private secondary schools in Kigali City, Rwanda. The table 4.6 below shows the number of teachers in sampled public and private secondary schools, according to their qualification.

Table 6: Qualification of teachers in sampled schools

Name of the School	Number of teachers by qualification			
	A0	A1	A2	TOT
APRED Ndera	20	17	5	42
APE Rugunga	21	17	3	41
MSS	11	3	1	15
La Colombière	17	0	3	20

S/Total private	**69**	**37**	**12**	**118**
FAWE Girls School	26	4	0	30
LDK	32	16	5	53
LNDC	18	10	8	36
St Andre	76	30	13	119
S/total Public	**152**	**60**	**26**	**238**
Total	**221**	**97**	**38**	**356**

As it was shown in table 6 above, most teachers are well qualified with either a bachelor's degree or a diploma in education. Few of them have got a secondary leaving certificate. Though this good qualification in public and private schools, the table shows that the number of teachers with a bachelors' degree is larger in public schools than the private schools. The difference in teachers' qualification is tested by a T-Test below:

T-Test
Teachers with a Bachelor's degree

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Private A0	17.2500	4	4.50000	2.25000
	Public A0	38.0000	4	25.97435	12.98717

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1 A0 - A0	-20.75000	25.59134	12.79567	-61.47153	19.97153	-1.622	3	.203

Since p-value in 2-taled (0.203) is greater than alpha (0.025) we accept the hypothesis which says that there is a significance difference in teachers' qualification. Since as depicted in Table above, the mean of teachers in private schools who have a bachelor's degree (A0 qualification) are 17.25 while in public schools they are 38. This implies that public schools have a bigger number of teachers with a bachelor's degree than private schools.

Teachers' Qualification (Diploma)

The table below shows that the mean of teachers with a diploma is larger in public shools than in private schools. In public schools, the mean is equal to 15.0 while in orivate schools it is 9.2.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Private A1	9.2500	4	9.03235	4.51617
	Public A1	15.0000	4	11.13553	5.56776

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1 Private A1 - Public	-5.75000	18.13606	9.06803	34.60852	23.10852	-.634	3	.571

The T-Test used above shows that the p-value 0.571 is greater than alpha 0.025 nd this implies there is a significant difference in teachers' qualification with a diploma. 'his implies that public schools are working towards the quality standards in education or secondary schools in Rwanda, which requires that teachers for lower secondary ducation at least have A1 and upper secondary should hold A0.

Teachers' Qualification (Secondary leaving certificate, A2)

The under qualified teachers with a secondary certificate in public schools are 26 representing 10.0% of public school teachers, while in private schools they are 12 representing 10.16% of private school teachers.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Private A2	3.0000	4	1.63299	.81650
	Public A2	6.5000	4	5.44671	2.72336

Paired Samples Test

	Paired Differences					t	df	Sig. (2-tailed)
				95% Confidence Interval of the Difference				
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper			
Pair 1 Private A2 - Pub	3.50000	6.55744	3.27872	3.93435	6.93435	-1.067	3	.364

The T-Test above shows that there is a significant difference in number of teachers with a secondary leaving certificate since the p-value (0.364) is greater than 0.025. The mean in public is 6.5 while in private it is 3.0. This shows there is steal a need of improving the qualification of teachers and recruiting more teachers with at least a bachelor degree in both public and private schools. It is more noticeable in public secondary schools.

4.3.2 Independent variable 2. Teacher/students ratio

Research question Three: How does the teacher-students ratio influence the academic performance of students in Kigali City, Rwanda.

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Private Teacher student ratio	23.2500	4	10.65755	5.32877
	Public Teacher student ratio	25.0000	4	1.41421	.70711

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	PrivateTeacher student ratio - Pu Teacher student r	1.75000	10.24288	5.12144	8.04871	4.54871	-.342	3	.755

As it was shown by the T-test above, the p-value calculated is greater than 0.05 which means there is a significant difference in teacher student's ratio between public and private secondary schools of Kigali City, Rwanda. The teacher student's ratio in private school is 23 while in public schools it is 25. The difference is not great and both ratios are acceptable according to education quality standards established by the General Inspectorate of Education, in 2009 which require the number of students not exceeding 46 students in a classroom.

This implies the teacher students' ratio in both public and private schools does not negatively affect their academic performance.

4.3.4 Independent variable 3. Availability of school facilities

Research question Four: "How do the school facilities influence the academic performance of students in Kigali City, Rwanda?"

Availability of laboratories to teach science

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Private number of laboratories	1.7500	4	.50000	.25000
	Public number of laboratories	2.7500	4	.50000	.25000

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Private number of laboratories - Public number of laboratories	-1.00000	.81650	.40825	-2.29923	.29923	-2.449	3	.092

'he p-value calculated (0.92) is greater than 0.05. That is we reject Ho and it implies hat there is sufficient evidence to conclude at 5% significance level that there is lifference in availability of science laboratories between public and private secondary chools.

'his implies that in most public and private schools there are laboratories to teach cience but enough materials are available in public schools more than in private chools. Results found supportive in answering the research question four which focus n how school facilities affect the academic performance in public and private schools. 'he difference in availability of laboratories contributes to the justification of difference n academic performance between public and private schools.

Availability of school libraries

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Private Number of books in libraries	6.05575	4	5.516192	2.758096
	Public number of books in libraries	11.61575	4	10.844089	5.422045

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Private Number of books in libraries - Public number of books in libraries	-5.560000	12.255275	6.127638	-25.0609	13.940878	-.907	3	.431

The p-value calculated (0.431) is greater than 0.05. That is we reject Ho and it implies that there is sufficient evidence to conclude at 5% significance level that there is difference in availability of libraries between public and private secondary schools.

This implies that most of public schools have libraries at school and those libraries have enough books to help students in learning activities, while few private schools have got libraries and most of those libraries do not contain enough books to help students. This is an other factor related to the poor academic performance of private schools in Kigali City.

Availability of school computers

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Private number of computers	34.5000	4	24.63737	12.31868
	Public number of computers	55.0000	4	10.80123	5.40062

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Private number of computers - Public number of computers	-20.50000	32.51154	16.25577	-72.23311	31.23311	-1.261	3	.296

'he p-value calculated (0.296) is greater than 0.05. That is we reject Ho and it implies hat there is sufficient evidence to conclude at 5% significance level that there is lifference in the number of computers for computer science between public and private econdary schools.

'his implies that most of public schools have enough computers at school to help tudents in learning activities, while few private schools have got at least a computer oom with enough computers. This is an other factor related to the poor academic erformance of private schools in Kigali City, Rwanda.

Number of desks in sampled schools

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Private number of desks	267.2500	4	81.61444	40.80722
	Public number of desks	680.2500	4	254.52619	127.26310

Paired Samples Test

		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper			
Pair 1	Private number of desk Public number of desk	-413.000	325.66138	62.83069	-931.200	05.19993	-2.536	3	.085

The p-value calculated (0.085) is greater than 0.05. That is we reject Ho and it implies that there is sufficient evidence to conclude at 5% significance level that there is difference in the number of desks between public and private secondary schools.

This implies that most of public schools have enough desks, while some of private schools have not enough desks, and as a results more students seat on one desk. This is an other factor related to the poor academic performance of private schools in Kigali City, Rwanda.

CHAPTER FIVE

FINDINGS, CONCLUSIONS, RECOMMENDATIONS

This chapter portrays a discussion of the results of the study, based on the findings presented in chapter four. The discussion is related to the objectives of the study and the findings earlier stated. Conclusions are drawn and recommendations are given.

FINDINGS

Academic performance in Private and Public secondary schools of Kigali City in the period of 2005-2009

Research Objective One was to establish the comparison of students' results in national examination between public and private secondary schools of Kigali City within the period of 2005 and 2009.

The study was based on the research question one "What is the performance of candidates who sat for national examination in 2005-2009, in public and private secondary schools in Kigali City?"

Concerning the performance at high grades A^--B^-, it was found that there is a great difference in academic performance between public and private schools. The T-test showed that p-value 0.675708 > 0.05 allows to reject Ho; that is there is a significant difference in performance between public and private school at grade A-B^- in three subject chemistry, mathematics and physics. Results show that public schools performed at higher grade better than private schools. It was found that private schools have a low performance than public schools.

The above findings led to a conclusion that academic performance of both public and private secondary schools improved during the period of 2005-2009; and during the same period public schools performed better than private schools.

Teachers' qualification affecting the academic performance

Research objective Two intended to determine how factors such as teachers' qualification, teacher student ratio, and school facilities, influence the academic performance of Kigali City secondary schools both public and private.

The first independent variable in this study was teachers' qualification. As it was given in a checklist showing the qualification of teachers, it was clear that only 19.3% of have got a bachelor's degree in education while in private schools while in public schools they represent 42% while other 17% of the total number have a diploma in public schools.

Since the Quality Standards in Education for Rwanda (2009) accept as qualified, a teacher with a bachelor's degree or at least a diploma, the above percentages show that Public schools in Kigali City have better qualified teachers than private schools. This affect their academic performance and research found that the high level of qualification of teachers in public secondary schools contributes to the high academic performance of their students while the great number of under qualified teachers in private schools leads to the poor academic performance of their students.

Teacher/Students ratio affecting the academic performance

The second independent variable in this study was the teacher/students ratio. Results from the research showed that both public and private schools respect standards from the ministry of education requiring not more than 30 students per a teacher. It was found that in public secondary schools the teacher/students ratio is 1:22 while in private schools it is 1:23. This leads to a conclusion that the teacher/students ratio did not affect the academic performance in both public and private secondary schools of Kigali City during the period of 2005-2009.

School facilities as factors affecting academic performance

The third independent variable in this study was school facilities as a factor affecting the academic performance. Results from the study showed that the availability of school facilities was different from public and private secondary schools during the period of 2005-2009. Those facilities were stated as school desks, learning materials, curricular copies, library, and laboratories.

Results from the study showed that a big number of public schools have enough desks in classrooms than private schools. The p-value calculated (0.085) is greater than 0.05. That is we reject Ho and it implies that there is sufficient evidence to conclude at 5% significance level that there is difference in the number of desks between public and private secondary schools.

Research found that that most of public schools have enough desks, while some of private schools have not enough desks, and as a results more students seat on one desk. This is an other factor related to the poor academic performance of private schools in Kigali City, Rwanda.

These results are supportive in answering the research question three focusing on how school facilities affect the academic performance. It was seen that private schools do not have enough desks and since students are not comfortable with the sitting places, they do not study very well and this leads to poor academic performance, while students from public schools with enough sitting places can easily study their subjects and then perform better.

School library with appropriate books were taken as affecting academic performance. It was found that the p-value calculated (0.431) is greater than 0.05. That is most of public schools have libraries with enough books to help students in learning activities, while few private schools have got libraries and most of those libraries do not contain enough books to help students. This is an other factor related to the poor academic performance of private schools in Kigali City.

The same statement appears basing in availability of school science laboratories. The p-value calculated (0.92) is greater than 0.05. That is there is difference in availability of science laboratories between public and private secondary schools. The research findings showed that there are laboratories to teach science in most public schools while private schools do not have enough science laboratories.

Results found are supportive in answering the research question four which focus on how school facilities affect the academic performance in public and private schools. The difference in availability of laboratories contributes to the justification of difference in academic performance between public and private schools.

The availability of computers to learn computer science is still a problem in more secondary schools of Kigali City. This is a big challenge to students who prepare for international competition on the job market. This study found out inequalities in computer availability between public and private schools. The p-value calculated (0.296) was greater than 0.05. That showed that there is a difference in the number of computers for computer science between public and private secondary schools.

It was found that most of public schools have enough computers at school to help students in learning activities, while few private schools have got at least a computer room with enough computers. This is an other factor related to the poor academic performance of private schools in Kigali City, Rwanda.

CONCLUSIONS

As explained by Ndabaga et al. (2004), education is considered to be the one of the most important catalysts of human resource development, especially in Kigali City. Poor school performance does not only results in the students with low self-esteem but also it causes the stress to teachers who teach them and parents who seem to pay school fees for nothing. Since 1994, the Government of Rwanda and the private sector

focused on improving the quality of education given to Rwandan children. Schools from Kigali City were not neglected and thus many private schools opened the doors.

The study was conducted to analyze the academic performance of public and private secondary schools of Kigali, and identify some of factors affecting the academic performance. The researcher found that there were three main factors affecting the academic performance such as the qualification of teachers, teacher/students ratio, and availability of enough school facilities.

Results indicate that the academic performance of Kigali City Secondary Schools increased along the period of 2005-2009. It was found that though both sides knew a noticeable improvement in academic performance, public secondary schools were all the time on the top of performance.

Teachers' qualification was the main factor that improved the quality of teaching in Kigali City and thus resulting in a high academic performance. During the whole period, Kigali City emphasized on recruitment of highly qualified teachers in both public and private schools. The difference in numbers of qualified teachers was parallel to the difference in academic performance between public and private schools.

A positive point was found about teacher/students ratio. Kigali City secondary schools, both public and private schools, have a small teacher/students ratio, and it was almost the same 1:22 and 1:23 respectively in public and private schools. This was considered as a good determinant of education quality of Kigali City secondary schools.

It was found that the provision of enough school facilities influences positively the ongoing of the schools. Thus the lack of enough and adequate facilities such as school desks, books in library and enough materials in laboratory, and computers to help students do their work and research with the computer, in most private schools handicaps the good expected performance of the outcomes of those schools. This is because in such schools without or with few school facilities students simply cram the

subject matter without further understanding and thus after a given time all things are forgotten, which results in failures in national examination.

Looking at the contribution of parents to education of their children, Kigali City parents were sensitized to show their impact on the improvement of their children's education but their role is still small. In public schools parents do not make a great effort in providing their children with enough learning materials not because of poverty but because since time, most of learning materials were given by the Government. Parents from private schools seem to be in advance though there is a need to encourage them much more.

RECOMMENDATIONS

Based on the findings, this section presents recommendations seemed necessary to help improvement of academic performance in Kigali City Secondary schools. Those recommendations are addressed to different people namely the government and educational planners, curriculum designers, local government, the school managers, teachers and parents.

Recommendations for the government and planners:

Reinforce the continuous training of teachers in both public and private schools ensuring that they do not have only a degree in education but that their methods of teaching are updated every time.

should increase rapidly the supply of school facilities not only to public schools but also to private schools since both sections are preparing future leaders of the country.

-They must provide textbooks to achieve a student/textbook ratio of 1:1 in all the subjects and adequate supplies of supplementary reading materials for students and teachers.

-To plan for centers of libraries and laboratory facilities which are commonly used by all students from public and private secondary schools.

Recommendations for private sector and community in general:

- To make effort in employing only qualified teachers and provide them with training in new knowledge and new teaching techniques
- To participate in the provision of teaching and learning aids, and to acquire teachers with special training in production of local teaching aids.
- To work closely with Local Government and the Ministry of Education in planning and implementation of academic programs so that all students are taught the same thing in the same manner.

Recommendations to school managers

- To provide their teachers with relevant teaching materials;
- To work closely with local leaders and parents in order to share responsibilities in improving the quality of education in their schools and thus increase the academic performance;
- To establish a system of study tours in which teachers visit the model schools to get experience from them.
- To establish a system of assisting students from poor families with learning materials and school fees and any other kind of assistance so that they do not feel frustrated in coming school without all requirements.

Suggestions for further research

Academic performance in Rwandan secondary schools has been studied by different authors but in a general way. Studies were carried out on academic

performance in specific areas but not much in comparison between public and private schools.

Numerous factors affecting academic performance were discussed but not deeper as such. This study came out with some remarks and recommendations to overcome the problem of poor performance occurring in different schools both public and private schools.

Therefore, the researcher invites all people who have interest in contributing to a high quality in education of Kigali City secondary schools, to go with a deep research on factors affecting academic performance in Kigali City secondary schools.

REFERENCES

AMARA E., A (May 2002). "*Guide on children's rights, in the African Charter on the Rights and Welfare of the Child*", Addis Ababa.

Amin, E.M. (2005). "*Social science research: conception, methodology and analysis*", 1st ed, Kampala, Makerere University.

"*Annex to the presidential order establishing quality standards in Education*", as retrieved on http://www.ige.gov.rw/index.php?option=com_docman&task=doc_details & Itemed=14&gid=12&lang=en , on 17 February 2011.

Asikhia, O. A (2010). "*Students and Teachers' Perception of the Causes of Poor Academic Performance in Ogun State Secondary Schools*", Nigeria.

Bureau of African affairs, *Background Note Rwanda*". Retrieved from http://www.unesco.org/prsp/docs/prsp-final/Rwanda.PDF, 18th November 2009.

Eurasia Journal of Mathematics, Science and Technology Education, Volume 2, Number 2, July 2006

FORREST W.PARKAY, copyright 2010, Inc. "Becoming a teacher", Upper Saddle River, New Jersey.

General Inspectorate of Education (July 2010). "*Annual Education Report 2009 Featuring Nursery , primary, vocational, literacy and special Education*", Kigali .

General Inspectorate of Education.Sept.2009."*Quality Standards in Education for Nursary, Primary and Secondary Schools in Rwanda*", Kigali.

Isarel, G.D., Beaulieu, L.J., & Hartless,G (2001). *"The influence of family and community social capital on educational achievement".* Retrieved on http://www.essortment.com/all/parents involvem-trhuj.htm, on 2nd July, 2010

JOSEPH E., Jesuina M. B, "Secondary Student perceptions of factors effecting failure in science in Portugal", retrieved on www.ichr.uwa.edu.au/files/user 17/volume3

Macmillan (2002), "*Macmillan English dictionary for advanced learners".*

Michigan Department of Education Decision Making Yardstick, 2001. *"What research says about parents' involvement in children' education in relation to academic Achievement".*Retrievedon:http://www.michigan.gov/documents/Final_Parent_Involvement_Fact_ Sheet_14732_7.pdf

Mike Taafe and Everarda G. Cunningham, *"Measurement models of factors influencing academic achievement and completion of tertiary studies",* Swinburne University of Technology, Lilydale, Victoria; Retrieved on www.aare.edu.au/05pap/taa05428

MINEDUC (2010). *"Education Sector Strategic plan".* As retrieved on http://planipolis.iiep.unesco.org/upload/Rwanda/Rwanda%20Education%20Sector%20Plan%202006%202010.pdf

MUSHIMIYIMANA B.,Août 2010. "Indice de la maîtrise des langues d'enseignement sur le processus d'enseignement/apprentissage au Rwanda". CAS des écoles secondaires du District de Kicukiro: APADE ET A.I.P.E.R Nyandungu (2009)", Kigali.

NDABAGA Eugène, October 2004. *"The study on performance assessment of Frontline Providers",* Kigali.

NIYITEGEKA Godefroid, May 2005. "*A study of factors that affect learners' performance in National Accounting Examination at the secondary school level: The case study of King David Academy and ESSA Nyarugunga (2001-2003)*", Kigali.

NIYONSABA. A,Septembre 2009. "Etude comparative de la réussite scolaire entre les jeunes filles et les jeunes garçons fréquentant les filières scientifiques au niveau de l'enseignement secondaire. Cas des écoles scientifiques de la Ville de Kigali", Masoro.

NIYONZIMA d. Août 2009."*Problématique sur la fréquentation des laboratoires par les élèves des sections scientifiques: Cas du district Nyarugenge 2007-2009*", Masoro.

Owour (November 2005)."*Poor performance of students in secondary schools*". World Bank Policy, Review, Newsletter.

Préfecture de la Ville de Kigali, 1990. « *Monographie de la Ville de Kigali* », Edition 1990. Kigali

SEBANANI P., Aût 2009. "*Effet de l'Insuffisance du matériel de laboratoire sur l'enseignement/apprentissage des eleves en section de Biochimie. Cas du district de Nyarugenge*", Kigali.

The state of the World's Children. Feb.2011, "Adolescence, An age of opportunity", United Nations Children's Fund.

Wagner D. (1991), "*The future of literacy in a changing World*", Vol.1, Pergomon Press, Oxford Press, Oxford.

WODIDI MOSES BWAISA, Oct.2007. "*The causes of poor performance of the students in sciences within secondary schools in NSANGI Sub country, Wakiso District.*

Yadav, k (2001). "*Teaching of Life Science*", Anmol publications, pvt Ltd.

APPENDICES

Appendix 1

TRANSMITTAL LETTER

KAMPALA INTERNATIONAL UNIVERSITY

Ggaba Road, Kansanga PO BOX 20000 Kampala, Uganda
Tel: +256(0) 41-266813 * Fax: +256 (0) 41-501 974
E-mail: admin@kiu.ac.ug *website: http: // www.kiu.ac.ug

INSTITUTE OF OPEN AND DISTANCE LEARNING

OFFICE OF THE DIRECTOR

1st July 2010

The Hon. Mayor of City of Kigali
P.O Box 3527 Kigali

Dear Sir/madam

INTRODUCTION LETTER FOR RESEARCH

I have the pleasure to introduce YANKURIJE Marthe - MED/10027/81/DF to you. She is a student of ***Masters Degree in Educational Management and Administration*** *at Kampala International University. She is carrying out her research on* ***"A Comparative Analysis of A' Level Students' Academic Performance of Public and Private Secondary Schools in Kigali City, Rwanda".*** *She is at the data collection stage and your Institution/organization has been identified as her area of study. It will therefore be appreciated if you can give the best assistance to her for a dependable research work.*

The university will be counting on your kind cooperation.

Dr Joseph S. owoeye

KIU 01 JUL 2010 IODL DIRECTOR

Exploring the Heights

Appendix 2

RESEARCH INSTRUMENT

2.1 Questionnaire for Students

A. Introduction part

"Dear respondent"

I am a Kampala International University student, making a research on **"A study on academic performance of public and private secondary schools in Kigali City".** I kindly request you to spare me your priceless time and respond to the questions as genuinely as possible. I wish to further request you to answer all questions if possible. The information you give will be treated confidentially and used solely for the academic purpose. Thus the questions require free expression of what you feel by filling in or ticking the appropriate answers. Your cooperation and honest opinion are highly appreciated.

Yours Sincerely,

YANKURIJE Marthe

Student, Kampala International University

B.QUESTIONNAIRE FOR STUDENTS

Personal information

Instructions A: Put "X" to the correspondent answer

Age: 16-20☐ 20-35☐ 25-30☐ 30-35☐

Sex: Male☐ Female☐

Questionnaire

Instructions B: Put "X" to the correspondent answer.

SD=Strongly Disagree; **D**=Disagree; **A**=Agree and; **SA**=Strongly Agree

	Statements	SA	A	D	SD
1	Your parents give you enough material to help your learning activities such as textbooks, notebooks, pens, .../*Ababyeyi baguha ibikoresho bihagije bigufasha kwiga nk'ibitabo, amakayi, amakaramu, ...*				
2	The school desks are enough to your number in classroom/*Intebe ziri mu ishuri ryanyu zirahagije.*				
3	The school provides enough materials like books, geographical and mathematical tools, ... to help your learning activities /*Ikigo kibaha ibikoresho bihagije bibafasha kwiga nk'ibitabo, ibikoresho bya jewogarafi, iby'imibare ndetse n'ibindi.*				
4	You use the school library to help your learning activities /*Mukoresha isomero ryo ku ishuri mu kwiga kwanyu.*				
5	That school Library has enough books/*Iryo somero rifite ibitabo bihagije.*				

6	You use the school laboratories to learn sciences /*Iyo mwiga siyansi cyangwa ubumenyi mukoresho raboratwari.*				
7	Those laboratories have enough materials/*Izo raboratwari zifite ibikoresho bihagije.*				
8	Your school provides computers to learn computer science/*Ikigo cyanyu gifite imashini (ordinateurs) mwigiraho.*				

2.3. Interview guide (with the headteachers)

1. What is the number of classes, classrooms, students, teachers with their qualifications for each level?

2. What are the available and needed teaching materials (libraries, laboratories, computers, curricula)?

3. If it would mind, provide to us the more information about the resource of your financial facilities to run the run the school.

4. What are the contributions of parents and NGOs to the schools facilities?

5. Could you tell us about academic performance of your school during the period of 2005-2009?

6. If it would mind, provide to us more information about factors influencing academic performance in your school.

Appendix 3*: AVAILABLE TEACHING FACILITIES IN EACH OF THE SCHOOLS SELECTED IN THE SAMPLE*

	NAME OF THE SCHOOL	Status of the school	Number of students	Number of teachers by qualification				Teacher/students ratio
rivate	MSS	Private	557	11	3	1	15	37.13
	APRED Ndera	Private	908	20	17	5	41	22.14
	APE Rugunga	Private	941	21	17	3	41	22.95
	La colombière	Private	225	17	0	3	20	11.25
	S/TOT		**2631**	69	37	12	**117**	
ıblic	FAWE Girls School	Public	700	26	4	0	30	23.33
	LDK	Public	1366	32	16	5	53	25.77
	LNDC	Public	942	18	10	8	36	26.16
	St André	Public	701	39	0	2	41	17
	S/TOT		**3709**	115	30	15	**160**	

Appendix 4: SAMPLE SIZE (S) REQUIRED FOR THE GIVEN POPULATION SIZE (N) BY (AMIN, 2005)

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	256	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	10000	384

Source: Fom R.V. Krejcie and D.W. Morgan (1970), Determining sample size for research activities, Educational and psychological measurement, 30, 608, Sage Publications.

RESEARCHER'S CURRICULUM VITAE

Personal Profile

Names: YANKURIJE Marthe

Status: Single

Parents: HITIMANA Elie and NYIRANGWERA Eliana

Place and Date of birth: Nyamasheke, 17 July 1975

Place of residence: Kacyiru Sector, Gasabo District, KIGALI CITY

Educational Background

1982-1990: Nyakibingo primary school

Award: Primary Leaving Certificate

1990-1996: Institut St François de Shangi

Award: Degree in Education (A6)

1999-2003: Kigali Institute of Education

Award: Bachelor's Degree in Science with Education

2008-2010: Kampala International University

Work Experience

1997-1998: Teacher of science at Groupe Scolaire de Karengera

2003-2005: Teacher of science at Martyrs Secondary School

2005-2006: Survey on socio-economic status of Rwandan families in Former Cyangugu Province.

Nov 2007-Sept 2009: Officer in charge of Education in Kigali City

Oct 2009- Dec 2010: Officer in charge of Archive & Documentation in Kigali.

Jan 2011-Today: Inspector of Education in Kigali City