OPERATIONAL MANAGEMENT AND ITS EFFECT ON THE ACADEMIC PERFORMANCE OF SECONDARY SCHOOL STUDENTS IN ADJUMANI DISTRICT, UGANDA

BY

JULIET VINCENT DRAJO

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DECLARATION

I, Juliet Vincent Drajo, declare that this study is my original work and has, to the best of my knowledge, never been submitted for the award of a degree or any other award in a University or other institutions of higher learning.

Signature.....

Date:....

APPROVAL

This dissertation has been submitted for examination with my approval

Signed

Date:....

Supervisor: Dr. Kagoda

DEDICATION

This dissertation is dedicated to Our Lady, Mary Mother of the Church whose

intercessory prayers resulted into its production.

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ABSTRACT

The purpose of this study was to investigate the effect of management by educational personnel, management of instructional materials, management of educational facilities and management of finances on the performance of secondary school students in Adjumani district.

The researcher used a cross-sectional survey design, which employed quantitative and qualitative approaches. Out of the 13 schools, the researcher selected four secondary schools; two were government aided, two private, one purely girls, the rest mixed. The target sample for students and teachers was 152 but 149 questionnaire were received and key informants were 10 out the 16 targeted. Frequencies and percentage accompanied with chi-square, correlation and regression analysis were used to test the effect of management by educational personnel, instructional materials, facilities and finance on performance of secondary school students.

The research found out that management by educational personnel accounted for 6.2% change in students' academic performance in Adjumani district. Management of instructional materials accounts for 6.6% change in students' academic performance in Adjumani district. Management of educational facilities accounts for 5.3% change in students' academic performance in Adjumani district. Management of finances accounts for 5.3% change in students' academic performance in Adjumani district.

The research concluded that head teachers need to be adequately trained in their managerial roles so as to regularly supervise their teachers and other school activities. Among others, they should plan for staff development, staff houses, means of transport because most teachers are diploma holders, who commute from their homes far from school which is negatively affecting students' academic performance. There is no reading culture and research by both teachers and students since they are inadequately exposed to the use of instructional materials, consequently affecting academic performance of most schools in Adjumani negatively. There is a significant positive relationship between management of educational facilities and students' academic performance. Lack of laboratory and library facilities in one case and lack of electricity and running (taped) water in most schools cannot provide students conducive environment for studying. Most head teachers do not raise enough finances to adequately cater for all running and development costs. Meagre funds are used for administrative purposes other than for purchasing laboratory equipments, chemicals, instructional materials and paying teachers' salaries and allowances. That is why teachers are reluctant to teach.

The research recommended that head teachers should be adequately trained by the Ministry of Education and Sports to enhance their managerial roles more effectively. Teachers and students should be more exposed to the use of instructional materials in order to develop reading culture and research. Head teachers should budget for the provision of essential facilities like electricity, running water, laboratory and library facilities, which will improve on the learning environment. Head teachers need to be trained in resource mobilization skills to diversify sources of income for their schools. Hence, ensure adequate remuneration for teachers to boost their natural interest and commitment to work.

CHAPTER ONE

INTRODUCTION

1.0 Background to the Study

The global concern of governments and Uganda in particular has been amongst others, performance of secondary school education. According to Odubuker (2004:2-3), and Kaggwa (2003:5), academic performance is defined as the quality and quantity of knowledge, skills, techniques, positive attitude, behavior and philosophy that students acquire. The ability to achieve is evaluated by marks and grades obtained in a test or examination, at the end of a topic, term, year or education cycle. The authors further assert that the quality of grades and the number of candidates who pass in the various grades determine the level of academic performance of a given class or institution in a given period of a particular examination whether internal or public. Performance as shown by Uganda National Examinations Board (UNEB) results on the table below.

Table 1: Summary of UNEB Results of Sampled Secondary Schools in AdjumaniDistrict 2001-2005

Sch. Name	1 st Grade	2 nd Grade	3 rd Grade	4 th Grade	7 th Grade	Failed (F9)	Total
Biyaya SS	13	60	184	108	4	24	393
Mons. Bala SS	98	235	309	127	1	33	803
St. Mary Assumpta	3	57	140	92	2	3	297
Grades	114	352	633	327	7	90	1523
National performance	605,100	987,269	398,362	265,575	199,181	234,443	2,689,930

Source: School records/files

The table indicates that out of the total number of 1,523 candidates who sat senior four in three sampled schools over the last five years, 2001-2005, only 466 obtained first and second grade. The remaining 1,057 were in third, fourth, seventh, and ninth grade. This means that 31% of students qualified for higher education and 69% may not have been admitted for advanced studies within this period of five years. However, the national performance for the last five years, 2001-2005, out of 2,689,930 candidates who sat senior four, 1,592,369 obtained first and second grade. The remaining 1,097,561 were in third, fourth, seventh, and ninth grade. This means that 59% of students qualified for higher education compared to 31% of sampled schools in Adjumani District.

According to the working group on Strategic Planning of Secondary Education Development (1999), other indicators of performance apart from national examinations are; classroom atmosphere, the professional and social competence level of teachers, the quantitative and qualitative level of text books and other scholastic materials, the competence and effectiveness of management and governance of the school, the support and participation of parents and the community at large, the schools' responsiveness to monitoring and inspection and others. In this study, Uganda National Examinations Board (UNEB) record of results will be used to characterize student's academic performance.

Operational management refers to the management of processes that transform a given quality of inputs into required outputs (Okumbe 1999:9). According to Hanagan (2002:8-9), it involves organizing, supervising, and controlling processes in transforming inputs that add value to outputs. It is concerned with routine activities. According to Wanda (1995), the main school inputs are teachers, classroom resources, school plant, school management, class-size, attendance, library facilities and extra-curricular expenditure (p.15). However, the nature and quality of resource inputs that determine the output of educational provision that will be used in this study include educational personnel, instructional materials, educational facilities and educational finance (Ankomah, Koomson, Bosu, Oduro 2005).

Amongst other researches, none was on the effect of operational management on performance in Adjumani hence the need for this study.

Educational inputs must undergo a transformation process, which is a crucial component of operational management. These processes are the teacher-pupil interaction in class management and control, the daily time-on-task with the class, the regularity and punctuality of the teacher in the school for instructional activities, length of school day and term, days effectively available for schoolwork in a term (Ankomah et al, 2005).

Educational personnel include administrators, teachers, and support staff (Musaazi 2006: 274). Head teachers are important because they motivate both staff and students to work (Aganze 1998:2, Musaazi 1982:172). According to (Ankomah et al, 2005) educational personnel are teachers and non-teaching staff. Mulkeen, Chapman, Dejaeghere and Bryner (2005) reported research findings across the world to indicate principals the most powerful determinant of overall quality and effectiveness of schools. The same author said a recent research in USA found teacher quality the most important variable in determining student performance. This is because you may have books, buildings, or anything but when people are not committed, your success is limited (Troy, 2002)

Instructional materials are any form of material used to facilitate teaching and learning process in school setting (Bitamazire 2005). They include textbooks, visual aids, scholastic equipment (Musaazi 1982). Effective use of these materials facilitate learning, they can attract and hold students' attention, increase retention and enhance understanding of the abstract concepts thus, improving performance (Ajuago 2002). Lockheed in Aganze (1998) advances scholastic materials to include blackboards and chalk. According to Muhiire (2002), availability of scholastic materials like textbooks and space determine performance.

Educational facilities refer to school space, classrooms, furniture, libraries, toilets water, the standard of construction and conditions of facilities and others (Ankomah et al, 2005). Buildings provide teachers and students optimum environment for learning

(Muguluma 2004). Aganze (1998:26) stated infrastructure in Ugandan schools to include classrooms, libraries, laboratories, and toilets and staff houses. Studies done by McGuffey (1982), Earthman and Lemasters (1996, 1998) cited in Schneider (2002:2) reported correlation between building quality and test scores.

According to Ankomah et al (2005), finances are categorized into capital and recurrent expenditure. Schools need sufficient money for buying textbooks, paying teachers salaries, buy science equipment, construct new buildings, and maintain other educational services. Higwira (1993) stated availability of funds enables a manager to create a suitable climate and tone conducive to produce positive and desirable results. Aganze (1998:2) advanced that academic performance was influenced by funds, which are used for attracting good teachers, good infrastructure and good instructional materials.

Theory about improving performance was started by Frederick Taylor who advocated for quality inputs in production process. Thus, the theory that was used in this study was the scientific management theory. Frederick Taylor's scientific management theory advocated for definition of daily tasks, use of appropriate tools and materials, pay commensurate with work done, and selection and training of staff that was essential for good performance (Musaazi 1982: 28-29). Good performance of secondary schools therefore means obtaining quality grades, first grade and second (Odubuker 2004: 2-3).

Many trained secondary teachers interviewed by teaching service commission may prefer Kampala schools, to rural ones where parents pay fee promptly with additional amount for lunch and teachers welfare. Therefore, teachers willing to teach in up-country districts are few, depriving rural schools of well-qualified teachers. Adjumani is a rural district with 13 schools, four government-aided and nine private. The people's dependency on agriculture for subsistence makes their income unreliable, making the communities of Adjumani poor and unable to support adequately their schools unlike in Kampala. The above issues need to be explored to establish the number of well-qualified teachers and their management of school activities, nature of inputs from government and contribution from parents. It is also important to establish the quality of head teachers and how they manage schools with meager resources. There was also need to assess how the above challenges affect performance of students in national examinations.

1.1 Statement of the problem

Performance of secondary school education is a global concern. In Uganda, performance in secondary schools has been varying in many schools. Currently government is committed to reform secondary school educational curriculum by providing educational hardware and software such as infrastructure, furniture, teachers, instructional materials and revised curriculum (Bitamazire 2005). Despite these efforts, academic performance in secondary schools remains low at ordinary level. Few secondary students in Adjumani district get either first grade or second grade, which can allow them to go for further education and job market. The bigger number always get third grade, fourth or fail (Ahimbisibwe and Busingye 2007). This may affect the students' prospects for further higher education with such low levels of achievement and failing to meet the entire educational objectives. It is not clear whether it is the quality of managers (head teachers and board of governors) or management of schools with inadequate resources in the district, or the quality of teachers, and students that contribute to this poor academic performance. The researcher investigated the contribution of operational management on academic performance of students in secondary schools in Adjumani District.

1.2 Purpose

The purpose of this study was to investigate the effect of management by educational personnel, instructional material, educational facilities, and finances on academic performance of secondary school students in Adjumani district.

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1.3 Objectives

- 1. To investigate the effect of management by educational personnel on the performance of students in Adjumani district
- 2. To establish the effect of management of instructional material on the performance of students in Adjumani district
- 3. To establish the effect of management of educational facilities on the performance of students in Adjumani district
- To investigate the effect of management of finance on the performance of students in Adjumani district

1.4 Hypotheses

The hypotheses for the study were;

- Good management by educational personnel positively affects academic performance of secondary school students in Adjumani district
- 2. Good management of instructional materials positively affects academic performance of secondary school students in Adjumani district.
- Good management of educational facilities affects academic performance of secondary school students in Adjumani district.
- 4. Good management of finances affects academic performance of secondary school students in Adjumani district.

1.5 Scope

This study was concerned with operational management and its effect on the performance of secondary school students in selected schools in Adjumani district. The study specifically sought to investigate the effect of management by educational personnel, instructional materials, educational facilities and finances on the performance of students in Adjumani district.

1.6 Significance

Teachers are implementers of the broad aims of education broken down into specific, short-term goals and objectives. In view of this, it is hoped that this study may provide data and information that may be useful for the ministry of education and sports for formulation of policies, budgeting, planning and decision making that may facilitate training and in-service training of education managers and equip them with managerial skills for operational management and bring about quality performance of students.

The findings and recommendations may be useful to education officers; operational managers namely head teachers, teachers, students and all stakeholders of schools who monitor the operation of schools. It may help teachers in their day today management of school and classroom activities and improve students' performance, as quality education may be provided.

The researcher hopes that the study may form a basis for further research on operational management and the management of educational institutions in general. This may lead to new ideas on operational management that would improve students' performance in Adjumani district and other secondary schools in Uganda and the world at large.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter reviewed related literature concerning operational management and its effect on performance of secondary school students in Adjumani district. The literature review encompassed the theoretical and conceptual framework as well as analysis of themes of the study under; the effect of management by educational personnel (head teachers and teachers), instructional materials, educational facilities and finances on students' academic performance in Adjumani district.

2.1 Theoretical frame work of the study

The theory that could explain, describe, help to understand and predict performance to operational management was the scientific management theory. Frederic Taylor's scientific management theory advocated for definition of daily tasks, use of appropriate tools and materials, pay commensurate with work done, and selection and training of staff, which are vital for good performance. All head teachers, teachers, and students needed to know school objectives, to work towards achieving them. Teachers need to scheme and prepare lessons daily. Students and teachers also need textbooks, visual aids, good science equipment, laboratories and the schools require trained teachers and school administrators to enhance good performance (Musaazi 1982: 28-29, Okumbe 1999:21). This theory was relevant to the study as it explained the relationship between management by educational personnel, instructional material, facilities, finance and academic performance in educational process.

2.2 Conceptual framework of the study

Operational management affects students' academic performance. Management by educational personnel, instructional materials, facilities and finances was related to students' academic performance. Guided by Frederick Taylors' scientific management theory, it was clear that definition of daily tasks, use of appropriate tools and materials, pay commensurate with work done and selection and training of staff lead to good academic performance if there was adequate teacher pupil interaction in class management and control, daily time on task with class, regularity and punctuality of teachers for instructional activities, and supervision activity by head teachers. The model for this study is as below;



Figure 1. The relationship between operational management and students' academic performance built on Frederic Taylors' management theory.

Source: Adapted and modified from Ankomah, Y., Koomson J., Bosu R., & Oduro G. K. T (2005).

2.3 Interpretation of the model

The conceptual framework implied that educational inputs of the school system such as personnel (head teachers and teachers), instructional materials, facilities and finances, interact and determine the quality of teaching and learning processes whereby effective interaction may lead to good performance and vice versa. For instance, teachers' effective interaction requires availability of instructional materials, facilities and finances that can be used for effective teaching. Managing and controlling the class, and teachers' punctuality and regularity for instructional activities throughout the school schedule in the term would enhance performance. The opposite is also true if the teacher is ineffective. Nevertheless, other extraneous variables affect performance. These include socio-economic status of the student; quality of admission in terms of enrolling students with poor or good grades and family background.

2.4 Management by educational personnel and students' performance

Management is a process of working with and through people to achieve organizational goals. It involves planning activities to achieve set objectives (Mafabi, Higwiri, Osire, and Agwai 1993:31). It describes what managers do, which involves organizing, supervising, and controlling (Hanagan 2002:9).

2.4.1 Head teachers

Many scholars found that among other factors that enhance pupils' good academic performance in schools, effort exerted by head teachers, teachers, and parents are a major contributing factor (Nambuba-Namusole 2005:1). According to Musaazi (2006:274), educational personnel are administrators, teachers and support staff. However, the roles of a head teacher have direct influence on managing teaching and learning process. According to Nambuba-Namusole (2005.4), the roles are; being custodian of good education standard in

his or her school, aiming at high educational standards and ensuring observation of punctuality for teachers, pupils and others. These roles were stipulated mainly for primary school head teachers but they also apply to secondary school heads.

To exhibit these roles a head teacher should have been adequately trained in educational planning, management and administration. Unfortunately Mulkeen et al. (2005), Colby, Witt et al. (2000), and Mafabi, et al. (1993) concur that in developing countries, Uganda in particular; few head teachers have been trained. They may lack academic and instructional leadership, time management, school vision and mission, tradition of performance, learning environment and school and community relations (Ankomah, et. al., 2005). This could render the head teacher ineffective in exercising his role. Wanda (1995:23) affirms that if management was equipped with skills, the work of administering and guiding the decision makers of the school on how to achieve an optimal mix of inputs would be smooth; because management motivates both staff and students to work (Aganze 1998:2, Musaazi 1982:172).

However, Nsubuga (2003) reported that most head teachers work hard, with average working week of over 65 hours, less than 20% received any induction management training, efforts have been made to train all head teachers in management and administrative skills and all newly appointed head teachers get induction in management training. Despite training efforts, the researcher wonders why performance in some schools especially Adjumani remain low. The researcher disagrees with Nsubuga (2003) that induction in management training does not make a person professional in management; it is inadequate. Therefore, the researcher believes that besides induction, head teachers need training and should practically apply managerial skills acquired that will effect on performance.

Researches across the world indicate that school head teachers are one of the main determinants of overall quality and effectiveness of schools (Mulkeen, et. al. (2005). However, many head teachers neglect instructional supervision and support of staff (Colby,

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Witt and Associates June 2000, Nsubuga 2003). Yet one of their major tasks is management of curriculum, ensuring effective instruction within the school by checking schemes of work, listening to teachers discussion of school curriculum, coordinating with the Ministry for supply of textbooks, chalk, science equipment and among others (Musaazi 1982.234). This enhances improved performance. The researcher agrees with the view of Musaazi (1982), because in some schools head teachers do not supervise their teachers. The researcher wished to find out whether it was the head teachers' low level of professionalism that affected students' academic performance or not.

2.4.2 Teachers

Recent research in USA revealed teacher quality as the most important variable in determining student achievement (Mulkeen et al (2005). A research done by BYU Uganda International Volunteers Program, Troy (2002) reported 29 schools out of 34 agreed that teachers are the most important resource that contributes to the success of their schools because of the commitment they exercise.

Ankomah, et. al. (2005) advanced that teacher performance is affected through inadequate number of teachers, pupil- teacher ratio, academic qualification, pedagogical training, content knowledge, ability, and experience. Kinungu-Kirindiriza (1989:3) reported teacher competence to include; lesson preparation, proficiency in subject instruction, maintaining order in classroom, encouraging pupil participation in the lesson, punctuality, discipline, participation in extra-curriculum activities, integrity, and participation in community affairs.

Poor working conditions cripple secondary schools teachers in Uganda, no incentives and career structure, only grade V upgrade and 1.8 attended refresher courses since 1993 (Ward, Penny, and Read 2006, Bitamazire 2005, Colby, Witt and Associates June 2000, Nsubuga 2003). Mulkeen et al (2005) confirmed that 15% are unqualified, and 28% have a

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bachelor's degree. However, Nsubuga (2003), argued that there was improvement in secondary school teachers' qualification and experience profile but some schools are ineffectively managed others have poor working conditions resulting in decline in overall quality of teaching in many secondary schools.

International studies also showed that opportunity to learn and time on the task enhances student performance. However, most teachers face transport and housing problems, do not get to school on time and stay until school hours are over, others hold second jobs, sometimes absent from school (Colby, Witt, and Associates June 2000:13). In Uganda and Zambia, World Bank (2004), reported teacher absenteeism rate at 26% and 17% respectively. Ankomah, et. al. (2005:15-16) supports this view. Similarly, Mulkeen et al (2005), and Nsubuga (2003) affirm that this reduces teaching hours, which are low in Sub Saharan Africa by international standards. Thus reduce performance due to unscheduled school closing and teacher and student absences, less classroom time and irregular homework, (Aganze 1998:27), because real quality improvement depends on what happens in the classroom (De Grauwe and Naidoo 2004). Time management is crucial and in the researchers' view, if performance in Adjumani secondary schools is to improve then teachers should spend more time in classroom activity.

Mulkeens et al (2005) further observes that there is positive correlation between teachers' knowledge of their subject and impact in the classroom. Some teachers may have little knowledge of the subject content to be taught thus practice remote teaching whereby they write notes on the board or use a class prefect to readout of a textbook while absent and this impedes good teaching. Nsubuga (2003) confirmed that teachers are not regularly appraised and schools are not adequately inspected. School head teachers do not supervise their teachers in class. Thus, teachers may become reluctant in teaching. If teachers are reluctant in teaching what should make a school healthy, alive and a positive place of learning? According to the researcher, the most critical issues for a vibrant place of learning have to do with spirit, commitment, the challenge of being a teacher, reverence and awe for the privilege of being called to teach. If teachers do not love what they do, how they hand on excitement about learning? Teachers cannot pass on joy about learning unless they posses it. No one can give what he or she does not have.

It should be noted that review above offered literature on role of head teachers, training, and supervision. About teachers, it reviewed teacher competence, qualification, time and knowledge. This research study investigated management by head teachers and class management by teachers and students' academic performance in Adjumani district.

2.5 Management of instructional materials and students' performance

Secondary schools in Uganda lack quality and quantity of instructional materials. Wanda (1995:20) cited World Bank Staff working paper (1988),"without some basic revitalizing of inputs particularly textbooks and instructional materials almost no learning can be expected to occur". These are any form of material used to facilitate teaching and learning process in school setting (Bitamazire 2005). They include; textbooks, visual aids, scholastic equipment (Musaazi 1982). Aganze (1998) stated scholastic materials to include blackboard and chalk.

Ajuago (2002) reported that availability of textbooks and other instructional materials have a positive correlation on students' performance because they facilitate understanding of abstract concepts, help in class control and others. She affirmed that a research done between 1979 and 1981 reported 68 types of different teaching aids supplied by government of Nigeria were never utilized. The researcher concurs with Ajuago (2003), but adds that it is not utilization alone rather teachers' commitment to professionalism; schemes of work, lesson planning, creative mind and interest in students' learning and performance, by having in mind what they want their students to achieve at the end of an education cycle that will propel teachers to make proper use of teaching aids.

According to Ward, Penny, and Read (2006), secondary schools in Uganda consider textbooks essential for performance but only few schools have satisfactory levels, many have none. Sources of subject information to students are from blackboard or dictated notes, teachers' past notes as secondary school student, pamphlets amongst others. Libraries too are short of relevant books, there is a general undeveloped reading skills and capacity to research and access information. Nsubuga (2003), asserted that the shortage of textbooks and other instructional materials is a major factor contributing to the poor quality of education in some secondary schools in Uganda. Surely, quantity and quality of textbooks is important but one thing to be added to it is that, a smartly laid out library with relevant books and control system is not a guarantee for good performance if the books are not read. This is where the researcher agrees with Ward, Penny and Read (2006), and argues that students need to cultivate reading culture by developing personal initiative driven by goal orientation, what one wants to be after school that makes them read and perform.

The above review considers literature about availability and use of instructional materials. It does not bring out the link between management of instructional materials and students' performance. This research study will investigate this missing link.

2.6 Management of educational facilities and students' performance

According to Muguluma (2004:21-22), many scholars who have researched on determinants of educational performance show that an increase in the amount of resources used does not lead to an increase in educational performance. In USA, there was lack of strong and systematic relationship between resources and performance. While Latin America established a positive relationship between infrastructure indicators including buildings, furniture, access to electricity or water and academic performance - they provide for teachers and students a good environment for learning. However, buildings have to be accompanied

by other practices for performance to be good, they have to be maintained to provide conducive environment for teaching and learning.

Education Standards Agency list for school infrastructure are; play ground, head teachers' office, staffroom, classroom, library, and toilet (Muguluma 2004). Aganze (1998) added laboratories and staff houses. Ankomah, et. al. (2005) included; boards, furniture, water, standards of construction, conditions of facilities and specialized rooms.

Many school in Uganda and Adjumani in particular lack these resources. In (Monitor 26th Jan. 2006), Bukenya lamented that 31.5% of Uganda Certificate of Education (UCE) centers have no functional laboratories, basic equipment, and chemicals which was the cause of poor performance in science subjects. The same paper reported Bitamazire stating construction of 54 laboratories countrywide by African Development Bank (ADB) to improve performance. In Adjumani district, the researcher observed that in 2005, the Chief Administrative Officer (CAO) closed seven secondary schools that never met the minimum standards. Among others were; Adjumani comprehensive, Okusijoni, Opejo, Loa, Trinity College that could not provide learning environment for students.

The available literature review is about educational facilities. No research has investigated the management of educational facilities and students' performance in Adjumani district. Hence, the need for this research study.

2.7 Management of educational finances and students performance

Financial constraints are experience by both government aided and private schools. Finances are needed for capital development and recurrent costs such as for constructions and staff salaries. Troy (2002) reported that most successful schools in Mukono put more emphasis on teachers and financial resources that can be used for meeting all the capital and recurrent expenditures and enhance performance. However, Ward, Penny, and Read (2005) revealed that government financial support for aided secondary schools in form of salaries, maintenance grants and development grants was merely 30% of the annual operational budget. Parents fund most of the operational and development costs in aided and private schools as the fee levels are similar. Adjumani being a rural district, parents' contributions are limited; fee defaulters are common so most schools prioritize their budgets for tuition costs and boarding, excluding textbooks and libraries. Nsubuga (2003) affirms that textbooks account for less than 2% of total expenditure for most secondary schools. Government contributes less than one third of it. The researcher agrees with the findings of Nsubuga (2003) and Ward, Penny and Read (2005), and believes that parents in Adjumani need sensitization, to develop a positive attitude and interest towards the education of their children, have initiative and awareness of their role to educate them. There is a saying that where there is will, there is way. So they need to plan for school fee and other educational requirements as priority, exploit government loan schemes for small-scale investments to generate income for education purposes and find other alternatives for school fee as well.

Inadequate finances need to be properly managed for effective performance. Itaaga (1995:37) stated there are many variations in the nature of financial management in grant aided secondary schools such that set plans cannot be implemented because of inflation, inadequate funds, and inefficiency of budgetary control agents that result into most secondary schools running in financial deficits at the end of the year. Higwira (1993:18) concurs with Itaaga (1995) that most head teachers operate within tight budgetary controls, which influence the pattern of delegation, participation and accountability by heads of departments. Higwira (1993) further advocated for a clear system for reaching decisions over priorities, methods of distribution, responsibility for ordering, the keeping of stock records and the justification of expenditure. This brings about transparency and accountability that enhances good performance.

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The researcher agrees with the issues of variation in financial management raised by Itaaga (1995), that brings about financial deficits and Higwira (1993) stating inadequate finances affecting management and therefore advocating for a clear system of financial management but adds that, one may have a perfect record of finances yet use the system to defraud the accounts. Thus, it is important for one to have the desire and willingness to be self-monitoring for effective performance. This research study will investigate the management of educational finances and students' performance.

All in all, the literature review echoed that management of processes that transform inputs into outputs, namely operational management (Okumbe 1999:9) affected students academic performance. Management by educational personnel, instructional materials, facilities are related to students' academic performance (Musaazi 1982:28-29, Okumbe 1999:21). For instance, good academic performance required inputs to under go a process of management like teacher pupil interaction in class management and control, daily time on task with the class, regularity and punctuality of teachers for instructional activities, head teachers supervising school activities. However, few head teachers and teachers are adequately trained thus negatively affecting head teachers' supervisory roles of promoting teacher performance, competence, quality, conditions of service, and knowledge of subject. In the same vein, provision of and maintenance of facilities and proper management of inadequate funds by making clear decisions over priorities, method of distribution, delegation, responsibility for ordering, keeping stock records, justification of expenditure without using the system to defraud accounts are being compromised.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter covers the research methodology; research design, study population, sample size and sample technique, research instruments, validity of research instruments, reliability of research instruments, procedure of the study and technique of data analysis.

3.1 Study Design

The researcher used a cross-sectional survey design. A cross-sectional survey design involves obtaining information from a wide section of respondents at once without need to follow up the respondents for further information (Amin, 2005). Thus, data collection was done over a short period. Quantitative and qualitative approaches were used with the view of triangulation as being appropriate for the study.

3.2 Study Population

There were 13 secondary schools in Adjumani District; four were government aided, nine private, one purely girls, the rest mixed. For purposes of controlling extraneous variables, four schools were purposively selected; two government aided schools of which the girls' school was one and two private schools. Selected schools were from both town and rural setting. The population of students was 1435 (School files 2006). Population of teachers was 70.

3.3 Sample size and sampling technique

From the students' population of 1435 in the four sampled schools, only senior four classes participated because they had lived in the school long enough to objectively explain how activities in the school are managed. Each class was about 45 candidates giving a total of

180 candidates, 70 teachers, and four head teachers. Out of population of 254 teachers and students, 152 were sampled with the help of Morgan's (1970) table (Amin, 2005: 454). Having determined the sample size for teachers and students, a ratio of 3 students to 1 teacher basing on the population of both students and teachers was determined and this ratio was used to come with a sample of 116 students and 36 teachers, which brings up to the 152 sample size earlier mentioned. Stratified random sampling technique was used in this study to select teachers and students because there was need to represent all groups of the target population, teachers and students. This method is very economical, offers accurate results and a high degree of representative ness and is very useful (Sotirios Sarantakos 1988:145). Purposive sampling was used to select key respondents who the researcher thought should not be left out in the study. These included head teachers, director of studies, and heads of departments.

3.4 Research Instrument

The researcher used three types of instruments namely; questionnaires, interview guide and observation checklist.

3.5 Questionnaires

According to Amin (2005), questionnaires are pencil and paper instruments designed to gather data from individuals about their knowledge, attitudes, beliefs and feelings. They are useful in gathering data, which is descriptive of current events, conditions, or attributes of a population at a particular point in time. The questionnaire are also useful in generating reliable and valid data from a high proportion of a population within a reasonable time period at a minimum cost and is a relatively cheap and quick means of obtaining information. As a form of data collection instruments, questionnaires offer anonymity and increase the likelihood of obtaining accurate information when sensitive information is required. For purposes of this study, two sets of questionnaires were used, one for teachers and students. The questionnaires were used to collect data on effect of management by educational personnel, instructional materials, facilities and resources on performance of secondary school students in Adjumani district. The questionnaires contained closed questions so that quantitative data was gathered.

Questionnaires were preferred because the target population of teachers and students was literate and experienced in responding to written questionnaire. The open-ended questions allowed the researcher to assess the respondents' attitude, what he/she thought or felt, and also what he/she knew about the subject. The researcher personally administered the questionnaires as this helped in establishing rapport with the respondents.

3.6 Interview guide

The researcher interviewed the head teachers, heads of departments, and director of studies. The interviews were scheduled to be consistent in collecting data on; the effect of management by educational personnel, instructional materials, facilities and finances, on performance of secondary school students in Adjumani district. Oral interview was chosen because it allowed full expression of respondents' opinion and in-depth information was obtainable. The use of interviews was also a complementary method of data collection for this study and was the principal means of determining the understanding of the key actors or stakeholders involved in the policy process (Amin, 2005). This method was also adopted because the respondents varied in their experiences and areas of specialties as well as for purposes of triangulation.

3.7 Observation checklist

This study also employed observation as a method of data collection. Observation as a method of data collection employs vision as its main means of data collection (Amin, 2005).

It offers the opportunity to record and analyze behavior and interactions as they occur. This allowed events, actions, and experiences to be seen through the eyes of the researcher. In this particular study, the researcher acted as a participant observer. The researcher observed the status of instruction materials and school facilities in place and took note of their status in order determine whether they were well managed or not.

3.8 Data collection procedure

After the approval of the proposed study, the researcher obtained introduction letter from the Dean School of Education, which was used to seek permission of head teachers in order to administer questionnaires to teachers and students as well as interview them, director of studies and heads of departments. The researcher also made some observations. The raw data was field edited, later coded and analyzed.

3.9 Validity of research instruments

Validity refers to the extent to which an instrument measures what it purports to measure (Amin, 2005). To ensure validity of research instruments, the draft instrument was subjected to scrutiny by the supervisor, other lecturers in the department and colleagues who had knowledge in research. Their comments and recommendations were used to improve the final copy of the instruments. The instruments were also subjected to rating by experts and the content validity index (CVI) was computed as;

CVI = <u>Agreed items by both judges as suitable</u>

Total number of items in the questionnaire

The CVI, which was 0.79 for the teachers questionnaire and 0.72 for the students' questionnaire was greater than 0.7. Thus, the questionnaires were considered as valid for the study.
3.10 Reliability of research instruments

Reliability refers to the extent to which the instrument will produce consistent scores when the same group of individuals is repeatedly measured under the same conditions (Amin, 2005). Reliability of research instruments was established by piloting the instruments in two selected secondary schools out side Adjumani district. Consistency of instruments was also computed using Cronbachs alpha coefficient.

$$\alpha = \frac{K}{K-1} \left[1 - \frac{\sum SDi^2}{SDt^2} \right]$$

Where $\alpha = \text{Re} \, liability$

 $\sum SDi^{2} = \text{Sum of the variance of individual item in the questionnaire}$ $SDt^{2} = \text{Variance of the entire questionnaire.}$ K = Number of items in the questionnaire

From the results that were collected and analyzed from the pilot study, the researcher found out that the instrument used was significant to the study and that the Cochran's chi-square for alpha was above 0.6 ($\alpha \approx 0.7$). The tool was considered to provide reliable and consistent information that would be used to depict what was happening in this area of study.

3.11 Data Analysis technique

The researcher analyzed quantitative data from questionnaires using descriptive statistics, whereby data collected was subjected to frequencies and percentages, because it is easy to interpret, understand and compare frequencies. The frequencies were then accompanied with chi-square to find out if there was an association between the two variables. Correlation analysis was used to test the relationship of management by educational personnel, instructional materials, facilities and finance on the academic performance of secondary school students in Adjumani district.

Schools with lowest average percentage of students in first and second divisions were considered having students with a very poor academic performance. Thus, students were categorized according to the average percentage of students in first and second divisions into either 'Very poor', 'Poor', 'Good' or 'Very good'. In addition, all teacher responses on management by educational personnel to items 1.1 to 1.7 were computed into an average score for each teacher. Like wise all teachers' responses on management of instructional materials, educational facilities and finances, to items 2.1 to 2.6, items 3.1 to 3.6, and items 4.1 to 4.7 were computed into average score for each teacher. The average scores for all teachers were then categorized into four categories as '1 = Very poor', '2 = Poor', '3 = Good' and '4 = Very good', whereby a teacher in the lowest average score was considered to hold the view that management by educational personnel, instructional materials, facilities and was very poor. The same procedure was followed for students' responses. finances Academic performance based on average percentage of students who passed in first and second division was tabulated with teachers' and students average score on management by educational personnel, instructional materials, facilities, and finances.

The regression analysis was then used to test the effect of management of educational personnel, instructional materials, facilities and finance on performance of secondary school students. Content analysis was used to analyze qualitative data from interviews and observations where by it was summarized into meaningful statements, which were used to supplement the quantitative data to enrich the interpretation of the findings.

The foregone chapter presented activities undertaken before setting out to collect data, the preliminary plan of action and the manner in which the study was carried out. This covered the research design, study population, sample size and sampling technique, research instruments, validity and reliability of research instruments, procedure of the study and technique of data analysis.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.0 Introduction

This chapter presents interpretation and analysis of the findings of the study. It was divided into five sections. The first section presented findings on the respondents' background information. The second section presented findings on the effect of management by educational personnel on the performance of students in Adjumani district. The third section presented findings on the effect of management of instructional material on the performance of students in Adjumani district. The fourth section presented findings on the effect of management of students in Adjumani district. The fourth section presented findings on the effect of management of students in Adjumani district. The fifth section presented findings on the effect of management of students in Adjumani district. The fifth section presented findings on the effect of management of students in Adjumani district.

4.1 Findings on the respondents' background information

This section presents findings on the respondents' background information. The findings comprise a cross tabulation of category of respondents by the respondents' gender, level of education, and teaching experience. Information about gender was solicited from both students and teachers, while information about level of education and teaching experience was solicited only from teachers. Findings are presented in Tables 2.

Gender	Category of respondent		Total
-	Teacher	Student	_
Male	30	63	93
	(83.3%)	(55.8%)	(62.4%)
Female	6	50	56
	(16.7%)	(44.2%)	(37.6%)
Total	36	113	149
	(100.0%)	(100.0%)	(100.0%)
Highest academic			
qualification of			
teachers			
Grade V	26		26
	(72.2%)		(72.2%)
Graduate	6		6
	(16.7%)		(16.7%)
Masters	1		1
	(2.8%)		(2.8%)
Others	3		3
	(8.3%)		(8.3%)
Total	36		36
	(100.0%)		(100.0%)
Teaching experience			
Below Five years	13		13
	(36.1%)		(36.1%)
Five years	20		20
	(55.6%)		(55.6%)
Five years and above	3		3
	(8.3%)		(8.3%)
Total	36		36
	(100.0%)		(100.0%)

Table 2: Respondents' background information

Findings in Table 2 show that information was solicited from 149 respondents (see totals) of whom 36 were teachers and 113 were students. Regarding gender, it was shown that 26

there were more male teachers, 30(83.3%), female teachers were 6(16.7%). In addition, there were more male students, 63(55.8%), and the female students were, 50(44.2%).

Findings about highest academic qualification reveal that most teachers, 26 (72.2%), have a Grade V academic qualification and very few have a Graduate or Masters or other level of academic qualifications. The reason why most teachers have a Grade V academic qualification may be attributed to the fact that before 2000, the highest institutions for teachers in the northern Uganda were Teaching Training Institutions. These only awarded certificates and the highest among these certificates was Grade V. Regarding teaching experience, findings show that most teachers 20,(55.6%), have a teaching experience of five years and slightly over a third have a teaching experience of below five years. This implies that most teachers have recently joined the teaching profession in secondary schools.

4.2 Hypothesis I: Good management by educational personnel improves academic performance of secondary school students in Adjumani district

A cross tabulation was used to determine the distribution of teachers' responses on management by educational personnel and students' academic performance. Schools with lowest average percentage of students in first and second divisions were considered having students with a very poor academic performance. The academic performance based on the average percentage of students who passed in first and second divisions was tabulated with teachers' average score on management by educational personnel. Results are presented in Table 3. Note that the management by educational personnel variable in the table has fewer responses compared to those in the questionnaire. This arises because none of the teachers' had average score of 4.

Table 3: Distribution of teachers' responses on management by educational personnel and students' academic performance

Students' academic performance	Management b	Management by educational personnel		
	Very poor	Poor	Good	-
Very poor	4	4	1	9
	(11.1%)	(11.1%)	(2.8%)	(25%)
Poor	2	6	1	9
	(5.6%)	(16.7%)	(2.8%)	(25%)
Good	3	6	0	9
	(8.3%)	(16.7%)	(0%)	(25%)
Very good	1	6	2	9
	(2.8%)	(16.7%)	(5.6%)	(25%)
Total	10	22	4	36
	(27.8%)	(61.1%)	(11.1%)	(100%)

Table 3 shows that for the 4(11.1%) of the teachers who reported that management by educational personnel was poor, the students' academic performance was very poor while 6 (16.7%) teachers who reported that management by educational personnel as poor, students' academic performance was poor. The implication of the findings is that for 27.8% teachers with the view that management by educational personnel was poor, the students' academic performance as poor.

Having established a cross tabulation of teachers showing the distribution of their responses on management by educational personnel and students' academic performance, a cross tabulation was also used to determine the distribution of students' responses on management by educational personnel and students' academic performance. The same procedure used to compute management by educational personnel and students' academic performance for teachers' findings was applied for students. Results are presented in Table 4.

 Table 4: Distribution of students' responses on management by educational personnel

 and students' academic performance

Students' academic performance	Management by educational personnel	Total

	Very poor	Poor	Good	
Very poor	6	22	0	28
	(5.3%)	(19.5%)	(0%)	(24.8%)
Poor	5	22	1	28
	(4.4%)	(19.5%)	(.9%)	(24.8%)
Good	5	21	2	28
	(4.4%)	(18.6%)	(1.8%)	(24.8%)
Very good	5	14	10	29
	(4.4%)	(12.4%)	(8.8%)	(25.7%)
Total	21	79	15	113
	(18.6%)	(69.9%)	(13.3%)	(100%)

Table 4 shows that for a small proportion of students, 22 (19.5%), who reported that management by educational personnel as poor, students' academic performance was very poor while for a similar proportion of students, 22(19.5%), who reported that management by educational personnel as poor, students' academic performance was poor. The implication of these findings is that like most teachers, for 39% of students with the view that management by educational personnel was poor, the students' academic performance as poor.

Having established the teachers and students responses as shown in Tables 3 and 4 above, the researcher then combined the results in Tables 3 and 4 as shown in Table 5 and the analysis was guided by the following first hypothesis: *Good management by educational personnel improves academic performance of secondary school students in Adjumani district.* In order to test the hypothesis, chi-square (X^2) and Pearson Moment Relationship coefficient (r) were computed. Results are as presented in Table 5 and 6.

Table 5: Distribution of teachers and students' responses on management byeducational personnel and students' academic performance

Students' academic performance	Managemen	Total		
	Very poor	Poor	Good	

Very poor	10	26	1	37
	(6.7%)	(17.4%)	(.7%)	(24.8%)
Poor	7	28	2	37
	(4.7%)	(18.8%)	(1.3%)	(24.8%)
Good	8	27	2	37
	(5.6%)	(18.1%)	(1.3%)	(24.8%)
Very good	6	20	12	38
	(4%)	(13.4%)	(8.1%)	(25.5%)
Total	31	101	17	149
	(20.8%)	(67.8%)	(11.4%)	(100%)
Chi-square values	2	$X_0^2 = 14.3$ df = 4	$X_c^2 = 12.6$	

Findings show that the hypothesis that "Good management of educational personnel improves academic performance of secondary school students in Adjumani district" was accepted. This is because chi-square observed ($X_o^2 = 14.3$) at degree of freedom four (df = 4) was greater than chi-square critical ($X_c^2 = 12.6$). Thus, the findings show that there was a significant association between management by educational personnel and students' academic performance. In particular, findings reveal that for the 26 (17.4%) respondents who reported management by educational personnel as poor, students' academic performance as very poor while for 28(18.8%) respondents who said that management by educational personnel was poor, students' academic performance was poor. These constitute 36.2%, which was a reasonable percentage. The implication of these findings was that when management by educational personnel was poor, students' academic performance was poor and vise versa. A further analysis of the combined data of the teachers and students using correlation is presented in Tables 6.

Table 6: Relationships between management by educational personnel and students' academic performance

Management of educational personnel

	Pearson relationship values	Regression values of R squared
Students' academic performance	r = .248	$R^2 = .062$
	p = .008	p = .008
N = 149	L	I

Table 6 shows a significant relationship between management by educational personnel and students' academic performance (For detailed calculation see Appendix 10). When the findings were tested, the correlation coefficient was found to be significant at a 5% level of significance, i.e. (p = .008) was found to be less than the critical value. The findings further suggested that management by educational personnel were related to students' academic performance.

In order to determine the effect of management by educational personnel on students' academic performance in Adjumani district, the regression values of R squared was computed during regression analysis and R squared was found to be .062, which was statistically significant. When R squared was expressed as a percentage, findings revealed that management by educational personnel accounts for 6.2% change in students' academic performance. This shows that management by educational personnel accounts for a very small change in students' academic performance.

In particular, interview findings were supportive of the relationship established from quantitative data obtained through questionnaires. For example, an interview with the Director of Studies of one of the schools revealed that management by the head teacher/teachers had a direct correlation to students' performance in that poor management of available resources such funds and labor leads to poor performance. The head teacher of one the school was supportive when he responded thus;

Management of the school by head teachers and teachers affects academic performance either positively or negatively. If the head teachers works closely with teachers while they are supervising the teaching/leaning process to ensure time is manage and teachers adhere to the code of conduct, it will have a positive impact on students' performance. Adequate preparation helps a teacher to deliver to learners. Good management ensures that textbooks and laboratory equipment are at the disposal of teachers and students. The teachers supplement these with creativity in preparing appropriate teaching aids. Thus, management by head teacher and teachers provides a conducive learning environment for students, which is very essential. A good learning environment should be free from indiscipline, strikes, and hooliganism. It should encourage competition and it is the role of head teacher and teachers to enforce discipline.

The Head of Science Department of another school during the interview said that poor time management such as late reporting on duty reduces input, thus poor output while proper time management increases yields. The Head of Science Department added that poor resource management results into limited resource availability for productivity. For example, corruption reduces funds for operating educational institutions. The Director of Studies of one the schools noted that there was lack of motivation, commitment among the teachers, and teacher-student relationship was not good because of poor management such as non-payment of salary for four years, no close supervision of teachers, failure to involve teachers in planning for the school, lack of instructional materials. All these have contributed to no progress in the school.

The head-teacher of another school was supportive of the Director of Studies when he said that lack of exposure of students to instructional material in the school has contributed to the students' poor performance. In addition, the Head of Department of another school said that when the head-teacher is good in his administration, school programs run effectively and students' performance is improved. However, when the head-teacher does not coordinate with teachers and teachers are not motivated well, then some school programmes may fail and students perform poorly.

The Director of Studies in the same vain responded that good administration would lead to good performance and poor administration contributes to poor teaching and thus poor students' performance. He added that the administration is expected to encourage and build self-confidence and self-esteem among teachers and students.

The Head of Department of Arts of the school also concurred by saying that regular supervision of teachers' scheme of work, notes and teaching can improve the students performance as it encourages the teachers to remain focused. He added that were teachers use educational facilities well, there are improved learning while inadequate funding limits the availability of resources to students, which would improve students' performance.

The Head of Science Department of one of the schools also agreed that that noncooperativeness in terms of not having good relationships among head-teacher and teachers negatively affect students' performance in a situation. He gave an example that when there is no proper or prompt salary payment, lack of qualified teachers, and so forth, teachers are demotivated, which lowers students' performance. Head of Science Department of one of the schools was supportive by stating that management by head-teachers and teachers directly affect students' performance. He added that good management, such as good monitoring and motivation of teachers, makes teachers and students work harder and results into good students' performance and poor management end up with poor students' performance.

Thus, from the findings, it was evident that management by educational personnel was central to the performance of secondary school students. When management by educational personnel was good, the performance of secondary school students was also good. When management by educational personnel was poor, the performance of secondary school students was also poor.

4.3 Hypothesis II: Good management of instructional materials improves academic performance of secondary school students in Adjumani district

A cross tabulation was used to determine the distribution of teachers' responses on management of instructional materials and students' academic performance. Schools with lowest average percentage of students in first and second divisions were considered having students with a very poor academic performance. The academic performance based on the average percentage of students who passed in first and second divisions was tabulated with teachers' average score on management of instructional materials. Results are presented in Table 7. Note that the management of educational personnel variable in the table has fewer responses compared those in the questionnaire. This arises because none of the teachers had average score of 4.

Table 7: Distribution of teachers' responses on management of instructional materials and students' academic performance

Management of instructional materials			Total
Very poor	Poor	Good	
3	4	2	9
(8.3%)	(11.1%)	(5.6%)	(25%)
2	6	1	9
	Very poor 3 (8.3%) 2	Very poor Poor 3 4 (8.3%) (11.1%) 2 6	Very poor Poor Good 3 4 2 (8.3%) (11.1%) (5.6%) 2 6 1

	(5.6%)	(16.7%)	(2.8%)	(25%)
Good	2	6	1	9
	(5.6%)	(16.7%)	(2.8%)	(25%)
Very good	1	6	2	9
	(2.8%)	(16.7%)	(5.6%)	(25%)
Total	8	22	6	36
	(22.2%)	(61.1%)	(16.7%)	(100%)

Table 7 shows that for the 4(11.1%) of the teachers who reported that management of instructional materials was poor, the students' academic performance was very poor while 6(16.7%) teachers who reported that management of instructional materials was poor, and students' academic performance was poor. The implication of the findings was that for 27.8% teachers with the view that management of instructional materials was poor, the students' academic performance as poor.

Having established a cross tabulation of teachers showing the distribution of their responses on management of instructional materials and students' academic performance, a cross tabulation was also used to determine the distribution of students' responses on management of instructional materials and students' academic performance. The same procedure used compute management of instructional materials and students' academic performance for teachers' findings was applied for students. Results are presented in Table 8.

 Table 8: Distribution of student's responses on management of instructional materials

 and students' academic performance

Students' academic performance	Management of	Total		
	Very poor	Poor	Good	
Very poor	6	22	0	28
	(5.3%)	(19.5%)	(0%)	(24.8%)
Poor	4	22	2	28
	(3.5%)	(19.5%)	(1.8%)	(24.8%)

Good	4	21	3	28
	(3.5%)	(18.6%)	(2.7%)	(24.8%)
Very good	4	13	12	29
	(3.5%)	(11.5%)	(10.6%)	(25.7%)
Total	18	78	17	113
	(15.9%)	(69%)	(15%)	(100%)

Table 8 shows that for a small proportion of students, 22(19.5%), who reported that management of instructional materials was poor, students' academic performance was very poor while for a similar proportion of students, 22(19.5%), who reported that management of instructional materials as poor, students' academic performance was poor. The implication of these findings was that like most teachers, for 39% of students with the view that management of instructional materials was poor, the students' academic performance as poor.

Having established the teachers and students responses as shown in Tables 7 and 8 above, the researcher then combined the results in Tables 7 and 8 as shown in Table 9 and the analysis was guided by the following second hypothesis: *Good management of instructional materials improves academic performance of secondary school students in Adjumani district*. In order to test the hypothesis, chi-square (X^2) and Pearson Moment Relationship coefficient (r) were computed. Results are as presented in Table 9 and 10.

 Table 9: Distribution of teachers and students responses on management of

 instructional materials and students' academic performance

Students' academic performance	Management	Management of instructional materials			
	Very poor	Poor	Good	-	
Very poor	9	26	2	37	
	(6%)	(17.4%)	(1.3%)	(24.8%)	
Poor	6	28	3	37	
	(4%)	(18.8%)	(2%)	(24.8%)	
Good	6	27	4	37	

	(4%)	(18.1%)	(2.7%)	(24.8%)	
Very good	5	19	14	38	
	(3.4%)	(12.8%)	(9.4%)	(25.5%)	
Total	26	100	23	149	
	(17.4%)	(67.1%)	(15.4%)	(100%)	
Chi-square values	$X_o^2 = 19.3$ df = 4 $X_c^2 = 12.6$				

The hypothesis that "Good management of instructional materials improves academic performance of secondary school students in Adjumani district" was accepted. The findings show that there was a significant association between management of instructional materials and students' academic performance. This was because chi-square observed ($X_o^2 = 19.3$) at degree of freedom four (df = 4) was greater than chi-square critical ($X_c^2 = 12.6$). Thus, findings show that for 26(17.4%) respondents who said that management of instructional materials was poor, students' academic performance was very poor while 28(18.8%) respondents who said that management of instructional materials was poor, students academic performance was poor. These constitute 36.2%, which is a reasonable percentage. The implication of these findings was that when management of instructional materials was poor, students' academic performance was poor and vise versa. A further analysis using correlation was presented in the following Table 10.

 Table 10: Relationships between management of instructional materials and students'

 academic performance

	Management of instructional materials			
	Pearson relationship values	Regression values of R squared		
Students' academic performance	r = .256	$R^2 = .066$		
	p = .002	p = .002		

N = *149*

Table 10 shows that, when the findings were tested, they were found to be with a significant relationship (p = .002). The critical value was found to be less than 5% level of significance. The findings suggested that management of instructional materials were related to students' academic performance.

In order to determine the effect of management of instructional materials on students' academic performance in Adjumani district, the regression values of R squared was computed during regression analysis and R squared was found to be .066, which was also statistically significant. When R squared was expressed as a percentage, findings revealed that management of instructional materials accounts for 6.6% change in students' academic performance. This shows that management of instructional materials accounts for a very small change in students' academic performance.

The researcher also obtained results through observation regarding management of instructional materials and students' academic performance. It was observed that though apparatus were available, they were not well managed. For example, in some schools, apparatus were packed in basins and in other schools, they were on the floor while in others, they kept together with books and chemicals in a disorderly manner.

Interview findings were supportive of the relationship. For example, the Head of Science Department of another school said that because of inadequate textbooks, the few ones kept away in the store, students find difficult to prepare themselves in the learning process. He added that practical exercises are not introduced early enough because of lack of equipment. In addition, he said that some teachers mismanage the few available instructional materials, which negative affect students' performance.

The Head of Science Department of one school said in support of the relationship that students from well socio-economic background perform well because they can afford additional reference books while those from the poor socio-economic background fail to concentrate due to inadequate supply of school requirements, textbooks and so forth. In support of the relationship, the Director of Studies of one the schools said that care for teaching an learning facilities and effective use of them results into good performance but most teachers do not watch closely the use of instructional materials, and this partly contributes to poor students' performance.

In a similar vain, the Head of Arts Department of one of the schools said that when the materials are not kept well in the library and laboratory, if the materials do not match with the syllabus and they are not available in the school for students to use, students are likely not to perform well. Maintaining a similar view, the Head teacher of one of the schools said that lack of exposure of students to instructional materials by keeping them in store contributes to students' poor performance. Head of Science Department of one of the schools said that in the Science Department, management of instructional materials is important. He explained that the right use of instructional materials enhances learning. He added that even if the instructional materials are available but not used properly, their presence alone could not help learners to learn. In addition, he said that the storage of instructional materials in good conditions makes them available for use repeatedly for students' learning. The Director of Studies of one of the schools held a similar view about storage of instructional materials. The head teacher of one of the schools said that laboratory reagents if mismanaged could give students wrong results and thus fail students' performance. The Director of Studies of one of the schools said the reason for using instructional facilities is to make teaching and learning simple because teachers will find it easier to transfer knowledge from their minds to students and students will understand them better.

Thus, the findings suggested that management of instructional materials were weakly and significantly related to students' academic performance though the instructional materials are available, adequate, stored and used in the teaching and learning of students. All these have a very small influence on students' performance.

4.4 Hypothesis III: Good management of educational facilities improves academic performance of secondary school students in Adjumani district

A cross tabulation was used to determine the distribution of teachers' responses on management of educational facilities and students' academic performance. Schools with lowest average percentage of students in first and second divisions were considered having students with a very poor academic performance. The academic performance based on the average percentage of students who passed in first and second divisions was tabulated with teachers' average score on management of educational facilities. Results are presented in Table 11. Note that the management of educational facilities variable in the table has fewer responses compared those in the questionnaire. This arises because none of the teachers had average score of 4.

Table 11: Distribution of teachers' responses on management of educational facilities and students' academic performance

Students' academic performance	Management of educational facilities			Total
	Very poor	Poor	Good	
Very poor	3	4	2	9
	(8.3%)	(11.1%)	(5.6%)	(25%)
Poor	2	6	1	9
	(5.6%)	(16.7%)	(2.8%)	(25%)
Good	2	6	1	9
	(5.6%)	(16.7%)	(2.8%)	(25%)

Very good	1	6	2	9
	(2.8%)	(16.7%)	(5.6%)	(25%)
Total	8	22	6	36
	(22.2%)	(61.1%)	(16.7%)	(100%)

Table 11 shows that for the 4(11.1%) of the teachers who reported that management of educational facilities was poor, the students' academic performance was very poor while for 6(16.7%) teachers who reported that management of educational facilities was poor, students' academic performance was poor. The implication of the findings is that for 27.8% teachers with the view that management of educational facilities is poor, the students' academic performance as poor.

Having established a cross tabulation of teachers showing the distribution of their responses on management of educational facilities and students' academic performance, a cross tabulation was also used to determine the distribution of students' responses on management of educational facilities and students' academic performance. The same procedure used to compute management of educational facilities and students and students' academic performance for teachers' findings was applied for students. Results are presented in Table 12.

 Table 12: Distribution of students' responses on management of educational facilities

 and students' academic performance

Students' academic performance	Management of educational facilities			Total
	Very poor	Poor	Good	-
Very poor	6	22	0	28
	(5.3%)	(19.5%)	(0%)	(24.8%)
Poor	4	22	2	28
	(3.5%)	(19.5%)	(1.8%)	(24.8%)
Good	4	21	3	28
	(3.5%)	(18.6%)	(2.7%)	(24.8%)

Very good	4	15	10	29
	(3.5%)	(13.3%)	(8.8%)	(25.7%)
Total	18	80	15	113
	(15.9%)	(70.8%)	(13.3%)	(100%)

Table 12 shows that for a small proportion of students, 22(19.5%), who reported that management of educational facilities was poor, students' academic performance was very poor while for a similar proportion of students, 22(19.5%), who reported that management of educational facilities as poor, students' academic performance was poor. The implication of these findings is that like most teachers, for 39% of students with the view that management of educational facilities was poor, the students' academic performance as poor.

Having established the teachers and students as shown in Tables 11 and 12 above, the researcher then combined the results in Tables 11 and 12 as shown in Table 13 and the analysis was guided by the following third hypothesis: *Good management of educational facilities improves academic performance of secondary school students in Adjumani district*. In order to test the hypothesis, chi-square (X^2) and Pearson Moment Relationship coefficient (r) were computed. Results are as presented in Table 13 and 14.

 Table 13: Distribution of teachers and students responses on management of

 educational facilities and students' academic performance

Students' academic performance	Management	facilities	Total	
	Very poor	Poor	Good	-
Very poor	9	26	2	37
	(6%)	(17.4%)	(1.3%)	(24.8%)
Poor	6	28	3	37
	(4%)	(18.8%)	(2%)	(24.8%)
Good	6	27	4	37
	(4%)	(18.1%)	(2.7%)	(24.8%)
Very good	5	21	12	38

	(3.4%)	(14.1%)	(8.1%)	(25.5%)
Total	26	102	21	149
	(17.4%)	(68.5%)	(14.1%)	(100%)
Chi-square values	Xo	$^{2} = 14.3$ df =4	$X_c^2 = 12.6$	

The hypothesis that "Good management of educational facilities improves academic performance of secondary school students in Adjumani district" was accepted. The findings show that there is an association between management of educational facilities and students' academic performance. This is because chi-square observed ($X_o^2 = 14.3$) at degree of freedom four (df = 4) was greater than chi-square critical ($X_c^2 = 12.6$). Thus, findings show that 26(17.4%) respondents who said that management of educational facilities was poor, students' academic performance was very poor while 28(18.8%) respondents who said that management of education of these findings is that when management of educational facilities is poor, students' academic performance is poor and vise versa. A further analysis using correlation is presented in the following Tables 14.

Table 14: Relationships between management of educational facilities and students' academic performance

	Management of educational facilities				
	Pearson relationship values	Regression values of R squared			
Students' academic performance	r = .230	$R^2 = .053$			
	p = .005	p = .005			
N = 149					

Table 14 shows a relationship between management of educational facilities and students' academic performance (For detailed calculation see Appendix 12). Further, there

was a significant relationship (p = .005) that was found to be less than the critical value at 5 % level of significance. The findings suggested that management of educational facilities was related to students' academic performance.

In order to determine the effect of management of educational facilities on students' academic performance in Adjumani district, the regression values of R squared was computed during regression analysis and R squared was found to be .053, which was also statistically significant. When R squared was expressed as a percentage, findings revealed that management of educational facilities accounts for 5.3% change in students' academic performance. This shows that management of educational facilities accounts for a small change in students' academic performance.

The researcher also obtained observations regarding management of educational facilities and students' academic performance. Observations revealed that though some schools had the entire basic infrastructure, they were not maintained. Some structures were new but old ones were not painted, had fallen roofs, and the playground was not maintained. Some interviews findings were supportive of the relationship established using data from the questionnaires while other interviews were contrary to the findings obtained from the questionnaires. For example, the head teacher of one of the schools was of the view that comfortable chairs, good rooms, sanitation facilities do not count much on students performance. However, the Director of one of the schools was of the view that educational facilities like school library and laboratory are essential for students and should to be easily accessible to the students. In support also, the Head of Science Department of another school said that latrines if improperly manage, cause diseases that negatively affect students' health and thus disrupts students learning and performance.

The Head teacher of one of the schools said that good management of educational facilities creates a conducive environment for teaching and learning. Supporting the relationship, the Head of Arts Department of one of schools said that the little the school has

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of educational facilities, the poorer the students' academic performance. The Director of Studies of one of schools was supportive when he said that to some extent educational facilities affect students' performance. He elaborated that the school does not have every facility that it needs at present but the little it has are fairly used but in science the facilities are inadequate to make students pass well.

The Head of Department of one of the schools was also positive the management of educational facilities like library, books, school furniture, and laboratory apparatus was not well because they are available, lost, or destroyed; eventually students do not performance well. Likely, the Head of Science Department of another school also said that well managed educational facilities lead to good performance of students while poor management of educational facilities lead too poor performance.

4.5 Hypothesis IV: Good management of finances improves academic performance of secondary school students in Adjumani district

A cross tabulation was used to determine the distribution of teachers' responses on management of finances and students' academic performance. Schools with lowest average percentage of students in first and second divisions were considered having students with a very poor academic performance. The academic performance based on the average percentage of students who passed in first and second divisions was tabulated with teachers' average score on management of finances. Results are presented in Table 15. Note that the management of finances variable in the table has fewer responses compared those in the questionnaire. This arises because none of the teachers had average score of 4.

Table 15: Distribution of teachers' responses on management of finances and students' academic performance

Students' academic performance	Management of finances	Total

	Very poor	Poor	Good	
Very poor	3	4	2	9
	(8.3%)	(11.1%)	(5.6%)	(25%)
Poor	2	6	1	9
	(5.6%)	(16.7%)	(2.8%)	(25%)
Good	2	6	1	9
	(5.6%)	(16.7%)	(2.8%)	(25%)
Very good	1	6	2	9
	(2.8%)	(16.7%)	(5.6%)	(25%)
Total	8	22	6	36
	(22.2%)	(61.1%)	(16.7%)	(100%)

Table 15 shows that for the 4(11.1%) of the teachers who reported that management of finances was poor, the students' academic performance was very poor while 6(16.7%)teachers who reported that management of finances was poor, and students' academic performance was poor. The implication of the findings is that for 27.8% teachers with the view that management of finances is poor, the students' academic performance as poor.

Having established a cross tabulation of teachers showing the distribution of their responses on management of finances and students' academic performance, a cross tabulation was also used to determine the distribution of students' responses on management of finances and students' academic performance. The same procedure used compute management of finances and students' academic performance for teachers' findings was applied for students. Results are presented in Table 16.

Table 16: Distribution of students' responses on management of finances and students' academic performance

Students' academic performance	Management of finances			Total
	Very poor	Poor	Good	

Very poor	6	22	0	28	
	(5.3%)	(19.5%)	(0%)	(24.8%)	
Poor	4	22	2	28	
	(3.5%)	(19.5%)	(1.8%)	(24.8%)	
Good	4	21	3	28	
	(3.5%)	(18.6%)	(2.7%)	(24.8%)	
Very good	4	15	10	29	
	(3.5%)	(13.3%)	(8.8%)	(25.7%)	
Total	18	80	15	113	
	(15.9%)	(70.8%)	(13.3%)	(100%)	

Table 16 shows that for a small proportion of students, 22(19.5%), who reported that management of finances was poor, students' academic performance was very poor while for a similar proportion of students, 22(19.5%), who reported that management of finances as poor, students' academic performance was poor. The implication of these findings is that like most teachers, for 39% of students with the view that management of finances is poor, the students' academic performance as poor.

Having established the teachers and students as shown in Tables 15 and 16 above, the researcher then combined the results in Tables 17 and 18 and the analysis was guided by the following fourth hypothesis: *Good management of finance improves academic performance of secondary school students in Adjumani district*. In order to test the hypothesis, chi-square (X^2) and Pearson Moment Relationship coefficient (r) were computed. Results are as presented in Table 17 and 18.

Table 17: Distribution of teachers and students responses on management of finances and students' academic performance

Students' academic performance	Manage	Total		
	Very poor	Poor	Good	

Very poor	9	26	2	37
	(6%)	(17.4%)	(1.3%)	(24.8%)
Poor	6	28	3	37
	(4%)	(18.8%)	(2%)	(24.8%)
Good	6	27	4	37
	(4%)	(18.1%)	(2.7%)	(24.8%)
Very good	5	21	12	38
	(3.4%)	(14.1%)	(8.1%)	(25.5%)
Total	26	102	21	149
	(17.4%)	(68.5%)	(14.1%)	(100%)
Chi-square values	X_0^2	df = 14.3 df = 4	$X_{c}^{2} = 12.6$	

The hypothesis that "Good management of finance improves academic performance of secondary school students in Adjumani district" was accepted. The findings show that there was an association between management of finances and students' academic performance. This was because chi-square observed ($X_0^2 = 14.3$) at degree of freedom four (df = 4) was greater than chi-square critical ($X_c^2 = 12.6$). Thus, findings show that 26(17.4%) respondents who said that management of finances was poor, students' academic performance was very poor while 28(18.8%) respondents who said that management of finances was poor, students' academic performance was poor. These constitute 36.2%, which was a reasonable percentage. The implication of these findings was that when management of finances is poor, students' academic performance is poor and vise versa. A further analysis using correlation is presented in the following Tables 18.

Table 18: Relationships between management of finance and students' academic performance

	Management of finances			
	Pearson relationship values	Regression values of R squared		
Students' academic performance	r = .230	$R^2 = .053$		

p = .005	p = .005

N = 149

Table 18 shows a relationship between management of finances and students' academic performance (see Appendix 11). The probability value (p = .005) was found to be less than the critical value at 5 percent level of significance. The findings suggested that management of finances were related to students' academic performance.

In order to determine the effect of management of finances on students' academic performance in Adjumani district, the regression values of R squared was computed during regression analysis and R squared was found to be .053, which was also statistically significant. When R squared was expressed as a percentage, findings revealed that management of finances accounts for 5.3% change in students' academic performance. This shows that management of finances accounts for a very small change in students' academic performance.

Interview findings were supportive of the relationship established from data from questionnaires. For example, all participants in the interview said that the financial challenge that affects students' performance was inadequate funding in the department. That lack of funds greatly contributed to lack of adequate equipment, furniture, laboratory apparatus, which make teaching and learning difficult. The Head of Department of another school added that to make matters worse, the cost of apparatus and equipment was too high. Because of this, rural areas cannot afford and because of this, students cannot perform well. Other financial challenges in relation to students' performance identified by Head teacher of one of the schools was gradual school payment, and fee arrears related to school dropouts, which result into low motivation of teachers and irregular provision of instructional materials leading to poor students' performance. In addition to inadequate funding, the Head of Science Department of one of the schools said that financial challenges in relation to

students' performance include bureaucratic procedures and price fluctuations in procurement school requirements/materials for teaching and learning.

Observation of raw data of UNEB results on table 19 and 20 where strongly supportive of interview findings.

Table 19: Summary of UNEB results for selected secondary schools in Masaka and

Sch. Name	1 st Grade	2 nd Grade	3 rd Grade	4 th Grade	7 th Grade	F9	Total
St. Henry's	803	16	00	00	00	00	819
Col. Kitovu							
Sacred	137	178	78	22	00	00	515
Heart SS							
Christ the	440	411	107	10	00	00	968
King Girls							
St. John's	72	195	156	83	02	10	518
Kabwoko							
Total	1452	800	341	115	02	10	
grades							

Rakai districts 2003-2008.

Source: School files

Table 20: Summary of UNEB results for sampled Secondary schools in Adjumani

district 2003-2007

Sch. Name	1 st Grade	2 nd Grade	3 rd Grade	4 th Grade	7 th Grade	F9	Total
Biyaya SS	18	66	177	119	04	18	402

Mons Bala	60	202	274	200	01	36	773
SS							
Comboni	18	135	215	215	00	45	628
SS							
St. Mary	03	52	105	75	01	16	252
Ass. SS							
Total	99	455	771	609	06	115	
Grades							

Source: School files

Table 19 and 20 show that secondary schools in other regions like Masaka and Rakai districts have good academic performance than secondary schools in Adjumani district. While four schools in Adjumani get only 99 first grades over five years, four schools in other regions get 1,452 first grades in five years. Adjumani secondary school results show higher number of candidates in low grades while in Masaka and Rakai districts show higher number of candidates in higher grades such as first grade. These results therefore reveal strong relationship between management of educational personnel, instructional materials, educational facilities, and finances to students' academic performance.

Also note that, according to the Weekly Observer (2008 February 28-March 5), p.16-17, 29-31. Best, Worst S.4 Schools, Adjumani district schools do not surface anywhere among the top 250 schools with highest percentage of first grades (Refer to Appendix 12). The schools that obtained first grades in Adjumani were tailing in the national rank of first grade scores. Out of 2012 schools reported, the best schools in Adjumani ranked number 965 with 2.5%, 1041with 2.2%, 1116 with 1.9%, 1133 with 1.8%, and 1350 with 1.0% then 1409 with 0.8%. Majority of Adjumani district schools fall in the category of those that scored no first grades. Thus the respondents, perception of good academic performance was wrong, that was why most findings were weekly significant. To them, one first grade obtained in a school meant good academic performance yet Adjumani district annually registers over 1300-1500 candidates (Appendix 13 and 14). In comparison to UNEB results from other regions, it is clear that Adjumani secondary schools are performing very poorly with fewer first and second grades hence showing findings strongly significant (see appendix 15 and 16).

According to Odubuker (2004:2-3), and Kaggwa (2003:5), the quality of grades and number of candidates who pass in the various grades determine the level of academic performance. The quality of grades in Adjumani schools is low, very few first grades and the rest no first grades (Appendix 12).

According to Muyita S. and Natabaalo G. Daily Monitor (Saturday, Feb 2, 2008), Adjumani district ranked 60 out of 79 districts in first grade performance by districts '0' level results for year 2007. In similar vein, Adjumani district ranked 64 out of 69 districts in 2006 (Ahimbisibwe Fortunate and Busingye Cannan 2007 February 11). How districts performed (Sunday Vision p.1-2). This therefore gives the researcher clear judgment of Adjumani district academic performance as low.

In brief, the analysis found out that there was a significant positive relationship between management by educational personnel, instructional materials, facilities, finances and academic performance. Operational management affected academic performance of secondary school students in Adjumani district. Academic performance in Adjumani district was truly very low compared to other districts in Uganda.

CHAPTER FIVE

DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

This chapter presented the discussion, conclusions and recommendations of the study. It was divided into three sections. The first section presented discussion. The second section presented conclusions. The third section presented recommendations and areas for further research.

5.1 Discussion

Effect of management by educational personnel on the performance of students in Adjumani district

There was a significant positive relationship between management by educational personnel and students' academic performance. Thus, the hypothesis that "Good management by educational personnel improves academic performance of secondary school students in Adjumani district" was accepted. The findings suggested that management by educational personnel was related to students' academic performance. In particular, findings revealed that

management by educational personnel accounted for 6.2% change in students' academic performance. This shows that management by educational personnel accounts for a small change in students' academic performance.

The study findings show that the role of the head teachers and teachers has direct influence on managing teaching and learning process and hence the performance of students. This is in agreement with Nambuba-Namusole (2005:1) who observed that effort exerted by head teachers, teachers, and parents was a major contributing factor to enhancing pupils' good academic performance in schools. The implication of the findings is that as custodian of good education standard in their school, head teachers and teachers should aim at high educational standards by allocating duties, supervising instructional activity as well as other school activities. Teachers should always be present for classroom instruction and efficiently organize and manage the class.

Since findings indicated a relationship between management by educational personnel and students' academic performance and yet management by educational personnel was concerned with teacher quality (Mulkeen et al 2005), then it implied relationship between management by educational personnel and teacher quality. That was, the better that teacher quality through management by educational personnel, the better will be students' academic performance. Thus, management of schools in Adjumani district should ensure that there is improved teacher quality through the management by educational personnel in order to improve students' academic performance. In this light, the findings of this study agree with Troy (2002) whose research indicated that teachers are the most important resource that contribute to the success of their schools because of the commitment they exercise. This further implied that the school administration in Adjumani District should always make teachers commit themselves to they exercise.

In respect to Ankomah et al (2005), management by educational personnel is also concerned with teacher performance and teacher performance is affected through the following: number of teachers, pupil- teacher ratio, academic qualification, pedagogical training, content knowledge, ability, and experience. The implication of this to the positive relationship between management by educational personnel and students' academic performance was that the study findings concur with Ankomah et al (2005). This was because it was shown that because teaching staff were not properly allocated duties, head teachers did not satisfactorily supervise school activities, and some teachers were always not present for classroom instruction, students' academic performance in Adjumani district was poor.

According to Kinungu-Kirindiriza (1989:3), management by educational personnel involves management of teacher competence. Thus, the relationship between management by educational personnel and students' academic performance, implies a relationship between management of teacher competence and students' academic performance. That is, the more teachers are made competent, the better the students' academic performance. However, Kinungu-Kirindiriza (1989:3) reported that teacher competence to includes; lesson preparation, proficiency in subject instruction, maintaining order in classroom, encouraging pupil participation in the lesson, punctuality, discipline, participation in extra-curriculum activities, integrity, and participation in community affairs. In relation to the findings of the study, this means that the more the schools administration effectively and efficiently oversees teachers in lesson preparation, proficiency in subject instruction, maintaining order in classroom, encouraging pupil participation in the lesson, punctuality, discipline, participation, maintaining order in classroom, encouraging order in classroom, encouraging pupil participation in the lesson, punctuality, discipline, participation to the findings of the study, this means that the more the schools administration effectively and efficiently oversees teachers in lesson preparation, proficiency in subject instruction, maintaining order in classroom, encouraging pupil participation in the lesson, punctuality, discipline, participation in extra-curriculum activities, integrity, and participation in community affairs, the better will be the students' academic performance in Adjumani district.

According to Ward, Penny, and Read (2006), Bitamazire (2005), Colby, Witt and Associates (2000), and Nsubuga (2003), poor working conditions such as no incentives and career structure, non- participation of teachers in refresher courses cripple secondary schools teachers in Uganda. Thus, management of working conditions is part and parcel of management by educational personnel. In relation to the findings of the study, this implies

that there was a relationship between management of working conditions and students' academic performance in Adjumani district. Thus, the better the management of working conditions, the better the students' academic performance.

According to Mulkeen et al (2005), management by educational personnel also involves the management of teacher qualification. This may be in the form of providing career development to teachers or recruitment of teachers with better qualifications. In respect to the findings of the study, this implied that there was a positive relationship between providing career development to teachers or recruitment of teachers with better qualifications and students' academic performance in Adjumani district. Thus, the more the school administration in Adjumani district provide career development to teachers or recruit teachers with better qualifications, the better the students' academic performance.

As regards Colby, Witt, and Associates (2000:13), management by educational personnel involves management of time on the task. When related to the finding of this study, the implication was that there was a significant relationship between management of time on the task and students' academic performance. Therefore, the more the school administration makes teachers devote more time on the task, the better the students' academic performance. Colby, Witt, and Associates (2000:13) observes that the school administration can make teachers devote more time on the task by solving transport and housing problems and other problems that make teachers hold second jobs, which make teachers fail to get to school on time or absent from school. In respect to the findings of the study, if the school administration in Adjumani district solved these problems, there will be improvement in the students' academic performance.

According to Mulkeens et al (2005), management of educational personnel is also about management of teachers' knowledge of their subject. Since there was a significant positive relationship between management of educational personnel and students' academic performance, then that findings are in agreement with Mulkeens et al (2005) that

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management of teachers' knowledge of their subject has an impact in the classroom and to this study the classroom was in the heart of students' academic performance.

5.2 Effect of management of instructional materials on the academic performance of secondary school students in Adjumani district

There was also a significant relationship between management of instructional materials and students' academic performance. Thus, the hypothesis that "Good management of instructional materials improves academic performance of secondary school students in Adjumani district" was accepted. The findings suggested that management of instructional materials were related to students' academic performance. This meant that, there was a relationship, that the better the management of instructional materials, the better the students' academic performance. This meant that, there was a academic performance. Findings revealed that management of instructional materials accounted for 6.6 % change in students' academic performance. This shows that management of instructional materials accounts for a very small change in students' academic performance.

The findings suggest that with few materials such as textbooks, visual aids, scholastic equipment used to facilitate teaching and learning process in school setting in secondary schools in Adjumani, students' performance was compromised. This finding concurs with Wanda (1995) who observed that without some basic revitalizing of inputs particularly textbooks and instructional materials almost no learning can be expected to occur.

The findings are also in agreement with Ajuago (2002) who reported that availability of textbooks and other instructional materials have a positive correlation on students' performance because they facilitate understanding of abstract concepts, help in class control and others. Given that the study established that management of instructional material was poor in secondary schools in Adjumani district, then it can be deduced that the availability of textbooks and other instructional materials was not sufficient and this contributed to students' poor academic performance. Thus, findings are in agreement with Ward, Penny, and Read (2006) who observed that secondary schools in Uganda consider textbooks essential for performance but only few schools have satisfactory levels, many have none. Thus, the poor students' performance is linked to poor management of instructional materials in form of blackboard or dictated notes being sources of subject information to students, libraries short of relevant books, undeveloped reading skills and capacity to research and access information.

5.3 Effect of management of educational facilities on the academic performance of secondary school students in Adjumani district

Further, it was also noted that, there was a positive significant relationship between management of educational facilities and students' academic performance. Thus, the hypothesis that "Good management of educational facilities improves academic performance of secondary school students in Adjumani district" was accepted. The findings suggested that management of educational facilities were related to students' academic performance. The relationship meant that the better the management of educational facilities, the better the students' academic performance. Findings revealed that management of educational facilities accounts for 5.3% change in students' academic performance. This shows that management of educational facilities accounts for a small change in students' academic performance.

These findings are contrary to Muguluma (2004:21-22) who observed that many scholars who have researched on determinants of educational performance show that an increase in the amount of resources used does not lead to an increase in educational performance. In fact, the findings show that an increase of resources used leads to an increase in educational performance and these findings are in agreement with findings in Latin America, which established a positive relationship between infrastructure indicators such as buildings, furniture, access to electricity or water and academic performance. Thus, the findings suggest that head teachers' office, staff room, classroom, library, buildings,
furniture, access to electricity, laboratories and staff house, boards, furniture, standards of construction, conditions of facilities and specialized rooms, water and toilet provide for teachers and students a good environment for learning.

5.4 Effect of management of finance on the academic performance of secondary school students in Adjumani district

There was a significant relationship between management of finance and students' academic performance. Thus, the hypothesis that "Good management of finances improves academic performance of secondary school students in Adjumani district" was accepted. The findings suggested that management of finance was related to students' academic performance. This relationship meant that the better the management of finance, the better the students' academic performance. Findings revealed that management of finance accounts for 5.3% change in students' academic performance. This shows that management of finance accounts for a small change in students' academic performance.

The findings are to some extent supportive of Troy (2002) who reported that most successful schools in Mukono put more emphasis on teachers and financial resources that can be used for meeting all the capital and recurrent expenditures and enhance performance. They also agree with Higwira (1993:18) who concurred with Itaaga (1995) that most head teachers operate within tight budgetary controls, which influence the pattern of delegation, participation and accountability by heads of departments, which affects the students' academic performance. The findings, thus, suggest that inadequate finances need to be properly managed for effective performance and that lack of transparency and accountability compromises good performance.

In short, the foregone discussion stated that there was a positive relationship between management by educational personnel, instructional materials, facilities, finances and

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students' academic performance. Operational management affects academic performance in Adjumani district.

5.5 Conclusions

From the findings of this research and in line with the theory and hypotheses that guided the study, the researcher drew the following conclusions;

Head teachers need to be adequately trained in their managerial roles so as to regularly supervise their teachers and other school activities. Among others, they should plan for staff development, staff houses, means of transport because most teachers are diploma holders, who commute from their homes far from school which is negatively affecting students' academic performance.

There is no reading culture and research by both teachers and students since they are inadequately exposed to the use of instructional materials, consequently affecting academic performance of most schools in Adjumani negatively.

There is a significant positive relationship between management of educational facilities and students' academic performance. Lack of laboratory and library facilities in one case and lack of electricity and running (taped) water in most schools cannot provide students conducive environment for studying.

Most head teachers do not raise enough finances to adequately cater for all running and development costs. Meagre funds are used for administrative purposes other than for purchasing laboratory equipments, chemicals, instructional materials and paying teachers' salaries and allowances. That is why teachers are reluctant to teach.

Although head teachers and teachers in Adjumani district are trying to improve academic performance through management by educational personnel, management of instructional materials, facilities and finances, there is still need to consolidate their efforts for better academic performance.

5.6 Recommendations

The researcher made the following recommendations from the findings and discussions as below;

- Head teachers should be adequately trained by the Ministry of Education and Sports to enhance their managerial roles more effectively.
- Teachers and students should be more exposed to the use of instructional materials in order to develop reading culture and research.
- 3. Head teachers should budget for the provision of essential facilities like electricity, running water, laboratory and library facilities, which will improve on the learning environment.

Head teachers need to be trained in resource mobilization skills to diversify sources of income for their schools. Hence, ensure adequate remuneration for teachers to boost their natural interest and commitment to work.

5.7 Areas for further Research

A study on other factors other than management by educational personnel, instructional material, educational facilities, finances and its effects on academic performance of secondary schools in Adjumani district. These could include among other factors; socioeconomic status of pupils, quality of admission and family background.

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APPENDICES

Appendix 1: Questionnaire for teachers

Dear respondent,

Thank you for accepting to participate in the study that requires information on the effect of operational management by educational personnel, materials, facilities and finances on the performance of secondary school students in Adjumani district.

Kindly respond to all questions as honestly as possible. The information obtained will be treated with utmost confidentiality for the purpose of this study.

Section A: Background information

Instruction: *Please tick where applicable*

1. Gender:	Male	Female					
2. What is you	ur highest acad	emic qual	ification?				
Grade V	Graduate	Masters	Other	s			
3. Teaching e	xperience: Belo	ow Five ye	ears	Five years	Five	years	and
above							

<u>NB</u>:

For the following sections use the rating scale below. Please tick in the box the most appropriate rating

RATING SCALE

(A) = Strongly agree (B) = Agree (C) = Disagree (D) = Strongly Disagree

Section B:

1.0	Management by educational personnel and students performance				D
	Head Teachers				
1.1	Every teaching staff is allocated duties during well scheduled meetings				
1.2	The head teacher supervises instructional activity as well as other school				

	activities		
1.3	The head teacher monitors every school activity closely		
	Teachers		
1.4	Teachers are always present for classroom instruction.		
1.5	Teachers get students on task quickly at the beginning of each lesson or		
	instruction activity.		
1.6	Teachers find no difficulty in efficiently organizing and managing the		
	class		
1.7	Teachers maintain high level of student time on task		
2.0	Management of instructional materials and students performance		
2.1	Teachers have relevant books for the subject(s) they teach		
2.2	Books in this school are carefully handled		
2.3	Teachers always effectively use teaching aid to present their lessons		
2.4	Teachers do not use old notes for students		
2.5	Chalk is always available for teachers		
2.6	The school has a well stipulated procedure for controlling use of		
	instructional materials		
3.0	Management of educational facilities and students performance		
3.1	The school has a laboratory in which the equipments are well stored		
3.2	The school has a library set with relevant books arranged orderly		
3.3	School buildings in this school are well maintained		
3.4	Office equipment are always well serviced		
3.5	Teachers on duties in this school always ensure that classrooms, head		
	teachers office and other areas are cleaned every morning before classes		
4.0	Management of finances and students norformance		
	management of mances and students performance		

4.1	The school draws annual budget and gets it approved by the Board of		
	Governors (BoG)		
4.2	Teachers are involved in the financial budgeting of this school		
4.3	The school adheres and implements the school budget		
4.4	This school maintains good financial records		
4.5	The head teacher accounts for any school funds to the BoG		
4.6	Parents pay school fee promptly		
4.7	The school finances budget allocation for instructional activity easily		
5.0	Performance		
5.1	Most students in this school pass in first grade		
5.2	Most students in this school pass in second grade		
5.3	Most students in this school pass in third grade		
5.4	Most students in this school pass in fourth grade		
5.5	Most students in this school obtain F.9		

Appendix 2: Questionnaire for students

Dear respondent,

Thank you for accepting to participate in the study that requires information on the effect of operational management by educational personnel, materials, facilities and finances on the performance of secondary school students in Adjumani district.

Kindly respond to all questions as honestly as possible. The information obtained will be treated with utmost confidentiality for the purpose of this study.

Section A: Background information

Instruction: *Please tick where applicable*

1. Gender: Male Female

<u>NB</u>:

For the following sections use the rating scale below. Please tick in the box the most appropriate rating

RATING SCALE

(A) = Strongly agree (B) = Agree (C) = Disagree(D) = Strongly Disagree

Section B:

1.0	Management by educational personnel	A	B	С	D
	Head teachers				
1.1	Every student in this school is allocated duties during well scheduled				
	meetings				
1.2	The head teacher supervises instructional activity as well as other school				
	activities				
1.3	The head teacher monitors every school activity closely				
	Teachers				
1.4	Teachers are always present for classroom instruction				

1.5	Teachers get students on task quickly at the beginning of each lesson or		
	instruction activity		
1.6	Teachers find no difficulty in efficiently organizing and managing the		
	class		
1.7	Teachers maintain high level of student time on task		
2.0	Management of instructional materials		
2.1	There are enough relevant books for the subjects we learn		
2.2	Books in this school are carefully handled		
2.3	Teachers always effectively use teaching aid to present their lessons		
2.4	Teachers do not use old notes for students		
2.5	Chalk is always available for teachers		
2.6	The school has a well stipulated procedure for controlling		
	use of instructional materials		
3.0	Management of educational facilities and students performance		
3.1	The school has a laboratory in which the equipments are well stored		
3.2	The school has a library set with relevant books arranged orderly		
3.2 3.3	The school has a library set with relevant books arranged orderly The school buildings in this school are well maintained		
3.2 3.3 3.4	The school has a library set with relevant books arranged orderly The school buildings in this school are well maintained Office equipments in this school are well serviced		
3.2 3.3 3.4 3.5	The school has a library set with relevant books arranged orderly The school buildings in this school are well maintained Office equipments in this school are well serviced Students on duties in this school always ensure the classrooms, head		
3.2 3.3 3.4 3.5	The school has a library set with relevant books arranged orderly The school buildings in this school are well maintained Office equipments in this school are well serviced Students on duties in this school always ensure the classrooms, head teachers office and other areas are cleaned before classes		
3.2 3.3 3.4 3.5 4.0	The school has a library set with relevant books arranged orderly The school buildings in this school are well maintained Office equipments in this school are well serviced Students on duties in this school always ensure the classrooms, head teachers office and other areas are cleaned before classes Management of finances and students performance		
3.2 3.3 3.4 3.5 4.0 4.1	The school has a library set with relevant books arranged orderly The school buildings in this school are well maintained Office equipments in this school are well serviced Students on duties in this school always ensure the classrooms, head teachers office and other areas are cleaned before classes Management of finances and students performance The school draws annual budget and gets it approved by the BoG		
3.2 3.3 3.4 3.5 4.0 4.1 4.2	The school has a library set with relevant books arranged orderly The school buildings in this school are well maintained Office equipments in this school are well serviced Students on duties in this school always ensure the classrooms, head teachers office and other areas are cleaned before classes Management of finances and students performance The school draws annual budget and gets it approved by the BoG Students are involved in financial budgeting of this school		

4.4	This school maintains good financial records		
4.5	The head teacher accounts for any school funds to the BoG		
4.6	Parents pay school fee promptly		
4.7	The school finances budget allocation for instructional activity easily		
5.0	Performance		
5.1	Most students in this school pass in first grade		
5.2	Most students in this school pass in second grade		
5.3	Most students in this school pass in third grade		
5.4	Most students in this school pass in fourth grade		
5.5	Most students in this school obtain F.9		

Appendix 3: Interview Guide for head teachers

Thank you for accepting to participate in the study that requires information on the effect of operational management by educational personnel, materials, facilities and finances on the performance of secondary school students in Adjumani district.

Kindly respond to all questions as honestly as possible. The information obtained will be treated with utmost confidentiality for the purpose of this study.

Section A: Background information

- 1. Indicate your gender.....
- 2. What is your highest qualification?
- 3. What is your teaching experience?

Section B: Management of Educational Inputs

1 (a) In your opinion, how does management by head teachers and teachers affect students' academic performance.

Explain.....

- (b) What is your comment about management of instructional materials affecting students' performance?
- (c) In your opinion does management of educational facilities affect students' performance?

Explain

(d) According to you, what challenges do you face in managing school finances in relation to improving students' performance?

Explain how you solve these challenges.....

Appendix 4: Interview Guide for heads of department

Dear respondent,

Thank you for accepting to participate in the study that requires information on the effect of operational management by educational personnel, materials, facilities and finances on the performance of secondary school students in Adjumani district.

Kindly respond to all questions as honestly as possible. The information obtained will be treated with utmost confidentiality for the purpose of this study.

Section A: Background information

- 1. Indicate your gender.
- 2. What is your highest qualification?
- 3. What is your teaching experience?

Section B: Management of Educational Inputs

1 (a) In your opinion, how does management by head teachers and teachers affect students' academic performance in your department.

Explain

b) What is your comment about management of instructional materials affecting students' performance in your department?

Give your views.....

c) In your opinion does management of educational facilities affect students' performance?

Explain

 According to you, what financial management challenges does your department face in relation to improving students' performance.

Explain how you solve these challenges.....

Appendix 5: Interview Guide for Director of studies

Dear respondent,

Thank you for accepting to participate in the study that requires information on the effect of operational management by educational personnel, materials, facilities and finances on the performance of secondary school students in Adjumani district.

Kindly respond to all questions as honestly as possible. The information obtained will be treated with utmost confidentiality for the purpose of this study.

Section A: Background information

- 1. Indicate your gender.....
- 4. What is your highest Academic qualification?
- 5. What is your teaching experience?

Section B: Management of Educational Inputs

1 (a) In your opinion, how does management by head teachers and teachers affect students' academic performance in your school.

Explain.....

(b) What is your comment about management of instructional materials affecting students' performance in your school?

Give your views.....

(c) In your opinion does management of educational facilities affect students' performance in your school?

Explain

(d) According to you, what financial challenges does your school face in relation to improving students' performance.

Explain how you solve these challenges.....

Appendix 6: Reliability for Teachers' Questionnaire Management by educational personnel

			Mean	Std Dev	Cases
1.	QN1.1		2.0278	.9706	20.0
2.	QN1.2		1.7222	.5662	20.0
3.	QN1.3		1.7222	.7411	20.0
4.	QN1.4		1.9167	.8409	20.0
5.	QN1.5		2.3056	.7099	20.0
6.	QN1.6		2.1944	.8218	20.0
7.	QN1.7		1.9167	.6492	20.0
					N of
Statis	tics for	Mean	Variance	Std Dev	Variables
	SCALE	13.8056	7.5325	2.7445	7

Item-total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Alpha if Item Deleted
QN1.1	11.7778	7.2063	1182	.6708
QN1.2	12.0833	6.0214	.4284	.7429
QN1.3	12.0833	5.3929	.4621	.7055
QN1.4	11.8889	5.7016	.2798	.7817
QN1.5	11.5000	5.5714	.4348	.7212
QN1.6	11.6111	5.7873	.2706	.7858
QN1.7	11.8889	6.1016	.3148	.7726
Reliabilit	y Coefficients			

N of Cases = 20.0 N of Items = 7

Alpha = .7286

Management of instructional materials

			Mean	Std Dev	Cases
1.	QN2.1		1.8333	.7746	20.0
2.	QN2.2		2.0833	.8062	20.0
З.	QN2.3		2.2778	.8819	20.0
4.	QN2.4		2.0000	.8619	20.0
5.	QN2.5		1.3333	.5855	20.0
6.	QN2.6		2.1111	.7848	20.0
					N of
Statist	cics for	Mean	Variance	Std Dev	Variables
2	SCALE	11.6389	8.7516	2.9583	6

Item-total Statistics

	Scale	Scale	Corrected	
	Mean	Variance	Item-	Alpha
	if Item	if Item	Total	if Item
	Deleted	Deleted	Correlation	Deleted
QN2.1	9.8056	6.5040	.4170	.7486
QN2.2	9.5556	5.5111	.6843	.7516

QN2.3	9.3611	5.9516	.4700	.6301
QN2.4	9.6389	6.2373	.4115	.7515
QN2.5	10.3056	7.7611	.1985	.7046
QN2.6	9.5278	6.7706	.3342	.7752
Reliabilit	y Coefficients			
N of Cases	= 20.0		N of Items = 6	
Alpha =	.7886			

Management of educational facilities

			Mean	Std Dev	Cases
1.	QN3.1		2.1389	.9305	20.0
2.	QN3.2		2.1389	.8993	20.0
3.	QN3.3		1.9167	.6918	20.0
4.	QN3.4		2.1667	.6969	20.0
5.	QN3.5		1.8611	.9305	20.0
					N of
Statist	cics for	Mean	Variance	Std Dev	Variables
S	SCALE	10.2222	8.7492	2.9579	5

Item-total Statistics

	Scale	Scale	Corrected	
	Mean	Variance	Item-	Alpha
	if Item	if Item	Total	if Item
	Deleted	Deleted	Correlation	Deleted
QN3.1	8.0833	5.5071	.5441	.6944
QN3.2	8.0833	5.3357	.6270	.6596
QN3.3	8.3056	6.5040	.5007	.7130
QN3.4	8.0556	6.5111	.4927	.7151
QN3.5	8.3611	5.8944	.4402	.7364

Reliability Coefficients

Ν	of	Cases	=	20.0	Ν	of	Items =	=	5

Alpha = .7493

Management of finances

			Mean	Std Dev	Cases
1.	QN4.1		2.0000	1.0690	20.0
2.	QN4.2		2.7222	1.1113	20.0
3.	QN4.3		2.4444	.9085	20.0
4.	QN4.4		2.0833	.7700	20.0
5.	QN4.5		2.1944	1.0370	20.0
6.	QN4.6		2.9167	.8742	20.0
7.	QN4.7		2.5278	.7741	20.0
					N of
Statist	tics for	Mean	Variance	Std Dev	Variables
5	SCALE	16.8889	20.6730	4.5468	7

Item-total Statistics

	Scale	Scale	Corrected	
	Mean	Variance	Item-	Alpha
	if Item	if Item	Total	if Item
	Deleted	Deleted	Correlation	Deleted
QN4.1	14.8889	14.1587	.6677	.7684
QN4.2	14.1667	13.7429	.6912	.7634
QN4.3	14.4444	14.5968	.7564	.7553
QN4.4	14.8056	16.1611	.6331	.7811
QN4.5	14.6944	14.6754	.6195	.7781
QN4.6	13.9722	20.4278	0657	.8786
QN4.7	14.3611	15.8373	.6876	.7730

Reliability Coefficients

N of Cases = 20.0 N of Items = 7

Alpha = .8148

Appendix 7: Reliability for Students' Questionnaire Management of educational personnel

			Mean	Std Dev	Cases
1.	QN1.1		2.2743	1.0199	20.0
2.	QN1.2		1.4690	.6691	20.0
3.	QN1.3		1.6726	.7611	20.0
4.	QN1.4		1.8673	.8609	20.0
5.	QN1.5		2.0531	.8540	20.0
6.	QN1.6		2.0442	.9579	20.0
7.	QN1.7		1.8407	.9119	20.0
					N of
Statist	tics for	Mean	Variance	Std Dev	Variables
2	SCALE	13.2212	13.7631	3.7099	7
Item-to	otal Stati	stics			
	S	cale	Scale	Correct	ed
	М	ean	Variance	Item-	Alpha
	if	Item	if Item	Total	if Item
	De	leted	Deleted	Correlat	ion Deleted

QN1.1	10.9469	10.3186	.3670	.7061
QN1.2	11.7522	10.7238	.5914	.6585
QN1.3	11.5487	11.0891	.4132	.6906
QN1.4	11.3540	10.2129	.5105	.6659
QN1.5	11.1681	11.1590	.3286	.7099
QN1.6	11.1770	10.5398	.3707	.7026
QN1.7	11.3805	10.0593	.4966	.6685

Reliability Coefficients

Ν	of (Cases	=	20.0	Ν	of	Items	=	7
A]	pha	=	.7185	i					

Management of instructional materials

		Mean	Std Dev	Cases
1. QN2.1		2.1150	.9797	20.0
2. QN2.2		1.6460	.6671	20.0
3. QN2.3		1.9027	.9351	20.0
4. QN2.4		2.3097	1.1579	20.0
5. QN2.5		1.2478	.5752	20.0
6. QN2.6		2.0796	.9649	20.0
				N of
Statistics for	Mean	Variance	Std Dev	Variables
SCALE	11.3009	6.6944	2.5873	6
Item-total Sta	tistics			
	Scale	Scale	Correcte	ed
	Mean	Variance	Item-	Alpha
	if Item	if Item	Total	if Item
	Deleted	Deleted	Correlat	ion Deleted
ON2.1	9.1858	4.9027	.691	7.7500
ON2.2	9.6549	5.4602	.753	1.7342
QN2.3	9.3982	5.5989	.6500	.6553
ON2.4	8.9912	4.4910	.175	8.7643

QN2.5 QN2.6 Reliability	10.0531 9.2212 y Coefficients	6.3722 4.8345	.5530 .6189	.7572 .7285
N of Cases	= 20.0		N of Items = 6	
Alpha =	.7249			

Management of educational facilities

vianag	management of cuucational facilities							
			Mean	Std Dev	Cases			
1.	QN3.1		2.0708	1.1551	20.0			
2.	QN3.2		1.8584	.9716	20.0			
3.	QN3.3		1.9735	.9010	20.0			
4.	QN3.4		1.9558	.7950	20.0			
5.	QN3.5		1.5752	.7884	20.0			
					N of			
Statis	tics for SCALE	Mean 9.4336	Variance 9.2478	Std Dev 3.0410	Variables 5			

Item-total Statistics

	Scale	Scale	Corrected	
	Mean	Variance	Item-	Alpha
	if Item	if Item	Total	if Item
	Deleted	Deleted	Correlation	Deleted
QN3.1	7.3628	5.2690	.4987	.7718
QN3.2	7.5752	5.9965	.4848	.7775
QN3.3	7.4602	6.2863	.4758	.7842
QN3.4	7.4779	6.2696	.5894	.6440
QN3.5	7.8584	8.2655	.0796	.7329

Reliability Coefficients

Ν	of	Cases	=	20.0		Ν	of	Items	=	5
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Alpha = .7629

Management of finances

vianag	ement of mances			
		Mean	Std Dev	Cases
1.	QN4.1	1.9292	.9610	20.0
2.	QN4.2	3.3540	1.0082	20.0
З.	QN4.3	1.9558	.9102	20.0
4.	QN4.4	1.8496	.8986	20.0
5.	QN4.5	1.9823	1.0263	20.0
6.	QN4.6	2.3451	.9979	20.0
7.	QN4.7	2.0177	.8236	20.0
			1	N of

				N OI
Statistics for	Mean	Variance	Std Dev	Variables
SCALE	15.4336	11.8371	3.4405	7

Item-total Statistics

Scale	Scale	Corrected	
Mean	Variance	Item-	Alpha
if Item	if Item	Total	if Item
Deleted	Deleted	Correlation	Deleted

QN4.1	13.5044	9.1986	.2942	.7982
QN4.2	12.0796	11.8418	1472	.6643
QN4.3	13.4779	8.5017	.4723	.7272
QN4.4	13.5841	8.1558	.5599	.7914
QN4.5	13.4513	8.3927	.4021	.7493
QN4.6	13.0885	9.5992	.2008	.7365
QN4.7	13.4159	9.7987	.2638	.7111

Reliability Coefficients

N of Cases = 20.0 N of Items = 7

Alpha = .7454

Appendix 8: Calculation for correlation between management by educational personnel

and academic performance

RESPONDENTS	X	X2	Y	Y2	XY
1	1	1	1	1	1
2	1	1	1	1	1
3	1	1	1	1	1
4	2	4	1	1	2
5	2	4	1	1	2
6	2	4	1	1	2
7	1	1	1	1	1
8	3	9	1	1	3
9	2	4	1	1	2
10	2	4	2	4	4
11	2	4	2	4	4
12	1	1	2	4	2
13	3	9	2	4	6
14	1	1	2	4	2
15	2	4	2	4	4
16	2	4	2	4	4
17	2	4	2	4	4
18	2	4	2	4	4
19	2	4	3	9	6
20	2	4	3	9	6
21	2	4	3	9	6
22	2	4	3	9	6
23	2	4	3	9	6
24	1	1	3	9	3
25	1	1	3	9	3
26	1	1	3	9	3
27	2	4	3	9	6
28	2	4	4	16	8
29	2	4	4	16	8
30	2	4	4	16	8
31	1	1	4	16	4
32	2	4	4	16	8
33	2	4	4	16	8
34	3	9	4	16	12
35	3	9	4	16	12
36	2	4	4	16	8
3/	1	1	1	1	1
38	2	4	1	1	2
39	2	4	1	1	2
40	2	4	1	1	2
41	2	4	1	1	2
42	1	1	1	1	1
43	2	4	1	1	2
44	2	4	1	1	2
43	1	1	1	1	1
40	2	4	1	1	2
4/	1	1	1	1	1
48	2	4	1	1	2
49	2	4	1	1	2

50	2	1	1	1	2
50	2	4	1	1	2
51	2	4	1	1	2
52	2	4	1	1	2
53	2	4	1	1	2
54	1	1	1	1	1
55	2	4	1	1	2
56	1	1	1	1	1
57	2	<u>.</u> Д	1	1	2
58	2	4	1	1	2
50	2	4	1	1	2
59	2	4	1	1	2
60	2	4	1	1	2
61	2	4	1	1	2
62	2	4	1	1	2
63	2	4	1	1	2
64	2	4	1	1	2
65	1	1	2	4	2
66	1	1	2	4	2
67	1	1	2	4	2
68	2	<u>л</u>	2	т 	<u> </u>
69	2	4	2	+ 1	-+ /
70	2	4	2	4	4
70	2	4	2	4	4
71	3	9	2	4	6
72	2	4	2	4	4
73	2	4	2	4	4
74	2	4	2	4	4
75	2	4	2	4	4
76	2	4	2	4	4
77	2	4	2	4	4
78	2	4	2	4	4
79	2	4	2	4	4
80	2	4	2	4	4
81	2	4	2	4	4
82	1	1	2	4	2
83	2	4	2	4	
84	2	1	2	1	1
85	2	4	2	4	
86	2	4	2	4	4
80	2	4	2	4	4
87	1	1	2	4	2
88	2	4	2	4	4
09	2	4	2	4	4
90	2	4	2	4	4
91	2	4	2	4	4
92	2	4	2	4	4
93	2	4	3	9	6
94	1	1	3	9	3
95	2	4	3	9	6
96	1	1	3	9	3
97	2	4	3	9	6
98	2	4	3	9	6
99	2	4	3	9	6
100	2	<u>ب</u> ل	3	a	6
101	2 2		2	0	6
102	2	4 1	0 0	3	6
102	2	4	<u>ວ</u>	3	0
103	2	4	<u></u> ৩	9	<u>ь</u>
104	2	4	3	9	6

105	3	9	3	9	9
106	1	1	3	9	3
107	1	1	3	9	3
108	2	4	3	9	6
109	2	4	3	9	6
110	2	4	3	9	6
111	1	1	3	9	3
112	2	4	3	9	6
113	2	4	3	9	6
114	2	4	3	9	6
115	2	4	3	9	6
116	2	4	3	9	6
117	3	9	3	9	9
118	2	4	3	9	6
119	2	4	3	9	6
120	2	4	3	9	6
121	2	4	4	16	8
122	1	1	4	16	4
123	2	4	4	16	8
124	2	4	4	16	8
125	2	4	4	16	8
126	2	4	4	16	8
127	1	1	4	16	4
128	2	4	4	16	8
129	2	4	4	16	8
130	2	4	4	16	8
131	2	4	4	16	8
132	2	4	4	16	8
133	2	4	4	16	8
134	1	1	4	16	4
135	3	9	4	16	12
136	1	1	4	16	4
137	3	9	4	16	12
138	3	9	4	16	12
139	3	9	4	16	12
140	3	9	4	16	12
141	3	9	4	16	12
142	3	9	4	16	12
143	3	9	4	16	12
144	3	9	4	16	12
145	3	9	4	16	12
146	2	4	4	16	8
147	1	1	4	16	4
148	2	4	4	16	8
149	2	4	4	16	8
SUMS	284	588	374	1126	735

Applying the following formula

$$\mathbf{r} = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{[n(\sum X^2)] - (\sum X)^2 [n(\sum Y^2) - (\sum Y)^2]}}$$

Where;

n= number of paired observations

X stands for management of educational personnel

Y stands for academic performance

 $\sum XY$ = sum of cross products of X and Y. That is, multiply the corresponding values of X and Y and sum these products,

 $\sum X$ and $\sum Y$ are sums of the X and Y scores respectively.

 $\sum X^2$ = Sum of all the squared X scores,

 $\sum Y^2$ =Sum of all the squared Y scores

 $(\sum X)^2$ = Sum of all X scores, this sum squared,

 $(\sum Y)^2$ = Sum of all Y scores, this sum squared.

Substituting in the formula, the following is obtained

 $r = \underline{149(735)-(284)(374)} \approx .248$ $\sqrt{[149(588)-(284)^2][[149(1126)-(374)^2]}}$

Appendix 9: Calculation for correlation between management of instructional material

and academic performance

RESPONDENTS	Х	X2	Y	Y2	XY
1	3	9	1	1	3
2	1	1	1	1	1
3	1	1	1	1	1
4	2	4	1	1	2
5	2	4	1	1	2
6	2	4	1	1	2
7	1	1	1	1	1
8	3	9	1	1	3
9	2	4	1	1	2
10	2	4	2	4	4
11	2	4	2	4	4
12	1	1	2	4	2
13	3	9	2	4	6
14	1	1	2	4	2
15	2	4	2	4	4
16	2	4	2	4	4
17	2	4	2	4	4
18	2	4	2	4	4
19	2	4	3	9	6
20	2	4	3	9	6
21	2	4	3	9	6
22	2	4	3	9	6
23	2	4	3	9	6
24	1	1	3	9	3
25	1	1	3	9	3
26	3	9	3	9	9
27	2	4	3	9	6
28	2	4	4	16	8
29	2	4	4	16	8
30	2	4	4	16	8
31	1	1	4	16	4
32	2	4	4	16	8
33	2	4	4	16	8
34	3	9	4	16	12
35	3	9	4	16	12
36	2	4	4	16	8
37	1	1	1	1	1
38	2	4	1	1	2
39	2	4	1	1	2
40	2	4	1	1	2
41	2	4	1	1	2
42	1	1	1	1	1
43	2	4	1	1	2
44	2	4	1	1	2
45	1	1	1	1	1
46	2	4	1	1	2
47	1	1	1	1	1
48	2	4	1	1	2
49	2	4	1	1	2

50	2				_
50	2	4	1	1	2
51	2	4	1	1	2
52	2	4	1	1	2
53	2	4	1	1	2
54	1	1	1	1	1
55	2	4	1	1	2
56	1	1	1	1	1
57	2	1	1	1	2
58	2		1	1	2
50	2	4	1	1	2
5) 60	2	4	1	1	2
60	2	4	1	1	2
01	2	4	1	1	2
62	2	4	1	1	2
63	2	4	1	1	2
64	2	4	1	1	2
65	3	9	2	4	6
66	1	1	2	4	2
67	1	1	2	4	2
68	2	4	2	4	4
69	2	4	2	4	4
70	2	4	2	4	4
71	3	9	2	4	6
72	2	4	2	4	4
73	2	4	2	4	4
74	2	4	2	4	4
75	2		2		
76	2	4	2		4
70	2	4	2	4	4
78	2	4	2	4	4
78	2	4	2	4	4
80	2	4	2	4	4
00	2	4	2	4	4
81	2	4	2	4	4
82	1	1	2	4	2
83	2	4	2	4	4
84	2	4	2	4	4
85	2	4	2	4	4
86	2	4	2	4	4
87	1	1	2	4	2
88	2	4	2	4	4
89	2	4	2	4	4
90	2	4	2	4	4
91	2	4	2	4	4
92	2	4	2	4	4
93	2	4	3	9	6
94	1	1	3	9	3
95	2	4	3	9	6
96	1	1	3	9	3
97	2	4	2	a	6
98	2		2	<u>a</u>	6
99	2	4	2	0	6
100	2	4	3	9	0
100	2	4	<u>১</u>	9	<u>р</u>
101	2	4	3	9	6
102	2	4	3	9	6
103	2	4	3	9	6
104	2	4	3	9	6

105	3	9	3	9	9
106	1	1	3	9	3
107	1	1	3	9	3
108	2	4	3	9	6
109	2	4	3	9	6
110	2	4	3	9	6
111	3	9	3	9	9
112	2	4	3	9	6
113	2	4	3	9	6
114	2	4	3	9	6
115	2	4	3	9	6
116	2	4	3	9	6
117	3	9	3	9	9
118	2	4	3	9	6
119	2	4	3	9	6
120	2	4	3	9	6
121	2	4	4	16	8
122	1	1	4	16	4
123	2	4	4	16	8
124	2	4	4	16	8
125	2	4	4	16	8
126	2	4	4	16	8
127	1	1	4	16	4
128	2	4	4	16	8
129	2	4	4	16	8
130	2	4	4	16	8
131	2	4	4	16	8
132	2	4	4	16	8
133	2	4	4	16	8
134	1	1	4	16	4
135	3	9	4	16	12
136	1	1	4	16	4
137	3	9	4	16	12
138	3	9	4	16	12
139	3	9	4	16	12
140	3	9	4	16	12
141	3	9	4	16	12
142	3	9	4	16	12
143	3	9	4	16	12
144	3	9	4	16	12
145	3	9	4	16	12
146	3	9	4	16	12
147	3	9	4	16	12
148	2	4	4	16	8
149	2	4	4	16	8
SUMS	295	633	374	1126	765

Applying the following formula

$$\mathbf{r} = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{[n(\sum X^2)] - (\sum X)^2 [n(\sum Y^2) - (\sum Y)^2]}}$$

Where;

n= number of paired observations

X stands for management of instructional material

Y stands for academic performance

 $\sum XY$ = sum of cross products of X and Y. That is, multiply the corresponding values of X and Y and sum these products,

 $\sum X$ and $\sum Y$ are sums of the X and Y scores respectively.

 $\sum X^2$ = Sum of all the squared X scores,

 $\sum Y^2$ =Sum of all the squared Y scores

 $(\sum X)^2$ = Sum of all X scores, this sum squared,

 $(\sum Y)^2$ = Sum of all Y scores, this sum squared.

Substituting in the formula, the following is obtained

 $r = \underline{149(765)-(295)(374)} \approx .256$ $\sqrt{[149(633)-(295)^2][[149(1126)-(374)^2]]}$

Appendix 10: Calculation for correlation between management of educational facilities

and academic performance

RESPONDENTS	Х	X2	Y	Y2	XY
1	3	9	1	1	3
2	1	1	1	1	1
3	1	1	1	1	1
4	2	4	1	1	2
5	2	4	1	1	2
6	2	4	1	1	2
7	1	1	1	1	1
8	3	9	1	1	3
9	2	4	1	1	2
10	2	4	2	4	4
11	2	4	2	4	4
12	1	1	2	4	2
13	3	9	2	4	6
14	1	1	2	4	2
15	2	4	2	4	4
16	2	4	2	4	4
17	2	4	2	4	4
18	2	4	2	4	4
19	2	4	3	9	6
20	2	4	3	9	6
21	2	4	3	9	6
22	2	4	3	9	6
23	2	4	3	9	6
24	1	1	3	9	3
25	1	1	3	9	3
26	3	9	3	9	9
27	2	4	3	9	6
28	2	4	4	16	8
29	2	4	4	16	8
30	2	4	4	16	8
31	1	1	4	16	4
32	2	4	4	16	8
33	2	4	4	16	8
34	3	9	4	16	12
35	3	9	4	16	12
36	2	4	4	16	8
37	1	1	1	1	1
38	2	4	1	1	2
39	2	4	1	1	2
40	2	4	1	1	2
41	2	4	1	1	2
42	1	1	1	1	1
43	2	4	1	1	2
44	2	4	1	1	2
45	1	1	1	1	1
46	2	4	1	1	2
47	1	1	1	1	1
48	2	4	1	1	2
49	2	4	1	1	2

50	-				_
50	2	4	1	1	2
51	2	4	1	1	2
52	2	4	1	1	2
53	2	4	1	1	2
54	1	1	1	1	1
55	2	4	1	1	2
56	1	1	1	1	1
57	2	1	1	1	2
58	2		1	1	2
50	2	4	1	1	2
5) 60	2	4	1	1	2
60	2	4	1	1	2
01	2	4	1	1	2
62	2	4	1	1	2
63	2	4	1	1	2
64	2	4	1	1	2
65	3	9	2	4	6
66	1	1	2	4	2
67	1	1	2	4	2
68	2	4	2	4	4
69	2	4	2	4	4
70	2	4	2	4	4
71	3	9	2	4	6
72	2	4	2	4	4
73	2	4	2	4	4
74	2	4	2	4	4
75	2		2		
76	2	4	2	4	4
70	2	4	2	4	4
78	2	4	2	4	4
78	2	4	2	4	4
<i>13</i> 80	2	4	2	4	4
00	2	4	2	4	4
81	2	4	2	4	4
82	1	1	2	4	2
83	2	4	2	4	4
84	2	4	2	4	4
85	2	4	2	4	4
86	2	4	2	4	4
87	1	1	2	4	2
88	2	4	2	4	4
89	2	4	2	4	4
90	2	4	2	4	4
91	2	4	2	4	4
92	2	4	2	4	4
93	2	4	3	9	6
94	1	. 1	3	q	3
95	2	4	2	a	6
96	1	1	2	0	2
97	י ר	1	2	0	6
98	2	4	3 2	9	e o
99	2	4	<u> </u>	9	0
100	2	4	<u>১</u>	9	6
100	2	4	3	9	6
101	2	4	3	9	6
102	2	4	3	9	6
103	2	4	3	9	6
104	2	4	3	9	6

105	3	9	3	9	9
106	1	1	3	9	3
107	1	1	3	9	3
108	2	4	3	9	6
109	2	4	3	9	6
110	2	4	3	9	6
111	3	9	3	9	9
112	2	4	3	9	6
113	2	4	3	9	6
114	2	4	3	9	6
115	2	4	3	9	6
116	2	4	3	9	6
117	3	9	3	9	9
118	2	4	3	9	6
119	2	4	3	9	6
120	2	4	3	9	6
121	2	4	4	16	8
122	1	1	4	16	4
123	2	4	4	16	8
124	2	4	4	16	8
125	2	4	4	16	8
126	2	4	4	16	8
127	1	1	4	16	4
128	2	4	4	16	8
129	2	4	4	16	8
130	2	4	4	16	8
131	2	4	4	16	8
132	2	4	4	16	8
133	2	4	4	16	8
134	1	1	4	16	4
135	3	9	4	16	12
136	1	1	4	16	4
137	3	9	4	16	12
138	3	9	4	16	12
139	3	9	4	16	12
140	3	9	4	16	12
141	3	9	4	16	12
142	3	9	4	16	12
143	3	9	4	16	12
144	3	9	4	16	12
145	2	4	4	16	8
146	2	4	4	16	8
147	2	4	4	16	8
148	2	4	4	16	8
149	3	9	4	16	12
SUMS	293	623	374	1126	757

Applying the following formula

$$\mathbf{r} = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{[n(\sum X^2)] - (\sum X)^2 [n(\sum Y^2) - (\sum Y)^2]}}$$

Where;

n= number of paired observations

X stands for management of educational facilities

Y stands for academic performance

 $\sum XY$ = sum of cross products of X and Y. That is, multiply the corresponding values of X and Y and sum these products,

 $\sum X$ and $\sum Y$ are sums of the X and Y scores respectively.

 $\sum X^2$ = Sum of all the squared X scores,

 $\sum Y^2$ =Sum of all the squared Y scores

 $(\sum X)^2$ = Sum of all X scores, this sum squared,

 $(\sum Y)^2$ = Sum of all Y scores, this sum squared.

Substituting in the formula, the following is obtained

 $r = \underline{149(757)-(293)(374)} \approx .230$ $\sqrt{[149(623)-(293)^2][[149(1126)-(374)^2]]}$

Appendix 11: Calculation for correlation between management of finances and

academic performance

RESPONDENTS	Х	X2	Y	Y2	XY
1	3	9	1	1	3
2	1	1	1	1	1
3	1	1	1	1	1
4	2	4	1	1	2
5	2	4	1	1	2
6	2	4	1	1	2
7	1	1	1	1	1
8	3	9	1	1	3
9	2	4	1	1	2
10	2	4	2	4	4
11	2	4	2	4	4
12	1	1	2	4	2
13	3	9	2	4	6
14	1	1	2	4	2
15	2	4	2	4	4
16	2	4	2	4	4
17	2	4	2	4	4
18	2	4	2	4	4
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20	2	4	3	9	6
21	2	4	3	9	6
22	2	4	3	9	6
23	2	4	3	9	6
24	1	1	3	9	3
25	1	1	3	9	3
26	3	9	3	9	9
27	2	4	3	9	6
28	2	4	4	16	8
29	2	4	4	16	8
30	2	4	4	16	8
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32	2	4	4	16	8
33	2	4	4	16	8
34	3	9	4	16	12
35	3	9	4	16	12
36	2	4	4	16	8
37	1	1	1	1	1
38	2	4	1	1	2
39	2	4	1	1	2
40	2	4	1	1	2
41	2	4	1	1	2
42	1	1	1	1	1
43	2	4	1	1	2
44	2	4	1	1	2
45	1	1	1	1	1
46	2	4	1	1	2
47	1	1	1	1	1
48	2	4	1	1	2
49	2	4	1	1	2

50	2	4	1	1	2
51	2	4	1	1	2
52	2	4	1	1	2
53	2	4	1	1	2
54	1	1	1	1	1
55	2	4	1	1	2
56	1	1	1	1	1
57	2	4	1	1	2
58	2	4	1	1	2
59	2	4	1	1	2
60	2	4	1	1	2
61	2	4	1	1	2
62	2	4	1	1	2
63	2	4	1	1	2
64	2	4	1	1	2
65	3	9	2	4	6
66	1	1	2	4	2
67	1	1	2	4	2
68	2	4	2	4	4
69	2	4	2	4	4
70	2	4	2		4
70	2	9	2		6
72	2	4	2		4
72	2		2		4
73	2	4	2		
75	2	4	2	4	4
75	2	4	2	4	4
70	2	4	2	4	4
78	2	4	2	4	4
78	2	4	2	4	4
80	2	4	2	4	4
81	2	4	2	4	4
82	<u> </u>	4	2	4	4
83	2	1	2	4	<u> </u>
84	2	4	2	4	4
85	2	4	2	4	4
86	2	4	2	4	4
80	<u> </u>	4	2	4	4
88	2	1	2	4	Z
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94	<u> </u>	4	2	9	2
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101	2	4	<u>১</u>	9	0
102	2	4	<u>১</u>	9	0
103	2	4	ა ი	9	0
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105	3	9	3	9	9
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106	1	1	3	9	3
107	1	1	3	9	3
108	2	4	3	9	6
109	2	4	3	9	6
110	2	4	3	9	6
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113	2	4	3	9	6
114	2	4	3	9	6
115	2	4	3	9	6
116	2	4	3	9	6
117	3	9	3	9	9
118	2	4	3	9	6
119	2	4	3	9	6
120	2	4	3	9	6
121	2	4	4	16	8
122	1	1	4	16	4
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132	2	4	4	16	8
133	2	4	4	16	8
134	1	1	4	16	4
135	3	9	4	16	12
136	1	1	4	16	4
137	3	9	4	16	12
138	3	9	4	16	12
139	3	9	4	16	12
140	3	9	4	16	12
141	3	9	4	16	12
142	3	9	4	16	12
143	3	9	4	16	12
144	3	9	4	16	12
145	2	4	4	16	8
146	2	4	4	16	8
147	2	4	4	16	8
148	3	9	4	16	12
149	2	4	4	16	8
SUMS	293	623	374	1126	757

Applying the following formula

$$\mathbf{r} = \frac{n(\sum XY) - (\sum X)(\sum Y)}{\sqrt{[n(\sum X^2)] - (\sum X)^2} [n(\sum Y^2) - (\sum Y)^2]}$$

Where;

n= number of paired observations

X stands for management of finance

Y stands for academic performance

 $\sum XY =$ sum of cross products of X and Y. That is, multiply the corresponding values of X and Y and sum these products, $\sum X$ and $\sum Y$ are sums of the X and Y scores respectively.

 $\sum X^2$ = Sum of all the squared X scores,

 $\sum Y^2$ =Sum of all the squared Y scores

 $(\sum X)^2$ = Sum of all X scores, this sum squared,

 $(\sum Y)^2$ = Sum of all Y scores, this sum squared.

Substituting in the formula, the following is obtained

 $r = \underline{149(757)-(293)(374)} \approx .230$ $\sqrt{[149(623)-(293)^2][[149(1126)-(374)^2]]}$

Appendix 12									
	TOP 250 SCHOOLS ACCORDIN	NG TO THE NUI	MBER OF F	IRST GF	RADES				
		SCORED							
NO	SCHOOL	TOTAL	DIV 1	DIV II	DIV III				
1	St. Mary's SS Kitende	404	337	56	3				
2	Katikamu SS, Luwero	354	265	71	10				
3	Seeta High School	312	227	78	6				
4	Nabisunsa Girls' Sch	260	224	8	0				
5	Uganda Martyrs Namugongo	222	221	1	0				
6	Kings College Buddo	237	206	27	1				
7	Mengo SS	407	194	179	27				
8	Bweranyangi Girls	292	189	98	1				
9	Kibuli ss	253	188	57	3				
10	Gayaza High Sch	217	187	28	2				
11	St. Henry's Kitovu	191	187	3	0				
12	Ntare Sch. Mbarara	208	187	21	0				
13	St. Joseph SS Naggalama	213	180	32	0				
14	St.Mary's College Kisubi	177	171	3	0				
15	Ndejje SS	226	171	54	0				
16	Mbarara High School	186	160	24	0				
17	Maryhill High School Mbarara	189	157	30	1				
18	Trinity College Nabbingo	195	157	34	4				
19	Namilyango College	178	157	19	0				
20	Tororo Girls	296	154	126	15				
21	Makerere College School	294	151	111	23				
22	Gombe ss	233	145	74	9				
23	Mt. St. Mary's Namagunga	141	139	2	0				
24	Kawempe Muslim School	215	133	74	8				
25	Our Lady of Good Counsel	202	125	69	7				
26	St. Joseph's Girls' Nsambya	151	124	26	1				
27	Kiira College Butiki	212	118	66	20				
28	Naalya Sec. Sch. Namugongo	185	111	60	7				
29	Iganga SS	193	110	79	3				
30	St. Kalemba SS Kayunga	187	110	60	15				
31	Busoga College Mwiri	228	107	98	21				
32	Bishop Cipriano Kinangire SS Kampala	186	106	74	5				
33	Bukoyo SS, Iganga	255	101	59	36				
34	Jinja College	145	95	46	4				
35	Kyambogo College	272	95	124	40				
36	Imm. Heart Girls Rukungiri	145	92	53	0				
37	Masaka SS	444	90	174	112				
38	Lubiri SS	314	88	141	61				
39	Blessed Sacrament SS, Kimaanya	119	85	30	2				
40	St. Mary Gorret Katende	169	82	73	12				

NO	SCHOOL	TOTAL	DIV 1	DIV II	DIV III	
41	Kitante Hill School	222	81	88	39	
42	Buddo Secondary School	240	81	82	47	
43	Wanyange Girls	272	73	135	54	
44	Nabumali High School	262	73	117	55	
45	Bishop's SS, Mukono	142	71	57	32	
46	Naalya SS, Bweyogerere	272	71	119	57	
47	Maryland High Sch. Entebbe	122	70	57	32	
48	Kabalega SS, Masindi	290	68	119	57	
49	Teso College Aloet	192	66	45	6	
50	Mbogo High Kawempe	195	64	101	75	
51	Kampala SS	352	63	60	19	
52	St. Joseph's College Kisubi	180	62	88	37	
53	London College of St. Lawrence	151	61	110	19	
54	St. Lawrence SS, Crown City	193	60	137	103	
55	St. Lawrence Citezen's High School	121	59	56	40	
56	Mandela SS Hoima	202	58	57	25	
57	Muntuyera High, Kitunga	152	58	71	42	
58	St. Peters College, Tororo	139	57	51	12	
59	Lakeside College, Luzira	261	57	94	43	
60	St. Lawrence College Paris Palais	114	57	75	16	
61	Holy Cross Lake View SS Jinja	166	56	62	17	
62	Milton High School, Mukono	308	55	81	87	
63	Kitabi Seminary Bushenyi	74	54	41	12	
64	Bulo Parents SS	264	53	100	9	
65	St. Joseph's College Layibi	212	52	132	85	
65	St. Joseph's College Layibr	212	52	107	45	
66	Seroma Christian High School	241	52	90	65	
67	St. Edward's Sch Bukumi	66	51	12	104	
60	Nitvono Modern SS	321	51	103	104	
70	Kieubi High Sabaal Kampala	190	50	09	42	
70	Also Alight School, Kampala	200	50	01	20	
72	Stella Maria Cologo, Naubo	132	30	60	20	
73	Mugwapya Summit College	220	47	80	61	
74	Buloba High Sch	155	47	80	61	
75	Turkish Light Academy	63	46	15	2	
76	Rubaga Girl's Kampala	58	45	39	2	
77	High Sch. Ntinda	122	45	53	17	
78	St Mary's College Rusboroza	155	40	80	26	
79	Kaniuki SS	146	44	66	26	
80	Kveizooba Girls, Bushenvi	135	43	79	11	
81	Kibibi SS. Mpiai	186	43		40	
82	Christ The King SS. Kalisizo	177	40	92	33	
83	Mbale SS	499	39	155	159	
84	Bweyogerere Secondarv School	186	39	64	55	
85	Kigezi High School	129	38	67	11	

NO	SCHOOL	TOTAL	DIV 1	DIV II	DIV III	
86	M.M College, Wairaka	113	37	62	13	
87	Entebbe SS	168	37	68	55	
89	Nganwa High Sch. Bushenyi	165	37	78	41	
90	Kisubi Seminary	49	37	10	1	
91	St. Leo's College, Kyebambe	132	36	65	13	
92	Aduku SS	115	36	58	15	
93	St. Paul's Seminary, Kabale	47	36	9	1	
94	Mariam High Sch. Kisasi	121	36	66	15	
95	Secred Heart SS, Mbarara	171	35	106	28	
96	Bugwere High Sch	205	34	65	63	
97	Kajjansi Progressive SS	223	34	77	62	
98	Midland High Sch. Kawempe	207	34	79	70	
99	Nakanyonyi Girls Sch, Jinja	290	33	134	90	
100	Bugema Adventist College	149	32	76	36	
101	Bp. Kivengere Girls, Kabale	102	32	57	11	
102	St. Peters SS, Nalya	135	32	47	36	
103	St. Lawrence SS, Ssonde	129	32	64	28	
104	Ngora High Sch	161	31	63	58	
105	St. Joseph's College Ombaci	123	31	62	30	
106	St. Mbaga's College, Naddangira	206	31	79	62	
107	Lubiri High Sch	199	31	78	70	
108	Kabale Trinity College	198	31	103	51	
109	Kako SS, Masaka	92	30	44	14	
110	Masheruka SS, Bushenyi	111	30	68	11	
111	St. Kizito High, Mwera	43	30	13	0	
112	Mbogo Mixed SS	201	30	89	54	
113	Lango College, Lira	186	29	92	48	
114	Wampewo High Sch, Kasangati	128	29	63	30	
115	Bukalasa Seminary, Masaka	48	29	19	0	
116	Kasubi Secondary School, Kampala	243	29	65	97	
117	St. Kizito SS, Bugolobi	122	29	76	14	
118	Mulusa Academy Wobulenzi	180	29	57	56	
119	Jinja SS	390	28	128	134	
120	Soroti SS	473	28	141	189	
121	St. Joseph's Voc. Mbarara	112	28	68	16	
122	Light College katikamu	180	27	66	57	
123	Kibubura Girls, Ibanda	151	26	95	30	
124	Greenhill Academy Kampala	70	26	26	11	
125	Mpoma School	135	26	63	36	
126	St. Charles Lwanga Koboko	122	25	68	25	
127	Kyebanbe Girls S.S	116	25	75	15	
128	Migadde College, Bombo	109	25	50	28	
129	St. Katherine SS Lira	147	24	69	45	
130	Kotido SS	144	24	84	31	
131	St. Paul's High Sch, Jinja	55	24	29	1	
132	City High Sch	202	23	72	54	

NO	SCHOOL	TOTAL	DIV 1	DIV II	DIV III
133	Budini SS, Kaliro	241	23	97	77
134	St. Balikuddembe SS, Buwama	271	23	55	49
135	St. mark's College, Namagoma, Kla	138	23	64	31
136	Progessive Citizen H/S, Mukono	201	23	64	50
137	Bethany High Sch, Naalya	148	23	70	34
138	Kakungulu Mem, School Kampala	91	23	41	19
139	Ntinda View College	228	22	90	72
140	Duhanga SS High Hoima	130	21	53	36
141	St. Josephs' Seminary Nyenga	32	21	11	0
142	St. Peter's Nsambya	179	21	74	49
143	St.Balikudembe SS, Kisoga	131	21	37	42
144	Taibah College School	81	21	35	15
145	Kololo SS	161	20	50	39
146	Kasawo SS, Kayunga	133	20	54	33
147	Dabani Girls Sch	128	20	59	37
148	Kinyansano Girl's Rukungiri	131	20	55	53
149	Mukono High Sch	173	20	46	45
150	Valley Colege SS Bushenyi	82	20	38	16
151	Namugoona Parents SS	223	20	52	65
152	Mityana Standard SS	99	20	28	33
153	Jeressar High School	124	20	83	16
154	Sebel SS	242	19	67	84
155	Busoga High School	137	19	30	55
156	Uganda Martyrs Rubaga	95	19	34	30
157	Mary Reparatrix TC Ebbe	112	19	53	24
158	Bilal Islamic	239	19	73	77
159	Kitende SS, Kajansi	118	19	40	43
160	Busaana SS, Kayunga	168	19	53	61
161	Excel High Sch, Kitebi	207	19	58	44
162	Mikindye Secondary School	109	19	42	30
163	Dr. Obote College Boroboro	85	18	56	7
164	Mityana Ss	191	18	64	39
165	Kisenyi SS, Mubende	126	18	31	46
166	San Glovanni Sch, Kawempe	110	18	61	24
167	Baptist High Sch, Kitebi	159	18	69	46
168	St. Charles , Lwanga, Mubende	82	18	39	20
169	Kingstone High Sch, Kawempe	108	18	62	21
170	Mbarara Army Boarding SS	113	18	55	33
171	Ssaku Secondary School	116	18	35	39
172	Comboni College Lira	129	17	64	34
173	P.M.M Girls Sch, Jinja	151	17	50	38
174	St. Abdrea Kahwa's College ,Hoima	147	17	59	46
175	St. Bernard's College Kiswera	134	17	33	40
176	Kabindi SS, Kisoro	219	17	47	59
177	St Joseph's Cent SS Ndeba	99	17	53	22
178	Tropical High School, Kampala	83	17	30	24

NO	SCHOOL	TOTAL	DIV 1	DIV II	DIV III	
179	Namirembe Hillside H/S Kampala	57	17	24	14	
180	Namboole High Sch	99	17	36	33	
181	Bp, Asili Sec Sch Moyo	253	17	55	79	
182	Noah's Ark Sec. School Lugazi	175	17	40	45	
183	Kitgum High Sch	130	16	50	44	
184	Kisoko High Sch, Tororo	153	16	67	45	
185	St. John Bosco Hoima	37	16	19	2	
186	St Jooseph's Girls Nkoni	100	16	40	27	
187	St. Charles Lwanga Kasasa	57	16	23	11	
188	st. Thereza's Girls Bwanda	143	16	46	49	
191	Namagabi SS, Kayunga	256	16	76	78	
192	Lugazi Homeland College	137	16	42	26	
193	st.paul's S.S, Mbulamuti	42	16	13	11	
194	Wisdom SS, Kasawo	98	16	43	26	
195	Kawanda Sec. Sch	164	16	42	44	
196	Brilliant High Sch.Kawempe	79	16	17	2	
197	Busia Trust SS	226	16	53	89	
198	Nyarukiika High School Ibanda	39	16	15	15	
199	St.Noa Mawagali SS Jinja	220	16	89	77	
200	kabojja secondary School	49	16	18	9	
201	St. kizito Sec. School Kabowa	34	16	17	0	
202	Ibanda SSS.	48	15	21	12	
203	Mvara SS, Arua	143	15	58	55	
204	Kiteredde SS, Kyotera	69	15	28	18	
205	meth SS, Lugazi	77	15	32	22	
206	Ediofe Girls, Arua	97	15	56	25	
207	Sacred Heart Seminary, Mubende	28	15	10	3	
208	Kinaawa High sch, mulago	164	15	43	43	
209	St. Mary's SS, Namaliga	85	15	46	22	
210	kawempe Royal college	200	15	33	68	
211	Sumaya Girls H/S, Nsangi	242	15	65	81	
212	St, mary's Voc. Sch, Kyamuhunga	80	15	49	16	
213	Gulu High School	168	14	96	48	
214	Bukedi College, Kachoga	116	14	51	32	
215	Nyakasura Sch	114	14	42	37	
216	St.Kaggwa Bushenyi	75	14	47	12	
217	Busia SS.	174	14	43	53	
218	St. Mary's College Aboke.	52	14	30	8	
219	Kamonkoli College, Mbale	199	14	86	73	
220	St,. John's SS, Kabuwoko	119	14	48	36	
221	Nyabubare SS, Bushenyi	95	14	31	37	
222	Kyamakanda SS, Rukungiri	150	14	49	60	
223	Bp, Mcalister Coll, Bushenyi	54	14	25	8	
224	crested SS, Kampala	190	14	60	64	
225	GoodHeart Sec.School Jinja	79	14	38	22	
226	Lugazi parents inte. School	112	14	23	28	

NO	SCHOOL	TOTAL	DIV 1	DIV II	DIV III	
227	St. Thoman Acquinas SS, Kawempe	137	14	46	38	
228	Naminyango Secondary School	67	14	39	12	
229	St. John's Sec. School Ntebetebe	165	14	61	41	
230	piikington College, Muguluka Jinja	310	13	48	100	
231	Nadikel Seminary, Moroto	20	13	5	1	
232	Bwera SS, Kasese	148	13	34	59	
233	Kireka High Sch.	136	13	47	43	
234	Archbishop Kiwanuka SS, Kitovu	152	13	32	44	
235	Bp. Ogez H.S, Ishaka	86	13	34	27	
236	Tabah High Sch. Kawempe	59	13	23	13	
237	Bp. Nkoyoyo SS, Matale	122	13	31	40	
238	Vision College, Kikajjo	110	13	40	29	
239	Amuca SDA SS	320	13	74	109	
240	Grace High Sc, Bulamu	110	13	40	38	
241	Uganda Martys College, Ssende	70	13	24	18	
242	Kigumba Intensive SS	145	13	57	48	
243	St. Mark's Sec. School Kammengo	54	13	23	17	
244	Standard High School Zzana	136	13	45	36	
245	MasabaSS, Mbale	88	13	36	25	
246	Mpanga SS, fort.	221	13	63	66	
247	St. Gonzaga SS, Kiijukizo Rakai	132	12	42	41	
248	Luzira SS, Kampala	137	12	46	42	
249	St. Gerald's SS, nyakibale	94	12	44	23	
250	St. Bruno Sserunkuma Ggoli.	96	12	30	24	

Source: Weekly observer (2008 February 28- March 5), p.29-31. Best, Worst S.4 schools.

Appendix 13

First Grade Performance by Districts 'o' level results for the year 2007

S/n	DISTRICT	MALE	FEMALE	TOTAL	REGISTERED	% OF DIV 1
1	Wakiso	1717	1575	3292	19960	16.5
2	Kampala	1404	1169	2573	18753	13.7
3	Mukono	926	663	1589	11395	13.9
4	Bushenyi	350	360	710	6866	10.3
5	Jinja	530	180	710	5913	12
6	Masaka	513	156	669	7019	9.5
7	Luwero	392	276	668	5063	13.2
8	Mbarara	464	194	658	4597	14.3
9	Mpigi	373	203	576	5319	10.8
10	Kabale	249	87	336	4299	7.5
11	Tororo	160	174	334	3135	10.7
12	Kayayunga	170	72	242	2306	10.5
13	Iganga	114	125	239	4967	4.8
14	Mityana	125	89	214	3048	7
15	Mbale	157	44	201	4622	4.3
16	Rukungiri	65	121	186	2802	6.6
17	Masindi	161	21	182	2706	6.7
18	Arua	144	35	179	5855	3.1
19	Hoima	127	37	164	2473	6.6
20	Lira	127	28	155	3819	4.1
21	Rakai	83	67	150	2346	6.4
22	Soroti	127	21	148	3428	4.3
23	Ntungamo	121	21	142	2747	5.2
24	Kabarole	87	44	131	2440	5.4
25	Gulu	106	11	117	2673	4.4
26	Busia	72	40	112	2117	5.3
27	Kamuli	91	20	111	3360	3.3
28	Kasese	98	5	130	3317	3.1
29	Kibaale	65	29	94	1770	5.3
30	IVIUDende	59	15	74	1892	3.9
31	Ibanda	39	27	66	1489	4.4
32	Apac	44	21	65	1079	6
33	Видака	44	20	64	1050	6.1
34	Kumi	54	9	63	1631	3.9
30	Palisa	55	4	59	2100	2.7
30	Kahungu	30	14	50	1220	4.1
37	Kiporo	40	0	40	1041	3.1
30	Incingiro	25	4	45	075	4.2
39	Movo	30	10	40	975	4.0
40	Bugiri	30 22	5	40 20	1327	<u> </u>
41	Kitaum	35	3	38	1/65	2.3
/12	Manafwa	22	11	30	1403	2.0
43	Nakaseke	23	14	37	R01	<u> </u>
44	Kanchorwa	21	10 Q	35	1424	
46	Kaliro	21	2	33	001	2.0
40	Moroto	22	2 8	30	367	8.2
17		~~~~	0		507	0.2

48	Nakasongola	25	5	30	870	34
40	Kamwenge	23	6	27	938	3.1
50	Mavuqe	20	6	27	1194	23
51	Butaleia	25	2	25	809	3.3
52	Nebbi	24	1	24	1783	1.4
53	Kotido	22	2	20	144	16.7
54	Kvenioio	18	2	20	1352	1.5
55	Pader	20	0	20	633	3.2
56	Sironko	19	1	19	1195	1.7
57	Kiboga	17	2	19	1107	1.7
58	Ssembabule	18	1	19	600	3.2
59	Kiruhura	17	2	15	628	2.3
60	Adjumani	15	0	15	1518	1
61	Oyam	15	0	13	691	2.2
62	Dokolo	13	0	13	493	2.6
63	Lyantonde	12	4	12	203	6.4
64	Amuru	12	1	12	559	2.1
65	Bulisa	12	0	12	214	5.6
66	Yumbe	11	0	11	806	1.4
67	Kalangala	6	1	10	126	7.9
68	Bukedea	9	1	10	516	1.9
69	Bundibugyo	9	0	9	481	1.9
70	Amolatar	9	0	9	303	3
71	Amuria	6	1	7	382	1.8
72	Bukwo	6	1	7	463	1.5
73	Kaberamaido	6	0	6	538	1.1
74	Kaabong	6	0	6	95	6.3
75	Abim	4	2	6	173	3.5
76	Budeeba	4	0	4	203	2
77	Namutamba	4	0	4	379	1.1
78	Katakwi	1	0	1	314	0
79	Nakapiripit	0	0	0	111	0
	NATIONAL	10212	6089	16301	193076	8.4

SOURCE: Solomon Muyita and Grace Natabaalo. (Daily Monitor) (Saturday, Feb 2 2008)

Appen	Appendix 14										
		RESULT	S OF CANDIT	ATES C	D LEVEL (2006)						
S/n	DISTRICT	CANDIDATES	GRADE 1	S/n	DISTRICT	CANDIDATES	GRADE 1				
1	Wakiso	16143	23.1%	36	Kirihura	791	5.2%				
2	Mukono	9679	21.2%	37	Kapchorwa	1292	5.1%				
3	Kampala	17371	19.8%	38	Insingiro	847	5.1%				
4	Mbarara	4078	19.3%	39	Mbale	4157	4.9%				
5	Kayunga	1774	17.6%	40	Mubende	1663	4.9%				
6	Jinja	4812	17.5%	41	Kiboga	899	4.9%				
7	Mpigi	4097	16.3%	42	Kanungu	1244	4.7%				
8	Masaka	6066	15.2%	43	Amolatar	287	4.7%				
9	Bushenyi	6787	14.4%	44	Kisoro	979	4.6%				
10	Kalangala	91	13.6%	45	Apac	1923	4.3%				
11	Luweero	3908	12.9%	46	Arua	5356	4.2%				
12	Kabale	4227	11.9%	47	Kasese	3402	4.2%				
13	Moroto	319	11.2%	48	Kumi	1989	4.1%				
14	Rakai	2038	10.8%	49	Pallisa	2725	3.9%				
15	Tororo	2921	10.1%	50	Pader	527	3.9%				
16	Rukungiri	3075	9.7%	51	Bugiri	1341	3.7%				
17	Ntungamo	2638	9.5%	52	Kyenjojo	1070	3.7%				
18	Hoima	2318	9.5%	53	Kitgum	1366	3.4%				
19	Mityana	2723	9.4%	54	Моуо	1290	3.3%				
20	Masindi	2610	8.6%	55	Sirinko	912	3.3%				
21	Ibanda	1410	8.5%	56	Kaliro	763	3.3%				
22	Iganga	4293	8.3%	57	Nakapiripit	95	3.2%				
23	Kabarole	2375	8.2%	58	Kamwenge	629	3.1%				
24	Nakasongola	757	7.6%	59	Nebbi	1634	3.0%				
25	Nakaseke	742	7.4%	60	Yumbe	677	2.8%				
26	Butaloga	576	7.1%	61	Katido	295	2.8%				
27	Kibaale	1381	6.8%	62	Mayuge	982	2.7%				
28	Lira	3776	6.4%	63	Manafua	1649	2.2%				
29	Gulu	2732	6.2%	64	Ajumani	1348	2.1%				
30	Busia	2018	6.0%	65	Amuria	387	1.6%				
31	Koboko	1329	6.0%	66	Bundibugyo	451	1.4%				
32	Soroti	3132	5.8%	67	Katakwi	299	1.0%				
33	Kamuli	2773	5.7%	68	Kaberamaido	581	0.9%				
34	Kaabong	76	5.5%	69	Bukwo	473	0.9%				
35	Sembabule	497	5.3%								

SOURCE: Fortunate Ahimbisibwe and Connan Busingye (2007 February 11). How the

Districts performed. (Sunday Vision p. 1-2)

SUMMARY OF UNEB RESULTS OF SOME SELECTED SECONDARY SCHOOLS

Appendix 15								
	ST. HENRY'S COLLEGE KITOVU – MASAKA							
YEAR	Div. 1	Div. 2	Div. 3	Div. 4	Div. 7	Div. 9	TOTAL	
2003	117	08	00	00	00	00	125	
2004	148	00	00	00	00	00	148	
2005	157	02	00	00	00	00	159	
2006	194	03	00	00	00	00	197	
2007	187	03	00	00	00	00	190	
Total Grades	803	16	00	00	00	00	819	

IN MASAKA AND RAKAI DISTRICTS

SACRED HEART KITEREDDE S. S. – RAKAI

YEAR	Div. 1	Div. 2	Div. 3	Div. 4	Div. 7	Div. 9	TOTAL
2003	19	30	11	00	00	00	50
2004	27	28	8	00	00	00	63
2005	25	47	9	00	00	00	76
2006	28	29	11	01	00	00	69
2007	15	28	18	07	00	00	68
2008	23	28	21	13	00	00	79
Total Grades	137	190	78	21	00	00	405

CHRIST THE KING GIRLS S. S. S BULINDA - RAKAI

YEAR	Div. 1	Div. 2	Div. 3	Div. 4	Div. 7	Div. 9	TOTAL
2003	90	9	03	00	00	00	102
2004	54	46	04	00	00	00	104
2005	98	65	04	00	00	00	167
2006	88	55	11	00	00	00	207
2007	40	92	33	05	00	00	170
2008	55	88	31	05	00	00	179
Total Grades	425	355	86	10	00	00	929

YEAR	Div. 1	Div. 2	Div. 3	Div. 4	Div. 7	Div. 9	TOTAL
2003	12	16	23	10	01	05	67
2004	08	38	15	12	00	05	78
2005	15	28	17	04	00	00	64
2006	08	33	17	10	00	00	68
2007	14	48	35	17	01	00	115
2008	15	32	49	30	00	00	126
Total Grades	72	195	156	83	02	10	518

ST. JOHN'S KABWOKO S. S. – RAKAI

Source: School file

Appendix 16

SUMMARY OF UNEB RESULTS FOR SAMPLED SECONDARY SCHOOLS IN ADJUMANI

DISTRICT

Year	Div.1	Div.2	Div.3	Div.4	Div.7	Div.9	TOTAL
2002	1	12	30	17	1	6	67
2003	1	10	33	35	1	8	88
2004	4	12	38	22	0	2	78
2005	4	20	54	9	2	0	89
2006	8	12	22	36	0	2	80
Total Grades	18	66	177	119	4	18	402

BIYAYA SECONDARY SCHOOL

MONS BALA SECONDARY SCHOOL

Year	Div.1	Div.2	Div.3	Div.4	Div.7	Div.9	TOTAL
2002	18	43	57	40	0	13	171
2003	28	57	77	27	0	7	196
2004	12	43	56	16	0	3	130
2005							
2006	2	30	33	55	1	4	125
2007	0	29	51	62	0	9	151
Total Grades	60	202	274	200	1	36	773

DANIEL COMBONI SECONDARY SCHOOL

	Div.1	Div.2	Div.3	Div.4	Div.7	Div.9	TOTAL
2003	9	32	34	35	0	20	130
2004	3	27	47	31	0	10	118
2005	3	34	58	24	0	7	126
2006	3	21	34	62	0	7	127
2007	0	21	42	63	0	1	127
Total Grades	18	135	215	215	0	45	628

Year	Div.1	Div.2	Div.3	Div.4	Div.7	Div.9	TOTAL
2003	0	13	25	9	0	5	52
2004	0	7	9	5	0	1	22
2005	2	10	30	5	0	1	48
2006	0	5	16	10	0	0	31
2007	1	17	25	42	1	9	95
Total Grades	3	52	105	71	1	16	248

ST MARY ASSUMPTA SECONDARY SCHOOL

Source: School file