THE ACHIEVEMENT OF PRIMARY SCHOOL PUPILS IN UGANDA IN NUMERACY, LITERACY AND ORAL READING

NATIONAL ASSESSMENT OF PROGRESS IN EDUCATION UGANDA NATIONAL EXAMINATIONS BOARD

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ACRONYMS AND ABBREVIATIONS

DC	District Coordinator
DES	Directorate of Education Standards
EFA	Education For All
EMIS	Education Management Information System
EPRC	Education Policy Review Commission
HOTS	Higher Order Thinking Skills
LCM	Lowest Common Multiple
LOTS	Low Order Thinking Skills
MDG	Millennium Development Goals
MoES	Ministry of Education and Sports
NAPE	National Assessment of Progress in Education
NCDC	National Curriculum Development Centre
Р 3	Primary Three
Р 6	Primary Six
PLE	Primary Leaving Examination
PTCs	Primary Teachers' College
QEI	Quality Enhancement Initiatives
S.E	Standard Error
TLs	Team Leaders
UACE	Uganda Advanced Certificate of Education
UCE	Uganda Certificate of Education
UNEB	Uganda National Examinations Board
UPE	Universal Primary Education
USE	Universal Secondary Education

A WORD FROM THE MINISTER

An effective education system can act as pathways to national economic development in an increasingly globalized and competitive world. The Government introduced Universal Primary Education (UPE) in 1997 on the premise that increased access to education should be poverty alleviating and income equalizing among different sections of Ugandans. Indeed, there was a tremendous increase in pupil enrolment.

Government acknowledges the fact that the need to achieve *Education for All* (EFA) goals should be harnessed with improvements in the conditions of schooling and pupil achievement levels. The Ugandan experience has shown that spending on basic education, especially for the disadvantaged and those in hard to reach areas promotes equitable access.

Additionally, the Government has continued to put in place a number of other strategies to improve the conditions of schooling. For example, it has continued to provide instructional materials at all levels of the education system, to strengthen the training and in-service support to teachers, and enhance school-level supervision in a bid to minimize absenteeism of head teachers, teachers and pupils, among others.

The HIV/AIDS pandemic also continues to threaten the right and access to education and the attainment of EFA goals by affecting the supply, demand and quality of education. These effects result into increased drop in access to education, performance, transition rates and in education demand in general. It also causes an increase in teacher morbidity, work load, absenteeism, attrition and poor quality of teaching. The Government has developed a 5 year HIV/AIDS prevention strategy in order to address the challenges in the education sector. It has also strengthened the implementation of PIASCY performing Arts festivals at school level.

As stated in the previous reports, Government, through Uganda National Examinations Board, embarked on carrying out National Assessment of Progress in Education (NAPE) at the primary level since 1996 and secondary school level since 2008 to be able to monitor the effectiveness of the teaching-learning process. NAPE provides information about the achievement of a cohort of learners, which can supplement information on inputs to an education system and on educational processes.

This report is very informative because it provides policy makers, education managers and other stakeholders with evidence about the achievements and successes of the education system, constraints it may be operating under and the problems it may be experiencing, all of which should provide a basis for proposals for remedial action.

I, therefore, urge all stakeholders to give careful consideration to this report to ensure that quality teaching and learning takes place.

Hon. Maj. (Rtd) Jesicca Alupo (MP) Minister for Education and Sports

FOREWORD

Many countries have in the recent past realized the key role quality education plays in skill development for national development.

The Government of Uganda has directed its effort and resources, not only towards achieving access to education through Universal Primary Education (UPE), but also to improving the quality of education. For instance, through the application of quality enhancement initiatives (QEI) in some districts; and through the review of the curriculum. UNEB, too, has been provided with some resources to annually assess and monitor learning achievement of pupils.

This volume is the tenth annual publication of NAPE at the Primary level, in which assessment has continued to target P 3 and P 6 pupils in Numeracy and Literacy.

The report is meant for the key players in education, responsible for policy-development and implementation, as well as those who monitor and assess the process and outcomes. The Reader will note that the report format differs from that of academic researchers, due to the wide range of intended users: from parents and the learners to politicians and academicians.

I hope that each category of stakeholder will find the report valuable. We do welcome any feedback that you care to offer.

M B B Bukenya Executive Secretary

EXECUTIVE SUMMARY

The objectives of the 2011 NAPE study included determining the levels of achievement of P 3 and P 6 pupils and teachers in Literacy, Numeracy and Oral Reading; as well as establishing the variables that affect achievement.

The sample consisted of 24,533 P 3 pupils and 24,143 P 6 pupils drawn from 1,232 primary schools selected from the 112 districts of Uganda.

Performance in Numeracy at P 3 was quite good, but P 3 pupils' performance in Literacy and P 6 pupils' performance in the two subjects were below average. Teachers performed well in Numeracy and Literacy. However, their performance in Oral Reading, just like for the P 3 pupils, was weak.

The use of local language in lower primary could have led to better performance in Numeracy. Pupils' weak performance in Literacy could have been due to the deficiency in the teachers' skills to teach, particularly reading, reflected by the teachers' weak performance in Oral Reading; implying that they themselves might not have been taught reading skills. It is important that the teachers' deficiency in reading skills should be urgently addressed, so as to improve pupils' achievement in Literacy. Insufficient instructional materials is another likely drawback which should be dealt with sooner than later.

Variables that affect achievement:

Gender: P 3 and P 6 boys and girls performed at about the same level in Literacy, but in Numeracy P 6 boys performed better than the girls. Maybe due to the few role models the girls had, as only 8.2% of the female teachers in the sample taught Numeracy in P 6.

Teachers' performance followed the same trend as the pupils', with gender difference occurring only in Numeracy: males were better, which could be a result of gender stereotyping particularly in the rural areas. Popularising Mathematics and Science to girls in secondary schools could be one way of changing this trend.

Age: Younger pupils of about 8 years in P 3 and 11 years in P 6 performed best. Possibly due to learning difficulty or the involvement of older pupils in non-academic matters. Apart from encouraging parents to send children to school at the right age, there is need to continue improving the learning environment to make it conducive to all learners.

School ownership: Pupils in private schools performed better than those in government schools, particularly in P 6 Literacy. Perhaps better time management and more and better utilized reading materials in

private schools, and high pupil-teacher ratio in government school are contributing factors.

Teachers in government and private schools, however, performed at about the same level, implying that if the challenges of shortages currently facing government schools are addressed, teachers in such schools are capable of having their pupils perform just as well as those in private schools.

School Location: Pupils in urban schools performed better than those in rural schools. Probably there is a higher rate of absenteeism in the rural areas. Increasing supervision and ensuring that parents play their roles effectively are measures that could curb this problem.

Districts: The majority of pupils in Kampala, Bushenyi, Kiruhura, Masaka, Mbarara and Sheema performed well. But few pupils were rated proficient in the Northern districts of Agago, Alebtong, Amuru, Dokolo, Kole, Nwoya, Oyam and Pader; and the Eastern districts of Amuria, Bukedea, Bukwo, Kumi, Luuka, Manafwa and Pallisa. The teachers in these districts, too, generally performed at lower levels in Oral Reading. This calls for a need to identify the good practices in certain districts and replicate them in others. Also to identify the challenges in particular districts and apply targeted interventions.

Teachers' highest academic qualification: Teachers who had UACE as the highest academic qualification performed better than those with UCE. Possibly the former group has more grounding in the subject matter, which points to a need to consider revising the minimum entry qualification into PTCs to UACE.

Teachers' highest teaching qualification: Grade V holders performed slightly better than Grade III teachers in Oral Reading. Maybe the Grade V course allows for more development of reading skills. It might be worth identifying, re-training and using teachers with good reading skills to train others in their areas.

Class a teacher taught: P 6 teachers performed better than P 3 teachers, especially in Numeracy. Maybe because P 6 teachers deal with a wider content. This result suggests the need to regularly rotate the classes among the teachers in a school.

The subject a teacher taught: Teachers performed better in their main teaching subject than in the subject they did not teach. Perhaps as teachers plan, prepare and teach, they keep abreast with the subject matter, and some teachers may lack interest in certain subjects. There is therefore, need to allow subject specialization at the school level, especially in upper primary.

Chapter 1

INTRODUCTION

1.1 BACKGROUND

Uganda is one of the countries in East Africa, located between Latitudes 4^0 12'N and 1^0 29'S and Longitudes 29⁰ 34'E and 35⁰ 0' E; astride the equator. It comprises 241,550.7 square kilometers of land and 41,743.2 square kilometers of open water and swamps¹. The climate is generally tropical in nature, although it differs from one region to another.

Uganda is a landlocked country, bordered by Kenya in the East, the Democratic Republic of Congo in the West, Tanzania in the South, Rwanda in the South West and Sudan in the North. The country is mostly a plateau, whose fringes are marked by mountains and valleys which together with other physical features affect the provision of social services; like education in some areas. For instance, access to schools in the Island District of Kalangala, which is composed of many small islands on Lake Victoria, poses a challenge not only to pupils and teachers, but also to education administrators and inspectors. The same applies to the rocky and mountainous districts: Bundibugyo and Kisoro in the West and Bukwo and Bududa in the East. The country is currently divided into 112 districts, from the figure of 87 in 2010; 29% increase (see map on page 2). With the policy of decentralization, the districts are administered by the Local Governments, which are supervised by the Central Government's Ministry of Local Government.

Uganda's population is growing at a fast rate; increasing from 24.2 million in 2002 to the estimated figure of 32 million people by the end of 2010^2 . About a half of the population is below 15 years of age, which creates a high level of child dependence. The number of primary school pupils is expected to increase from 8.3 million in 2010 to 18.4 million in

¹ Uganda Bureau of Statistics, 2010 Statistical Abstract, Pg 1 http://www.ubos.org

² Uganda Bureau of Statistics, 2010 Statistical Abstract, Pg 11 http://www.ubos.org

2037¹. The high rate of population growth affects the country's effort to achieve and sustain quality education.

The population comprises about fifty ethnic groups, each with a different local language, which is supposed to be used as the medium of instruction in lower primary in the rural areas while English is taught as a subject. However, English is the medium of instruction in upper primary level and institutions of higher learning. Kiswahili is also taught is some primary and secondary schools.

A list of the districts in Uganda together with the zones and regions as well as the major languages is shown in Table 1.01

¹ Ministry of Finance and economic Development, Population Secretariat: Uganda – Population Factors and National Development, January 2010, Page 2

TABLE 1.01:REGIONS, ZONES AND DISTRICTS IN UGANDAAND THE MAJOR LANGUAGES SPOKEN

REGION	ZONE	DISTRICTS	MAJOR LANGUAGES
Central	Central I	Buikwe, Butambala, Buvuma, Gomba, Kayunga, Mpigi, Mukono, Wakiso.	Luganda
	Central II	Kiboga, Kyankwanzi, Luweero, Mityana, Mubende Nakaseke, Nakasongola.	Luganda, Lululi, Runyoro
	Central III	Bukomansimbi, Kalangala, Kalungu,Lwengo, Lyantonde, Masaka, Rakai, Sembabule.	Luganda, Runyankore
East	Far East	Amuria, Bukedea, Kaberamaido, Katakwi, Kumi, Ngora, Soroti, Serere.	Ateso, Kumam
	Mid East I	Bududa, Bukwo, Bulambuli, Kapchorwa, Kween, Manafwa, Mbale, Sironko.	Kupsabiny, Lumasaba
	Mid East II	Budaka, Busia, Butaleja, Kibuku, Pallisa, Tororo.	Ateso, Dhopadhola, Kiswahili, Lugwere Lunyole, Lusamya
	Near East	Bugiri, Buyende, Iganga, Jinja, Kaliro, Kamuli, Luuka, Mayuge, Namayingo, Namutumba.	Lusoga, Lusamya
Kampala		Kampala.	English, Kiswahili, Luganda.
North	Mid North I	Alebtong, Amolatar, Apac, Dokolo, Kole, Lira, Otuke, Oyam.	Lango.
	Mid North II	Agago, Amuru, Gulu, Lamwo, Kitgum, Nwoya, Pader.	Acoli.
	North East	Abim, Amudat, Kaabong, Kotido, Moroto, Nakapiripirit, Napak.	Ngakarimojong, Thur.
	West Nile	Adjumani, Arua, Koboko, Maracha, Moyo, Nebbi, Yumbe, Zombo.	Alur, Kakwa, Lugbara, Madi.
West	Far West	Kabale, Kanungu, Kisoro, Rukungiri.	Rukiga, Kinyarwanda, Rufumbira.
	Mid West	Bundibugyo, Kabarole, Kamwenge Kasese, Kyegegwa, Kyenjojo, Ntoroko.	Kiswahili, Lukhonzo, Lwamba, Rutooro.
	North West	Buliisa, Hoima, Kibaale, Kiryandongo, Masindi.	Kiswahili, Runyoro
	South West	Bushenyi, Buhweju, Ibanda, Isingiro, Kiruhura, Mbarara, Mitooma, Ntungamo Rubirizi, Sheema.	Kinyarwanda, Runyankore.

MAP OF UGANDA: Showing Districts

1.2 EDUCATION IN UGANDA

Uganda's formal system of education is four-tier model: seven years of primary education, four years of lower secondary and two years of upper secondary and thereafter, two to five years of tertiary education.

The Constitution of Uganda stipulates that education is a fundamental right for every citizen. It is therefore essential for the country to provide quality and relevant education to all its citizens, irrespective of cultural, gender, regional or social differences. Because of this and in response to *the 1990 World Conference on Education for All* (EFA) and *The Millennium Development Goals* (MDGs), Government introduced Universal Primary Education (UPE) in 1997. Ten years later, Universal Secondary Education (USE) was also introduced.

Regarding equity, gender parity has almost been achieved at the primary level. *The Gender Policy in Education* was launched in 2010 by the then Minister of Education and Sports to bolster this success. Some teachers have also been trained and equipped with the skills to identify and handle learners with special learning needs, leading to an increment of about 11% in the number of children with special needs enrolled in primary schools between 2009 and 2010.

To improve the quality of education in schools, Government and its development partners have put in place a number of quality enhancement initiatives. The Thematic Curriculum was introduced to enhance the teaching and learning of literacy and numeracy in lower primary. Other quality improvement interventions include; teacher training, more systematic school inspections, application of quality enhancement initiatives (QEI) in some districts and regular monitoring and assessment of learning achievement.

1.3 NATIONAL ASSESSMENT OF PROGRESS IN EDUCATION

The Education Policy Review Commission (EPRC, 1989) reported lack of reliable and up-to-date data on educational indicators. Back then, the only assessment information used for monitoring and evaluation was based on Primary Leaving Examinations (PLE) results and the reports by examiners on these examinations. However, PLE is an end of cycle examination, used primarily as a tool for certification and selection of pupils into post primary institutions. To supplement the information from PLE, National Assessment of Progress in Education (NAPE) was established in the education system. NAPE is used to ascertain the level of pupils, learning achievement and to monitor changes in the

achievement levels over time. It determines the skills that a cohort of pupils have acquired and are capable of acquiring in relation to the objectives of the curriculum. It is conducted annually in primary three (P 3) and P 6, before pupils reach the final year of the cycle, to allow for the necessary remedial measures to be implemented. NAPE was first carried out in the year 1996.

1.1.1 Objectives Of NAPE

The main objectives of NAPE are:

- Determine and monitor the level of achievement of pupils over time.
- Generate information on what pupils know and can do in different areas of the curriculum.
- Evaluate the effectiveness of reforms in the education system.
- Provide information on variables which affect learning achievement.
- Suggest measures for the improvement of teaching and learning in schools.

This volume presents the results of the 2011 NAPE survey. The objectives of the study are presented in the sequel. The description of the instruments and the procedures for selecting the sample and administering the instruments is contained in Chapter 2. Results of P 3 pupils' achievement in Numeracy are presented in Chapter 3. This is followed by a presentation of the results of P 3 pupils in Literacy in English¹ in Chapter 4 and Oral Reading in Chapter 5, Numeracy for P 6 pupils in Chapter 6, and P 6 Literacy in English in Chapter 7. Thereafter, the achievement of teachers in Numeracy, Literacy and Oral Reading is presented in Chapter 8. Chapter 9 gives an account of the challenges that primary schools reportedly faced in a period of one year prior to the survey. Finally, the conclusions, discussions and recommendations are given in Chapter 10. The results are presented in terms of the overall mean scores and percentages of pupils or teachers achieving the desired levels of proficiency. Statistics are also provided by gender, age, school ownership (government or private), location (urban or rural) and district.

¹ Also referred to as Literacy in this Report.

1.4 OBJECTIVES OF THE 2011 NAPE STUDY

The objectives of the 2011 study were:

- 1. Determine the level of pupils' achievement in Numeracy, Literacy and Oral Reading (P 3 only)
- 2. Examine pupils' performance in the competencies of Numeracy, Literacy and Oral Reading.
- 3. Examine the relationship between the achievement of pupils and gender, age, school ownership, location and district.
- 4. Compare the achievement of P 3 and P 6 pupils in Numeracy and Literacy between the years 2007 and 2011; and Oral Reading in the years 2003-2011.
- 5. Determine the level of teachers' achievement in Numeracy, Literacy and Oral Reading.
- 6. Examine teachers' performance in the competencies of Numeracy, Literacy and Oral Reading.
- 7. Examine the relationship between the achievement of teachers and gender, age, marital status, highest academic and teaching qualifications, teaching experience, school ownership, location and district.

Chapter 2

SURVEY PROCEDURES

2.1 INTRODUCTION

This chapter gives a description of the instruments and procedures that were used in selecting the sample, collecting, capturing and analyzing the data.

2.2 INSTRUMENTS

2.2.1 TESTS

At both P 3 and P 6, there were written tests of Numeracy and Literacy in English. In addition, P 3 pupils in some districts had a test of Literacy in the respective Local Language. The tests were based on the national curriculum and were developed according to test frameworks and detailed item specifications previously prepared by a team of experts. The item specifications allow for tests of comparable levels of difficulty over the years. All the items at P 3 were structured, but at P 6, the items were of multiple choice type, restricted and free response forms. The tests were developed by experienced primary school teachers, tutors from Primary Teachers' Colleges and staff from NCDC and UNEB. The compositions of the tests are given in Tables 2.01 to 2.04.

TABLE 2.01:COMPOSITION OF THE P 3 NUMERACY TEST BY
COMPETENCIES

COMPETENCIES	WEIGHT (%)
Counting objects	17
Associating a number of objects to a number	9
Writing number symbols from words & vice versa	5
Identifying place value	10
Adding numbers	10
Subtracting numbers	10
Multiplying numbers	6
Dividing numbers	5
Completing sequences	6
Sorting shapes	2
Telling the time on a clock face	1
Solving sums involving money and buying and selling	6
Solving sums involving capacity in daily life	2
Interpreting and drawing graphs	7
Writing and drawing fractions, and forming sets	4
TOTAL	100

TABLE 2.02:COMPOSITION OF P 3 LITERACY TEST BY
COMPETENCIES

SKILL AREA	COMPETENCIES	WEIGH	IT(%)
Reading	Describing		
comprehension	Recognizing	4	
	Comprehension	10	
	• Identifying	6	
	Associating objects to their names in words.	3	52
	Associating words to the same words.	3	52
	• Associating actions to sentences describing them.	3	
	Completing pictures	4	
	Completing words	8	
	Completing sentences	5	
Writing	Naming	10	
	Reading and drawing	6	
	Copying words	4	
	Writing letters of the alphabet	4	48
	Writing words	6	10
	Writing patterns	4	
	Writing sentences	10	
	Copying a story	4	
TOTAL			100

TABLE 2.03:COMPOSITION OF P 3 ORAL READING BY
COMPETENCIES

ORAL READING COMPONENT	WEIGHT (%)
Reading letters.	22
Reading Words.	22
Reading sentences.	34
Reading a story.	13
Listening Comprehension.	9
TOTAL	100

TOPICAL AREAS	WEIGHT (%)
Operation on Numbers:	
Addition of numbers	5
Subtraction of numbers	5
Multiplication of numbers	5
Division of numbers	4
Use of symbols >, < to compare numbers Use brackets to show order in which	1
combined operations (x,+) must be	2
Number System and Place Value	8
Number Patterns and Sequence	12
Measures	15
Graphs and Interpretations	8
Fractions	24
Geometry	11
TOTAL	100

TABLE 2.04:COMPOSITION OF P 6 NUMERACY BY TOPICAL
AREAS

TABLE 2.05:COMPOSITION OF P 6 LITERACY IN ENGLISH TEST BY
COMPETENCIES

SKILL AREA	COMPETENCIES	WEIGHT (%)	
Reading Comprehension	 Associating names in words to the objects Associating words to actions 	1	
	 Describing the activities in a picture 	4	
	 Reading and interpreting a picture sequence 	8	40
	Reading and interpreting a calendar	5	
	 Interpreting a sign post 	5	
	Reading and answering questions on a	8	
	poem		
	Reading and answering questions on a	8	
	story		
Writing	 Drawing named objects 	3	
	 Writing words correctly 	3	
	 Completing an application form 	7	
	 Writing an invitation 	10	40
	 Naming objects 	2	
	 Writing a simple guided composition 	5	
	 Writing a short composition 	10	
Grammar	 Using comparatives correctly 	2	
	 Using given vocabulary 	4	
	Using given structures	4	
	 Using prepositions correctly 	2	20
	 Giving correct plurals of words 	2	
	 Giving correct opposites of words 	2	
	Using the correct tense	4	
TOTAL			100

2.2.2 CONTEXTUAL INSTRUMENTS

There were four contextual instruments used to obtain information on the variables that affect pupils' learning. The description of each of these instruments is given in the sequel.

2.2.2.1 Teachers' Tests

There were three tests for primary school teachers: written Numeracy and Literacy and Oral Reading. The teachers' tests were similar to the P 6 pupils', in order to be able to correlate the performance of the two in various competencies.

2.2.2.2 Teachers' Questionnaire

A questionnaire was used to obtain information on teacher's factors: gender, age, marital status, highest academic qualification, highest teaching qualification and teaching experience.

2.2.2.2.1 School Information Form

This instrument was used to obtain information on the enrolment and actual attendance of pupils by gender in each of the sampled schools. The instrument also served as a register of the pupils, by class, who actually did the tests. The Head teacher's contact was also obtained to help UNEB in cross-checking the correctness of information on schools.

2.2.2.3 Head teachers' Interview Schedule

Head teachers of selected schools in which the assessment was conducted were interviewed in order to obtain information on the major challenges the school had faced (within one year) in: administration and management; and in pedagogy.

2.3 SURVEY DESIGN

2.3.1 SURVEY POPULATION

The target population consisted of pupils in primary three and primary six in all the primary schools (both government and private) in Uganda in July 2011.

2.3.2 SAMPLING DESIGN

A two-stage stratified cluster sampling design was used. The first stage involved selecting a random sample of schools, stratified by district. Schools in all the 112 districts of Uganda were included in the sampling frame. In the second stage, a random sample of pupils present in the school on the day of the survey was selected from each of P 3 and P 6 classes. Random selection of schools and of pupils within a school was to minimize selection bias.

2.3.3 SELECTION OF SCHOOLS

A list of primary schools from the Education Management Information System (EMIS), showing the total school enrolment as well as the enrolment figures at P 3 and P 6 provided the sampling frame for schools. As in previous years, it was found appropriate that schools would be selected basing on P 6 enrolment, because the number of pupils in P 6 in a school is usually less than that of P 3. This, therefore, ensures that the number of pupils in P 3 is big enough to meet the minimum sample size.

The number of schools selected from a particular district was proportional to the P 6 enrolment in that district, but each district had to have at least 10 schools in the sample. The schools for the Blind and the Deaf were included, but not considered as part of the district quota.

2.3.4 SELECTION OF PUPILS

A simple random sample of 20 pupils was selected per class within each school according to guidelines which guaranteed the random nature of the selection procedures. The sample size of 20 was used for the following reasons. Firstly, increasing the number to more than 20 raises the accuracy level only by a negligible amount, and yet, the cost of instrument production and administration gets much higher. Secondly, for ease of manageability, since most classrooms in Uganda take up to about 20 test takers, with appropriate spacing. Thirdly, one test administrator can effectively supervise about 20 pupils.

2.3.5 SELECTION OF TEACHERS

During the survey, 531 primary schools were selected from the 1,232 already sampled to participate in the 2011 NAPE assessment. These were schools that had been scheduled to be assessed on the first day of the survey, and they were selected from all the 112 districts of Uganda. In each of the 531 schools, four teachers were assessed. These were teachers who taught P 3 and P 6 Mathematics and English. Each teacher sat for three tests: Numeracy, Literacy in English and Oral Reading. The tests were similar to the P 6 pupils' and were done following the same timetable to avoid any form of malpractice.

2.3.6 SAMPLE SIZE

The national sample had 1,232 primary schools: 24,143 P 6 pupils, representing 2.9% of the national pupil enrolment at P 6. The distribution of sampled schools by district, is shown in Table 2.05

TABLE 2.06: NUMBER OF SCHOOLS IN THE SAMPLE AND IN THE SAMPLING FRAME, BY DISTRICT

REGION	ZONE	DISTRICTS
	Central I	Buikwe (16; 278)*, Buvuma (10; 20) Butambala (10; 86)
	(111; 2031)	Gomba (10; 110) Kayunga (10; 232), Mpigi (10; 150),
		Mukono [†] (19; 383), Wakiso (26; 772).
Central	Central II	Kiboga (10; 108), Kyankwanzi (10; 133),
(279; 4519)	(83; 1430)	Luweero (17; 316), Mityana (10; 236),
		Mubende (16; 315), Nakaseke (10; 138),
		Nakasongola (10; 184).
	Central III	Bukomansimbi (10; 93), Kalangala (9; 27),
	(85; 1058)	Kalungu (10; 98), Lwengo (10; 157),
		Lyantonde (10; 46), Masaka (10; 147), Rakai (16; 269),
		Sembabule (10; 221).
	Far East	Amuria (10; 121), Bukedea (10; 88),
	(82; 774)	Kaberamaido (10; 99), Katakwi (10; 76),
		Kumi ⁺ (10; 95), Ngora (11; 63), Serere (10; 56),
East		Soroti† (11; 176).
(330; 3903)	Mid East I	Bududa (10; 120), Bukwo (10; 64), Bulambuli (10; 59),
	(81; 837)	Kapchorwa (10; 64), Kween (10; 60),
		Manafwa (11; 167), Mbale (10; 182), Sironko (10; 121).
	Mid East II	Budaka ⁺ (11; 68), Busia (10; 145), Butaleja (10; 115),
	(61; 748)	Kibuku (10; 60), Pallisa (10; 145), Tororo (10; 215).
	Near East	Bugiri (10; 213), Buyende (10; 100), Iganga (11; 192),
	(106; 1544)	Jinja (10; 185), Kaliro (10; 124), Kamuli (15; 223),
		Luuka (10; 104), Mayuge (10; 180),
		Namayingo (10; 104), Namutumba (10; 119).
	Mid North I	Alebtong (10; 78), Amolatar (10; 58), Apac ⁺ (11; 131),
	(83; 688)	Dokolo (10; 71), Kole (10; 62), Lira ⁺ (12; 128),
		Otuke (10; 47), Oyam (10; 113).
	Mid North	Agago (10; 116), Amuru (10; 56), Gulu (10; 160),
North	II	Kitgum (10; 110), Lamwo (10; 73), Nwoya (10; 44),
(303; 2598)	(70; 670)	Pader (10; 111).
	North East	Abim (10; 48), Amudat (3; 11), Kaabong (10; 63),
	(63; 252)	Kotido (10; 26), Moroto (10; 24), Nakapiripirit (10; 44),
		Napak (10; 36).
	West Nile	Adjumani (10; 77), Arua (17; 293), Koboko (10; 68),

 ^{*} The first figure in the brackets shows the number of schools in the sample. The second figure is the number of primary schools in the district.
 [†] Districts with schools for the Deaf and Blind pupils.

REGION	ZONE	DISTRICTS
	(87; 988)	Maracha (10; 65), Moyo (10; 76), Nebbi (10; 185),
		Yumbe (10; 128), Zombo (10; 96).
	Far West	Kabale (18; 353), Kanungu (10; 190), Kisoro (10; 157),
	(48; 967)	Rukungiri (10; 267).
	Mid West	Bundibugyo (10; 111), Kabarole (10; 167),
	(79; 1228)	Kamwenge (10; 225), Kasese (19; 432),
West		Kyegegwa (10; 86), Kyenjojo (10; 166),
(296; 5461)		Ntoroko (10; 41).
	North West	Buliisa (10; 35), Hoima (10; 223), Kibaale (17; 561),
	(57; 1029)	Kiryandongo (10; 95), Masindi (10; 115).
	South West	Buhweju (10; 73), Bushenyi (10; 196), Ibanda (10;
	(112; 2237)	235), Isingiro (10; 316), Kiruhura (10; 290),
		Mbarara (16; 379), Mitooma (10; 150),
		Ntungamo (16; 354), Rubirizi (10; 69),
		Sheema (10; 175)
Kampala	Kampala	Kampala ⁺ (24; 635).
Uganda		(1,232; 17,116)

2.3.7 DISTRIBUTION OF SAMPLED PUPILS BY SELECTED FACTORS

This section presents the distribution of P 3 and P 6 pupils who actually participated in the survey according to their gender, age, school ownership, location and district.

2.3.7.1.1 DISTRIBUTION OF P 3 PUPILS IN THE ACHIEVED SAMPLE

The distributions of P 3 pupils in the achieved sample according to gender, age, school ownership, location, district and zone are presented in Tables 2.06 to 2.09.

1.05	E	BOYS	G	IRLS	ALL	
AGE (YEARS)	N	Percentage	N	Percentage	Ν	Percentage
6 – 7	103	0.8	176	1.5	279	1.1
8	731	5.8	1,176	10.0	1,907	7.8
9	1,853	14.6	2,202	18.6	4,055	16.5
10	3,649	28.8	3,803	32.1	7,452	30.4
11	2,592	20.4	2,205	18.6	4,797	19.6
12	2,200	17.3	1,459	12.3	3,659	14.9
12+ ^γ	1,567	12.3	815	6.9	2,382	9.7
Total	12,695	100.0	11,836	100.0	24,531 ¹	100.0

TABLE 2.07:DISTRIBUTION OF P 3 PUPILS IN THE ACHIEVED
SAMPLE BY AGE AND GENDER

The mean age at P 3 was 10.4 years: boys–10.6 years and girls 10.2 years.

TABLE 2.08:DISTRIBUTION OF P 3 PUPILS IN THE ACHIEVEDSAMPLE BY SCHOOL OWNERSHIP AND GENDER

SCHOOL	BOYS		G	GIRLS	ALL	
	Ν	Percentag	Ν	Percentag	Ν	Percentag
Г		е		e		е
Government	10,58	51.5	9,948	48.5	20,53	83.7
	4				2	
Private	2,113	52.8	1,888	47.2	4,001	16.3
Total	12,69	51.8	11,83	48.3	24,53	100.0
	7		6		3	

TABLE 2.09:DISTRIBUTION OF P 3 PUPILS IN THE ACHIEVEDSAMPLE BY SCHOOL LOCATION AND GENDER

SCHOOL LOCATION	BOYS		(GIRLS	ALL	
	N	Percentage	N	Percentage	N	Percentage
Urban	2,194	51.3	2,033	48.7	4,227	17.2
Rural	10,503	47.8	9,803	52.2	20,306	82.8
Total	12,697	50.9	11,836	49.1	24,533	100.0

 $^{\gamma}$ Age above 12 years

¹ Discrepancy due to two pupils who did not indicate their age.

TABLE 2.10:THE DISTRIBUTION OF P 3 PUPILS IN THE ACHIEVED
SAMPLE BY DISTRICT AND GENDER

REGION	ZONE	DISTRICT
	Central I (2176; 1061)	Buikwe (320; 164) ^{<i>a</i>} , Butambala (200; 93) Buvuma (200; 88), Gomba (190; 95), Kayunga (200; 105), Mpigi (200; 90), Mukono (355; 169), Wakiso (511; 257).
Central (5523; 2691)	Central II (1652; 782)	Kiboga (197; 91), Kyankwanzi (200; 95), Luweero(335; 151) Mityana (200; 97), Mubende (320; 160), Nakaseke (200; 95), Nakasongola (200; 93).
	Central III (1695; 848)	Bukomansimbi (195; 95), Kalangala (189; 91), Kalungu (198; 100), Lwengo (200; 96), Lyantonde (200; 102), Masaka (196; 93), Rakai (317; 174), Sembabule (200; 97).
	Far East (1616; 777)	Amuria (200; 86), Bukedea (200; 101), Kaberamaido (200; 89), Katakwi (200; 83), Kumi (200; 91), Ngora (216; 104), Serere (200; 107), Soroti (200; 116).
East	Mid East I (1606; 806)	Bududa (200; 108), Bukwo (200; 110), Bulambuli (200; 105), Kapchorwa (197; 84), Kween (200; 86), Manafwa (209; 108), Mbale (200; 94), Sironko (200; 111).
(6541; 3252)	Mid East II (1208; 594)	Budaka (208; 102), Busia (200; 97), Butaleja (200; 104), Kibuku (200; 104), Pallisa (200; 92), Tororo (200; 95).
	Near East (2111; 1075)	Bugiri (200; 112), Buyende (200; 104), Iganga (214; 97), Jinja (200; 101), Kaliro (200; 103), Kamuli (297; 158), Luuka (200; 95), Mayuge (200; 97), Namayingo (200; 105), Namutumba (200; 103).
	Mid North I (1657; 824)	Alebtong (200; 91), Amolatar (197; 89), Apac (220; 114), Dokolo (200; 101), Kole (200; 97), Lira (240; 124), Otuke (200; 101), Oyam (200; 107).
North	Mid North II (1398; 679)	Agago (198; 94), Amuru (200; 93), Gulu (200; 102), Lamwo (200; 108), Kitgum (200; 86), Nwoya (200; 102), Pader (200; 94).
(6114; 2888)	North East (1319; 530)	Abim (197; 85), Amudat (125; 72), Kaabong (200; 56), Kotido (200; 87), Moroto (200; 82), Nakapiripirit (197; 71), Napak (200; 77).
	West Nile (1740; 855)	Adjumani (200; 105), Arua (340; 160), Koboko (200; 88), Maracha (200; 90), Moyo (200; 95), Nebbi (200; 107), Yumbe (200; 102), Zombo (200; 108).
West (5881; 2785)	Far West (944; 450)	Kabale (350; 177), Kanungu (195; 93), Kisoro (200; 95), Rukungiri (199; 85).
	Mid West (1579; 737)	Bundibugyo (200; 85), Kabarole (200; 93), Kamwenge (200; 98), Kasese (380; 174), Kyegegwa (200; 90), Kyenjojo (199; 99), Ntoroko (200; 98).

 $^{^{\}alpha}$ The first figure shows the number of pupils in the sample. The second is the number of girls in the sample.

REGION	ZONE	DISTRICT
	North West	Buliisa (200; 96), Hoima (200; 78), Kibaale (340; 166),
	(1140; 535)	Kiryandongo (200; 97), Masindi (200; 98).
		Buhweju (200; 97), Bushenyi (186; 88), Ibanda (198; 92),
	South West	Isingiro (200; 93), Kiruhura (199; 100), Mbarara (320; 159),
	(2218; 1063)	Mitooma (195; 99), Ntungamo (320; 162), Rubirizi (200; 88),
		Sheema (200; 85).
Kampala	Kampala	Kampala (474; 220).
Uganda		(24,533; 11,836)

2.3.7.1.2 **DISTRIBUTION OF P 6 PUPILS IN THE ACHIEVED** SAMPLE

The distribution of P 6 pupils in the achieved sample by gender, age, school ownership, location, district and zone are presented in Tables 2.10 to 2.13.

AGE	E	BOYS		GIRLS	ALL	
(years)	Ν	Percentage	N	Percentage	Ν	Percentage
9 – 10	65	0.5	137	1.2	202	0.8
11	476	3.9	706	5.9	1,182	4.9
12	1,482	12.1	1,669	14.1	3,151	13.1
13	2,897	23.6	3,390	28.6	6,287	26.0
14	3,350	27.1	3,418	28.8	6,768	28.0
15	2,403	19.6	1,819	15.3	4,222	17.5
15+ ^γ	1,613	13.2	717	6.1	2,330	9.7
Total	12,286	100.0	11,856	100.0	24,142 ¹	100.00

TABLE 2.11:	DISTRIBUTION	OF P	6	PUPILS	IN	THE	ACHIEVED
	SAMPLE BY AGE AND GENDER						

 ^γ Age above 15 years
 ¹ Discrepancy in number due to the one pupil who did not indicate her age.

TABLE 2.12:DISTRIBUTION OF P 6 PUPILS IN THE ACHIEVEDSAMPLE BY SCHOOL OWNERSHIP AND GENDER

SCHOOL	BOYS		G	GIRLS	ALL	
P	Ν	Percentag	Ν	Percentag	Ν	Percentag
		е		е		е
Government	10,93	89.0	10,37	87.5	21,31	88.3
	5		9		4	
Private	1351	11.0	1,478	12.5	2,829	11.7
Total	12,28	100.0	11,85	100.0	24,14	100.0
	6		7		3	

TABLE 2.13:DISTRIBUTION OF P 6 PUPILS IN THE ACHIEVEDSAMPLE BY SCHOOL LOCATION AND GENDER

SCHOOL	BOYS		C	GIRLS	ALL		
LOCATION	N	Percentage	Ν	Percentage	Ν	Percentage	
Urban	1,805	14.7	1,858	15.7	3,663	15.2	
Rural	10,481	85.3	9,999	84.3	20,480	84.8	
Total	12,286	100.0	11,857	100.0	24,143	100.0	

TABLE 2.14:DISTRIBUTION OF P 6 PUPILS IN THE ACHIEVED
SAMPLE BY DISTRICT AND GENDER

REGION	ZONE	DISTRICT
	Central I (2103; 1135)	Buikwe (319; 161), ^α Butambala (191; 119), Buvuma (165; 87), Gomba (177; 90), Kayunga (200; 100), Mpigi (200; 112), Mukono (346; 188), Wakiso (505; 278).
Central (5377; 2870)	Central II (1645; 849)	Kiboga (200; 104), Kyankwanzi (198; 111), Luweero (329; 164), Mityana (200; 111), Mubende (318; 162), Nakaseke (200; 98), Nakasongola (200; 99).
	Central III (1629; 886)	Bukomansimbi (191; 115), Kalangala (165; 85), Kalungu (198; 111), Lwengo (200; 109), Lyantonde (200; 106), Masaka (200; 101), Rakai (287; 163), Sembabule (188; 96).
	Far East (1612; 836)	Amuria (194; 93), Bukedea (200; 104), Kaberamaido (200; 102), Katakwi (200; 83), Kumi (200; 111), Ngora (218; 122), Serere (200; 99), Soroti (200; 122).
East	Mid East I (1600; 813)	Bududa (200; 114), Bukwo (200; 100), Bulambuli (200; 110), Kapchorwa (189; 94), Kween (200; 97), Manafwa (211; 103), Mbale (200; 100), Sironko (200; 95).
(6497; 3282)	Mid East II (1199; 568)	Budaka (204; 103), Busia (200; 98), Butaleja (200; 89), Kibuku (195; 85), Pallisa (200; 95), Tororo (200; 98).
	Near East (2086; 1065)	Bugiri (200; 89), Buyende (200; 100), Iganga (220; 126), Jinja (200; 108), Kaliro (200; 101), Kamuli (275; 131), Luuka (200, 107), Mayuge (200; 98), Namayingo (191; 102), Namutumba (200; 103).
	Mid North I (1659; 739)	Alebtong (200; 77), Amolatar (199; 92), Apac (220; 103), Dokolo (200; 87), Kole (200; 101), Lira (252; 120), Otuke (192; 82), Oyam (196; 77).
North	Mid North II (1389; 582)	Agago (196; 78), Amuru (195; 78), Gulu (205; 99), Lamwo (200; 85), Kitgum (193; 88), Nwoya (200; 72), Pader (200; 82).
(6025; 2529)	North East (1279; 514)	Abim (190; 78), Amudat (105; 57), Kaabong (200; 60), Kotido (187; 64), Moroto (200; 86), Nakapiripirit (197; 89), Napak (200; 80).
	West Nile (1698; 694)	Adjumani (200; 87), Arua (331; 123), Koboko (200; 81), Maracha (196; 85), Moyo (183; 79), Nebbi (199; 80) Yumbe (196; 82), Zombo (193; 77).
	Far West (947; 514)	Kabale (359; 221), Kanungu (188; 86), Kisoro (200; 95), Rukungiri (200; 112).
West (5778; 2931)	Mid West (1540; 765)	Bundibugyo (188; 91), Kabarole (196; 114), Kamwenge (190; 96), Kasese (379; 190), Kyegegwa (194; 86), Kyenjojo (200; 100), Ntoroko (193; 88).
	North West (1120; 529)	Buliisa (200; 79), Hoima (199; 96), Kibaale (321; 165), Kiryandongo (200; 92), Masindi (200; 97).

 $^{^{\}alpha}$ The first figure shows the number of pupils in the sample. The second is the number of girls in the sample.

Kampala	South West (2171; 1123) Kampala	Buhweju (194; 98), Bushenyi (193; 105), Ibanda (176; 90), Isingiro (188; 86), Kiruhura (197; 94), Mbarara (320; 175), Mitooma (187; 109), Ntungamo (320; 163), Rubirizi (196; 109), Sheema (200; 94). (466; 245).
Uganda		(24,143; 11,857).

2.3.8 SAMPLING WEIGHTS

Sampling weights were computed to reflect the probability of pupils sampled and adjustments for non-responses, as well as poststratification adjustments. These weights were applied to the data to obtain un-biased estimates of the levels of proficiency and mean scores in Numeracy and Literacy in English.

2.4 DATA COLLECTION

A total of 820 officers were appointed from UNEB, DES, NCDC, Kyambogo University, Makerere University, Gulu University, Kampala International University, Primary Teachers' Colleges (PTCs) and the Headquarters of the Ministry of Education and Sports (MOES) as well as secondary school teachers, to work as District Coordinators (DCs) and Team Leaders (TLs) of the data collection process in the schools.

The DCs and TLs had a one-day training in Kampala, guided by a preprepared Test Administrator's Manual, which detailed the procedures. The officers discussed fully what was outlined in the Manual, which included, among others; how to obtain a random sample of 20 pupils per class of P 3 and P 6 in each school and how to conduct the tests.

Each TL worked with three test administrators selected from among tutors of PTCs, secondary school teachers or professional staff from the District Education Office. Where there were schools for the Deaf and Blind, there were two additional test administrators, selected from among teachers trained in special needs education. The team had a one-day training at the District Headquarters, facilitated by the DC. Equipped with the training, the team conducted assessments in one school per day. In each school visited, two team members attended to each of P 3 and P 6 classes. After the written tests, the whole team conducted Oral Reading in P 3.

The teachers sat for their tests at the same time as the P 6 pupils and they filled in a questionnaire immediately after the tests.
There was a team of monitors comprising twenty senior officers from UNEB, MOES and satellite institutions. The team monitored the data collection process in selected districts.

2.5 STATISTICAL DATA ANALYSIS

The tests were scored by primary school teachers, tutors from PTCs and inspectors in a central venue in Kampala. The test scores and information from the contextual instruments were captured using EpiDATA (version 3.02), and analysis was done using the STATA (version 11.0) statistical package.

Data analysis for each class was done at different levels. The first level of analysis involved determining the overall achievement level in each subject area in terms of mean score and the percentage of pupils reaching the desired level of proficiency. Then the proportion of pupils rated proficient in each competency of a subject was determined. Finally, performance was analyzed by pupils' gender and age, school ownership, location and district.

Pupils' overall achievement in each of the tests was described using one of four levels: '*Advanced'*, '*Adequate'*, '*Basic' and 'Inadequate'*, which were set at the time of preparing the tests. Detailed description of the categorization of the competencies, by performance levels is given in Section 2 of Chapters 3–7. The performance levels were defined as follows:

Advanced level:	indicates superior performance. A pupil with this rating would have demonstrated complete mastery of
	the subject matter.
Adequate level:	demonstrates competence in the subject matter. This
	is the desired minimum performance level that was
	required of all the pupils.
Basic level:	demonstrates competence in elementary concepts
	and skills. The pupil is performing at a level below
	his/her class.
Inadequate	demonstrates competence in only rudimentary
level:	concepts and skills and the pupil is performing far
	below the level of his/her class.

A pupil was rated proficient if he/she reached the 'Advanced' or 'Adequate' level of proficiency.

Teacher's achievement was described using two levels: proficient or non-proficient.

A teacher was rated proficient if he/she reached the 'Advanced' level of proficiency.

Chapter 3

ACHIEVEMENT OF P 3 PUPILS IN NUMERACY

3.1 INTRODUCTION

This chapter describes the achievement of P 3 pupils in Numeracy. First, the overall mean score and the percentages of pupils reaching various proficiency levels are given. This is followed by the percentages of pupils reaching the desired proficiency in each competency. Lastly the mean scores and proportions of pupils attaining the desired achievement levels are given by gender, age, school ownership and district. The competencies which constitute each proficiency level are highlighted in the next section.

3.2 DESCRIPTION OF THE COMPETENCIES BY PROFICIENCY LEVEL

The description of the competencies within each proficiency level is given below.

NOTE: A pupil at a given proficiency level is assumed to have mastered all the competencies below his/her level, plus the competencies specified at his/her level.

ADVANCED LEVEL

A pupil is able to:

- Apply addition or subtraction of whole numbers in real life situations.
 - Solve problems involving buying and selling of common objects.
 - Draw pictograms and interpret bar graphs.
 - Apply the concept of capacity in daily life.
 - Multiply a 2-digit number by a 1-digit number with carrying.

ADEQUATE LEVEL

A pupil is able to:

- Write number names from number symbols.
- Identify the place value of a number up to hundreds.
- Add up to three 2-digit numbers with carrying.
- Subtract a 2-digit number from a 2-digit number with borrowing.
- Multiply up to a 2-digit number by a 1-digit number without carrying.
- Divide a 2-digit number by a 1-digit number.
- Draw unit fractions.
- Count numbers in twos.
- Share a given number of objects equally.

BASIC LEVEL

A pupil is able to:

- Show a 3-digit number on an abacus.
- Add up to two 3-digit numbers without carrying.
- Subtract up to 3-digit numbers without borrowing.
- Read a unit fraction.
- Sort geometrical shapes.

INADEQUATE

A pupil is able to:

- Count objects or figures in ones and tens.
- Add similar objects.
- Associate a number of objects to the same number of other objects or a number of objects to the corresponding number in figures.

NOTE: A pupil is rated proficient if he/she attains the Advanced or Adequate level of proficiency.

3.3 OVERALL LEVEL OF ACHIEVEMENT OF P 3 PUPILS IN NUMERACY

The overall mean score of the P 3 pupils in Numeracy was 50.2% with a standard error (S.E) of 0.54. The girls and boys obtained mean scores of 49.2% (S.E: 0.60) and 51.2% (S.E: 0.52) respectively; which were not significantly different. Table 3.01 shows the percentage of P 3 pupils attaining the different proficiency levels in Numeracy, by gender.

TABLE 3.01:	PERCENTAGE OF P 3 PUPILS REACHING THE VARIOUS
	PROFICIENCY LEVELS IN NUMERACY, BY GENDER

PROFICIENCY LEVELS	BOYS	GIRLS	ALL	
Advanced	13.3	11.0	12.1	
Adequate	51.7	50.0	50.9	
Basic	24.7	27.3	26.0	
Inadequate	10.3	11.7	11.0	
TOTAL	100.0	100.0	100.0	

Overall 12.1% of the P 3 pupils were rated 'Advanced'. This category of pupils demonstrated superior academic performance. They proved that they had acquired in-depth understanding of the concepts and skills taught at this level and could also apply the concepts in daily life.

The second group of pupils, rated 'Adequate', constituted 50.9%. They showed that they had satisfactory mastery of the concepts and skills specified at this level. They not only had the knowledge of the skills and concepts, but also had thorough understanding.

The next category of pupils were rated "Basic" and constituted 26.0%. These had a marginal academic performance, showing partial understanding of the concepts and skills specified at this level.

The last group of pupils, constituting 11.0%, were rated "Inadequate". This category of pupils had minimal understanding of the concepts and skills specified at P 3 level.

More boys than girls reached the 'Advanced' and 'Adequate' levels. Figure 3.01 shows the percentages of P 3 pupils rated proficient (Advanced + Adequate) in Numeracy.



Overall 63.0% of the P 3 pupils attained the proficient level. Pupils at this level demonstrated competence in the subject. There was no significant difference between the proportion of boys and girls attaining the desired rating, but more boys than girls were rated proficient.

3.4 ACHIEVEMENT OF P 3 PUPILS IN NUMERACY BY TOPICAL AREAS

This section presents the achievement of P 3 pupils in Numeracy by topical areas. Table 3.02 shows the percentage of P 3 pupils rated proficient in each topical area of Numeracy.

TOPICAL AREA	BOYS	GIRLS	ALL
Associating objects	P 82.6	P 81.4	P 82.0
Counting	P 82.4	P 80.5	P 81.5
Addition	P 50.0	P 45.8	P 47.9
Multiplication	P 48.7	P 45.5	P 47.1
Division	P 42.0	P 37.5	P 39.8
Subtraction	P 37.9	P 34.9	P 36.4
Measures	P 12.7	P 10.9	P 11.9

TABLE 3.02:PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN
TOPICAL AREAS OF NUMERACY

Up to 82.0% and 81.5% of the P 3 pupils could perform tasks involving associating and counting respectively. A relatively lower proportion (47.9%) of the pupils were able to add numbers. However, a mere 11.9% of the pupils demonstrated competence in 'Measures'. Boys showed more competence in all the topical areas of Numeracy, though the differences were insignificant.

3.5 ACHIEVEMENT OF P 3 PUPILS IN THE COMPETENCIES OF NUMERACY

This section outlines the achievement of P 3 pupils in the competencies assessed in the Numeracy test. The flag on each competency was assigned the colour; 'Green', 'Yellow', or 'Red', where: 'Green' represents the competency in which at least three quarters of the pupils were rated proficient. 'Yellow' represents a competency in which at least a half, but less than three quarters of the pupils reached the desired proficiency. Lastly, 'Red' indicates a competency in which less than a half of the pupils attained the desired rating.

Tables 3.03 – 3.06 give the percentages of P 3 pupils rated proficient in various competencies grouped in topical areas.

TABLE 3.03:PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN
ASSOCIATING, PLACE VALUE AND COUNTING

COMPETENCIES	BOYS	GIRLS	ALL
Identifying place value on an abacus.	P5.8 🥐	P5.2 🎙	P5.5 🖗
Counting in ones in increasing order.	P 89.5	P 87.6	P 88.5
Associating a number of objects to figures.	P 87.6	Prime 86.7	Pri 87.2 🖗
Counting in ones in decreasing order.	P 86.1	P 84.4	P 85.3
Counting in tens.	P 84.4	P 83.5	P 83.9
Associating an equal number of objects.	P79.0 🥐	P78.1 🖗	┡ 78.5
Associating a figure to its name in word(s).	PF 60.7	P 60.7	P 60.7
Identifying place value of a number.	P 49.0	P 48.7	P 48.9
Showing a three digit number on an abacus.	PP 44.5	P 45.0	P 44.7
Writing number symbols from words.	P 44.6	P 43.3	P 44.0
Writing number names from symbols.	P 34.6	P 33.2 🖗	P 33.9
Counting in twos.	№ 34.4	P 26.5	P 30.5

Best performance was exhibited in 'identifying place values on an abacus' in which 95.5% of the pupils were proficient. This was followed by 'counting in ones in increasing order' and then 'associating a number of objects to figures' in which 88.5% and 87.2% of the pupils respectively reached the desired rating.

Worst performance was demonstrated in 'counting in twos' where less than a third of the pupils (30.5%) attained the desired proficiency. In addition, only 33.9% of the pupils were able to write number names from symbols. Apart from 'counting in twos', the proportions of boys and girls rated proficient in all competencies were comparable.

TABLE 3.04:PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN
OPERATIONS ON NUMBERS

COMPETENCIES	BOYS	GIRLS	ALL
Adding two or three 2-digit numbers without carrying.	P2.8 🎙	P0.8 🌱	₱91.8
Subtracting up to a 3-digit number from up to 3-digit number without borrowing.	P 77.5	№ 73.8	P 75.7
Multiplication as repeated addition.	P72.6	P71.5	P72.1
Sharing objects	№ 66.8	P 63.1	P 65.0
Division of a number less than 20 by a one-digit number.	№ 61.1	P 57.3	P> 59.2
Multiplying a one digit number by a one digit number.	P 52.8	P 49.2	P 51.0
Multiplying a two digit number by a one digit number.	№ 48.0	P 43.5	P 45.7
Adding two or three two-digit numbers with carrying.	P 38.1	Pri 34.5	┡ 36.3
Applying addition in daily life.	Pri 34.5 🖗	┡ 31.9	P 33.2 🖗
Divide a number > 20 by a one digit number.	P 32.7	PP 27.5	┡ 30.1
Applying subtraction in daily life.	P27.8 🎙	P 25.7	┡ 26.8
Subtracting up to a two-digit number from a two-digit number with borrowing.	P 26.7	P 24.6	P 25.7

Overall 91.8% of the pupils could add up to three 2-digit numbers without carrying. Over three quarters (75.7%) of the pupils could subtract up to a 3-digit number from a 3-digit number without borrowing, but only about a quarter of them (25.7%) could perform the same operation with borrowing; just over a quarter (26.8%) could apply subtraction in daily life. In multiplication, about a half of the pupils (51.0%) could multiply a one-digit number by a one-digit number, but fewer (45.7%) could multiply a two digit number by a one-digit number. There were no significant differences between the proportion of boys and girls attaining the desired proficiency in each competency, though more boys were rated proficient.

TABLE 3.05:PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN
GRAPHS, SORTING, TELLING TIME AND MEASURES.

COMPETENCIES	BOYS	GIRLS	ALL
Representing information in pictograms.	P 69.9	P 69.1	P 69.5
Interpreting bar graphs.	P 40.6	P 38.4 🥐	┡ 39.5
Sorting shapes.	PP 48.9	P 51.0	┡ 49.9
Applying the concept of capacity in daily life.	P 48.4	P 44.1	P 46.3
Telling time on the hour.	P 38.4	P 41.5	P 39.9
Solving sums involving buying and selling.	┡ 35.5	┡ 28.9	┡ 32.2

Whereas over two thirds (69.5%) of the pupils could represent information in pictograms, only 39.5% could interpret bar graphs. About 1 in 2, (49.9%) of the pupils were proficient in 'sorting shapes' and 46.3% were proficient in 'applying the concept of capacity in daily life', but only 32.2% had the same rating in 'solving sums involving buying and selling of objects'. Girls performed better than the boys in 'telling time' and 'sorting shapes' and boys were better in the others, but the difference was significant only in 'solving sums involving buying and selling'.

TABLE 3.06:PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN
FRACTIONS AND SETS

COMPETENCE	BOYS	GIRLS	ALL
Writing and drawing unit fractions with denominator less than 10.	P77.0	P 76.0	P76.5 🖗
Forming sets.	P 62.8	P 66.1	P 64.5

About three quarters of the pupils (76.5%) could write and draw unit factions. In 'forming sets', just less than two thirds (64.5%) were rated proficient. Boys and girls performed at about the same level in writing and drawing unit fractions with denominator less than 10, over three quarters: 77.0% and 76.0% respectively of them were rated proficient. But, the girls performed better than the boys in forming of sets, though not significantly.

3.6 ACHIEVEMENT OF P 3 PUPILS IN NUMERACY BY AGE

This section outlines the achievement of P 3 pupils in Numeracy by age and gender. Table 3.07 shows the mean scores of P 3 pupils in Numeracy, by age and gender.

AGE	BC	DYS	GIRLS A		AL	L
(years)	Mean	S.E	Mean	S.E	Mean	S.E
6–7	55.3	2.66	53.7	2.81	54.3	2.25
8	57.6	1.81	54.4	1.51	55.7	1.52
9	51.6	0.86	49.6	0.83	50.5	0.73
10	49.6	0.66	47.3	0.64	48.4	0.54
11	50.8	0.64	48.9	0.72	49.9	0.58
12	51.1	0.81	48.5	1.15	50.0	0.82
12+	51.0	1.33	48.9	0.98	50.2	0.96

TABLE 3.07:	MEAN SCORES OF P 3 PUPILS IN NUMERACY BY AGE
	AND GENDER

The mean scores of P 3 pupils first increased with increase in age from 54.3.% at 6 - 7 years to 55.7% at 8 years; then dropped to 50.5% at age 9 years and remained approximately the same throughout the other ages. For all ages, boys obtained higher mean scores than the girls, but were not significantly different.

Figure 3.02 shows the percentage of P 3 pupils rated proficient in Numeracy by age and gender.



The proportion of P 3 pupils rated proficient increased with age from 68.9% at 6 – 7 year olds to 71.0% for the 8 year olds. It then dropped to 63.1% for pupils aged 9 years and then remained nearly constant. At all ages, more boys than girls reached the desired proficiency level, but the differences were not significant.

3.7 ACHIEVEMENT OF P 3 PUPILS IN NUMERACY BY SCHOOL **OWNERSHIP**

This section presents the achievement of P 3 pupils in Numeracy by school ownership. Table 3.08 shows the mean scores of P 3 pupils in Numeracy by school ownership.

TABLE 3:08:	MEAN SCORES (PERCENTAGE) OF P 3 PUPILS IN			
	NUMERACY BY SCHOOL OWNERSHIP			

SCHOOL	BOYS GIRLS		S	ALL		
OWNERSHIP	Mean	S.E	Mean	S.E	Mean	S.E
Government	48.9	0.58	46.7	0.63	47.8	0.57
Private	62.1	1.63	61.7	1.64	61.9	1.57

The mean score of the pupils from government schools was 47.8%, which was significantly lower than the 61.9% obtained by the pupils from private schools. Whereas boys and girls in the private schools obtained about the same mean scores in government schools, boys' mean score of 48.9% was slightly higher than the girls' of 46.7%.





Overall, 81.0% of the pupils in the private schools reached the desired proficiency level, as compared to a significantly lower figure of 59.5% of those from the government schools. More boys than girls from schools of either ownership reached the desired rating, though the differences were not significant.

3.8 ACHIEVEMENT OF P 3 PUPILS IN NUMERACY BY SCHOOL LOCATION

In this section, a presentation of the performance of P 3 pupils in Numeracy by school location is made. Table 3.09 shows the mean scores of P 3 pupils in Numeracy by school location and gender.

SCHOOL	BOYS		GIR	LS	ALL			
LOCATION	Mean	S.E	Mean	S.E	Mean	S.E		
Urban	58.9	1.33	58.1	1.59	58.5	1.40		
Rural	48.8	0.59	46.5	0.58	47.6	0.54		

TABLE 3:09:MEAN SCORES OF P 3 PUPILS IN NUMERACY BY
SCHOOL LOCATION AND GENDER

The respective mean scores of pupils in the urban and rural schools were 58.5% and 47.6%, implying that pupils in urban areas did significantly better than those from the rural areas. Whereas boys and girls from the urban schools obtained about the same mean, boys in the rural schools obtained a slightly higher mean of 48.8% compared to the girls' 46.5%.



Figure 3.04 shows the percentage of pupils rated proficient in Numeracy by school location and gender.

The proportion of P 3 pupils rated proficient in Numeracy in the urban areas was 76.0%, in comparison to 59.1% of those in the rural areas, which was significantly lower. Within each school location, more boys than girls attained the desired proficiency levels, but the differences were not significant.

3.9 ACHIEVEMENT OF P 3 PUPILS IN NUMERACY BY DISTRICT

A description of the performance of P 3 pupils in Numeracy by district is made in this section. The districts were grouped, using the following colours: 'Green', 'Yellow', and 'Red'. Districts grouped in 'Green' are those in which 75% and above of the pupils were rated proficient. Districts in 'Yellow' are those in which at least a half, but less than three quarters of the pupils reached the desired proficiency. Lastly, districts in 'Red' are those in which less than a half of the pupils attained the desired proficiency level. 'Red' districts with an asterisk (*) had less than a quarter of the pupils rated proficient, and those with double asterisks (**) had 10% or less of the pupils rated proficient.

Table 3.10 shows the categorization of districts according to the percentages of pupils rated proficient in Numeracy.

TABLE 3.10: CATEGORIZATION OF DISTRICTS ACCORDING TO THE PERCENTAGES OF P 3 PUPILS RATED PROFICIENT IN NUMERACY

GREEN		YELLOW		ELLOW		RED	
Mbarara	98	Isingiro	74	Budaka	58	Kotido	49
Buhweju	95	Amuru	74	Kween	58	Kiryandongo	49
Masaka	95	Nakasongol	73	Busia	58	Amolatar	47
Bushenyi	94	Арас	73	Nakapiripirit	57	Kole	47
Kampala	94	Sembabule	72	Lira	56	Nebbi	46
Sheema	93	Kasese	71	Sironko	56	Iganga	46
Kyegegwa	88	Lwengo	71	Ngora	56	Lamwo	45
Kiruhura	88	Maracha	71	Kamuli	56	Pader	44
Kalangala	87	Bulambuli	71	Namutamba	55	Kyenjojo	44
Mukono	87	Napak	71	Dokolo	55	Bukwo	43
Rubirizi	87	Otuke	70	Bukomansimbi	55	Kitgum	43
Ibanda	86	Wakiso	70	Kyankwanzi	54	Моуо	43
Ntungamo	86	Gulu	70	Buvuma	54	Luuka	41
Mitooma	84	Mayuge	69	Bukedea	53	Buyende	41
Nakaseke	84	Hoima	68	Tororo	52	Buliisa	38
Rukungiri	83	Kalungu	68	Jinja	52	Masindi	38
Butambala	83	Serere	66	Butaleja	51	Kaberamaido	37
Mityana	82	Abim	66	Agago	51	Mbale	36
Kaabong	82	Arua	66	Katakwi	51	Oyam	28
Buikwe	81	Kiboga	65	Soroti	51	Amuria	27
Luweero	80	Mpigi	65	Mubende	50	Namayingo	27
Rakai	79	Bundibugyo	64	Kaliro	50	Kapchorwa	27
Yumbe	78	Kabarole	63	Kumi	50	Pallisa*	21
Lyantonde	77	Gomba	63			Alebtong*	14
Amudat	76	Kabale	63	55	()	Nwoya**	9
Adjumani	76	Zombo	62	(49.1%	0)		
Koboko	76	Kibale	62			25	()
Kanungu	76	Kayunga	62			(22.3%	0)
Kibuku	75	Bugiri	61				_
Kamwenge	75	Moroto	59				
Kisoro	75	Manafwa	59	1			
Ntoroko	75	Bududa	59				
32	\nearrow]			
(28.6%))					35	

Thirty two out of 112 districts (28.6%) were in "Green", about a half (49.1%) were in "Yellow" and 22.3% were in "Red". Two districts; Pallisa and Alebtong were in "Red" with an asterisk, while Nwoya was in "Red" with a double asterisks.

3.9 ACHIEVEMENT OF P 3 PUPILS IN NUMERACY IN THE YEARS 2007 – 2011

This section presents the trend in the achievement of the P 3 pupils in Numeracy in 2007 - 2011. Figure 3.05 shows the percentage of the pupils rated proficient in 2007 - 2011 by gender.



There was an increase in the proportions of pupils rated proficient from 2007 to 2008, then the proportions remained nearly constant till 2010, and finally dropped to 63.0% in 2011.

3.10 CONCLUSION

P 3 pupils performed well in: 'identifying place value on an abacus', 'adding numbers without carrying' and 'counting objects or numbers in ones'. They, however, experienced difficulty in subtracting numbers involving borrowing as well as in writing number names from symbols. They also showed limited skills in applying subtraction in real life situations. Furthermore, the pupils could ably represent information in pictograms, but found difficulty in interpreting bar graphs.

Chapter 4

ACHIEVEMENT OF P 3 PUPILS IN LITERACY IN ENGLISH

4.1 INTRODUCTION

This chapter presents the performance of the P 3 pupils in Literacy in English¹. It begins with a description of the competencies that were assessed. Then the overall level of performance, and the achievement of pupils in the various competencies are presented. Finally pupils' performance, by gender is presented by age, school ownership, school location and district.

4.2 DESCRIPTION OF COMPETENCIES BY PROFICIENCY LEVELS

NOTE: A pupil is assumed to have mastered all the competencies below his/her level, plus the competencies specified at his/her category.

ADVANCE	D LEVEL		
Reading Comprehension	Writing		
A pupil is able to:	A pupil is able to:		
 Read and describe the activities in 	 Write a sentence with the 		
a picture using meaningful, correct sentences and form of words.	correct spellings, spacing, capitalization and punctuation.		
 Associate activities to sentences describing them. 	 Copy a story neatly, legibly and with the correct 		
 Read and complete sentences correctly. 	spelling, spacing, and punctuation.		
 Read and answer questions about a story, including those which require deeper understanding of the story. 			

¹ Also referred to as 'Literacy'.

ADEQUATE LEVEL						
Reading Comprehension	Writing					
 A pupil is able to: Associate types of weather to their names. Identify the missing parts on an object and draw and name them correctly. Read a picture in the form of dots and join all the dots correctly. Complete words correctly. Read a story and answer questions that require short and direct answers. 	 A pupil is able to: Draw pictures of named objects correctly. Copy words correctly. Name objects found at home and school correctly. Write the letters of the alphabet with the correct shape and placement. Write patterns with the correct size, shape and rhythm. Write words correctly. Write sentences, but makes some errors in spelling, spacing, capitalization and punctuation. Copy a story, but makes some errors in spelling, spacing, capitalization and punctuation. 					
BASIC L	EVEL					
Reading Comprehension	Writing					
 A pupil is able to: Describe parts of an activity in a picture. Associate words to similar words. Identify some of the missing parts of an object and draw them correctly. Read a picture in the form of dots, but joins only some dots to form the picture. Complete common words of up to three letters. 	 A pupil is able to: Draw pictures of some named objects in their immediate surroundings. Name pictures of some objects in the home and school, with simple and familiar names. Write the letters of the alphabet, but with incorrect shape or position. Write patterns with varying sizes and rhythms. Copy a story, but makes many errors in spelling, spacing and punctuation. 					

INADEQUAT	E LEVEL
Reading Comprehension	Writing
 A pupil is able to: Identify some of the missing parts of an object, but draws them in the wrong positions. Read a picture given in the form of dots, but not join the dots correctly. 	 A pupil is able to: Copy some familiar words, but the writing is nearly illegible. Write the letters of the alphabet, but some in the mirror image form. Write single letters repeatedly instead of a pattern

NOTE: A pupil is rated proficient if he/she attains the 'Advanced' or 'Adequate' level of proficiency.

4.3 OVERALL LEVEL OF ACHIEVEMENT OF P 3 PUPILS IN LITERACY IN ENGLISH

The P 3 pupils obtained an overall mean score of 42.7% (S.E: 0.61) in Literacy. The boys' and girls' mean scores were 42.4% (S.E: 0.62) and 43.1% (S.E: 0.66) respectively which were not significantly different. This shows that boys and girls performed at about the same level in Literacy. Table 4.01 shows the percentage of P 3 pupils reaching the various proficiency levels in Literacy by gender.

TABLE 4:01:PERCENTAGE OF P 3 PUPILS REACHING THE VARIOUS
PROFICIENCY LEVELS IN LITERACY, BY GENDER

PROFICIENCY LEVELS	BOYS	GIRLS	ALL
Advanced	10.0	11.1	10.6
Adequate	37.3	37.4	37.3
Basic	32.7	32.2	32.5
Inadequate	20.0	19.3	19.7
TOTAL	100	100	100

About a tenth (10.6%) of the P 3 pupils reached the 'Advanced' level of proficiency. These were pupils who exhibited mastery of the Literacy skills specified at P 3 level.

More than a third of the pupils (37.3%) were categorized as 'Adequate'. These were pupils who reached the desired minimum level of proficiency as specified at P 3.

Just about a third of the P 3 pupils (32.5%) were rated 'Basic'. These were pupils who showed that they had acquired only the elementary competencies of Literacy.

The last proportion of the P 3 pupils (19.6%), were at the 'Inadequate' level. These performed far below the level expected of them. Figure 4.01 shows the percentage of P 3 pupils rated proficient in Literacy.



Nearly a half of the P 3 pupils (47.9%) were rated proficient in Literacy. The gender difference was negligible, with 47.3% boys and 48.5% girls rated proficient.

4.4 ACHIEVEMENT OF P 3 PUPILS IN VARIOUS COMPETENCIES

The results of the P 3 pupils' achievement in the various competencies are presented in this section. Table 4.02 shows the percentage of P 3 pupils who were rated proficient in the competencies of Reading Comprehension.

TABLE 4.02:PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN
THE COMPETENCIES OF READING COMPREHENSION

	-	-	
COMPETENCIES	BOYS	GIRLS	ALL
Associating (word:word; object:word; activity:sentence).	P 91.7	P 91.1	P 91.4
Completing pictures.	P73.2 🖗	P 68.5	P70.9 🖗
Completing words.	P 54.6	P 55.9	P 55.2
Recognising objects in picture form.	P 46.9	P 51.0	P 48.9
Identifying the missing parts of an object.	P> 50.5	Pres 45.9	Pri 48.1
Reading and completing sentences.	P 47.0	Pri 48.7	Pri 47.8 🖗
Reading and comprehending a story.	P 42.2 🕈	P 44.6	P 43.4
Reading and describing the activities in a picture.	P 15.8	P 17.0	P 16.4

Among the competencies of Reading Comprehension assessed, P 3 pupils performed best in 'associating objects', with 91.4% of them rated proficient. This was followed by 'completing pictures', where 70.9% of the pupils were proficient. Nevertheless, only 16.4% of the pupils were rated proficient in 'reading and describing the activities in a picture'. Gender differences were not significant.

Table 4.03 presents the percentage of P 3 pupils who associated various items correctly.

TABLE 4.03:PERCENTAGE OF P 3 PUPILS WHO ASSOCIATED
VARIOUS ITEMS CORRECTLY

COMPETENCIES	BOYS	GIRLS	ALL
Associating word to word.	P4.8 🥐	P 94.6	Pe 94.7 🖗
Associating activity to a sentence.	Pri 87.5 🖗	P 86.3	P 86.9
Associating object to word.	P 57.6	№ 56.2	P 56.9

The majority of the P 3 pupils (94.7%) could associate a word to the same word and 86.9% could associate an activity to a sentence. However, only 56.9% of them could associate objects to words. The gender differences were negligible.

Table 4.04 shows the percentage of P 3 pupils who were rated proficient in the various competencies of writing.

TABLE 4.04:PERCENTAGE OF P 3 PUPILS RATED PROFICIENT INTHE COMPETENCES OF WRITING.

COMPETENCIES	BOYS	GIRLS	ALL
Writing letters of the alphabet.	8.88 🌱	P 89.1	P 89.0
Writing patterns.	P 87.4	₱ 88.4	P 87.9
Copying words.	P77.9 🖗	P76.7	P77.3 🖗
Copying a story.	P 67.8	P73.8 🖗	P70.8 🖗
Drawing pictures of named objects.	P 65.9	№ 66.6	PF 66.2
Writing words.	P 45.1	P 48.5	P 46.8
Writing sentences.	P 33.9	Pri 34.5	Pri 34.2
Naming objects in pictures.	P 25.6	P 26.5	P 26.0

P 3 pupils' performance in the competencies of Writing varied. For instance, while 89.0% of them were able to write the letters of the alphabet, just 26.0% could name objects given in picture form. The only significant gender difference was in 'copying a story', where the girls performed better than the boys: 73.8% and 67.8% respectively were proficient.

4.5 ACHIEVEMENT OF P 3 PUPILS IN LITERACY IN ENGLISH BY AGE

Results of P 3 pupils' performance in Literacy by age is described in this section. Table 4.05 shows the mean scores of P 3 pupils in Literacy in English by age and gender.

AGE	BOYS		GI	RLS	ALL		
(years)	Mean	S.E	Mean	S.E	Mean	S.E	
6-7	55.8	2.95	57.9	3.44	57.1	2.67	
8	55.4	2.43	54.9	1.95	55.1	2.01	
9	45.5	1.15	44.6	0.96	44.9	0.91	
10	41.0	0.69	40.7	0.67	40.8	0.58	
11	40.7	0.66	40.9	0.70	40.8	0.58	
12	40.0	0.65	39.6	0.95	39.9	0.64	
12+ ^γ	38.4	0.89	38.9	0.83	38.6	0.71	

TABLE 4.05:MEAN SCORES (PERCENTAGE) OF P 3 PUPILS IN
LITERACY BY AGE AND GENDER

 $^{\gamma}$ Age above 12 years

P 3 pupils' mean score declined with increase in age. Whereas pupils aged 6 - 7 years obtained a mean score of 57.1%, their counterparts aged 8 years had a mean of 55.1% and the 12+ year olds scored the lowest mean of 38.6%. Gender differences were not significant at any age. Figure 4.02 shows the percentage of P 3 pupils rated proficient in Literacy by age and gender.



There was a decline in the percentage of pupils rated proficient as age increased. Although 66.8% of the pupils aged 6 - 7 years were proficient, this figure dropped to 65.5% for the 8 year olds, and further to 41.0% for the 12+ year olds. At 6-7 years, significantly more boys than girls were proficient.

4.6 ACHIEVEMENT OF P 3 PUPILS IN LITERACY IN ENGLISH BY SCHOOL OWNERSHIP

P 3 pupils' achievement in Literacy by school ownership is described in this section. Table 4.06 presents the mean scores of P 3 pupils in Literacy by school ownership and gender.

TABLE 4.06:MEAN SCORES (PERCENTAGE) OF P 3 PUPILS IN
LITERACY BY SCHOOL OWNERSHIP

SCHOOL	BOYS		GIRLS		ALL	
OWNERSHIP	Mean	S.E	Mean	S.E	Mean	S.E
Government	38.9	0.60	39.4	0.69	39.1	0.61
Private	59.3	2.17	61.8	2.20	60.5	2.12

Pupils from government schools scored a mean of 39.1%, which was significantly lower than the 60.5% of the pupils in private schools. Gender difference in mean scores in either case was not significant, although girls had slightly higher means.

Figure 4.03 shows the percentage of P 3 pupils rated proficient in Literacy in English according to school ownership.



Less than a half of the pupils (42.8%) in government schools were rated proficient in Literacy in English. The corresponding proportion of pupils in private schools was 73.1% which was much higher than for those in government schools. However, gender differences were not significant, but slightly a higher proportion of girls were proficient.

4.7 ACHIEVEMENT OF P 3 PUPILS IN LITERACY IN ENGLISH BY SCHOOL LOCATION

The P 3 pupils' achievement in Literacy according to the location of the schools is presented in this section. Table 4.07 shows the mean scores of the P 3 pupils in Literacy by school location and gender.

TABLE 4.07: MEAN SCORES (PERCENTAGE) OF P 3 PUPILS INLITERACY BY SCHOOL LOCATION AND GENDER

SCHOOL	BOYS		OL BOYS GIRLS		AL	
LOCATION	Mean	S.E	Mean	S.E	Mean	S.E
Urban	55.9	1.73	57.7	1.96	56.8	1.77
Rural	38.1	0.54	38.7	0.56	38.4	0.52

P 3 pupils in urban schools scored a significantly higher mean of 56.8%, compared to 38.4% of their counterparts from the rural schools. There were no significant gender differences in mean scores in each school location. Figure 4.04 shows the percentage of P 3 pupils rated proficient in Literacy by school location and gender.



Significantly more of the pupils from the urban schools (70.9%) were rated proficient compared to only 40.8% of those from the rural schools. However, the difference in the proportions of the two genders rated proficient in either case was not significant.

4.8 ACHIEVEMENT OF P 3 PUPILS IN LITERACY IN ENGLISH BY DISTRICT

A description of the performance of P 3 pupils in Literacy in English, by district, is made in this section. The districts were grouped using the following colours: 'Green', 'Yellow', and 'Red'. Districts grouped in 'Green' are those in which 75% and above of the pupils were rated proficient. Districts in 'Yellow' are those in which at least a half, but less than three quarters of the pupils reached the desired proficiency. Lastly, districts in 'Red' are those in which less than a half of the pupils attained the desired proficiency level. 'Red' districts with an asterisk (*) had less than a quarter of the pupils rated proficient, and those with double asterisks (**) had 10% or less of the pupils rated proficient.

Table 4.08 gives the categorization of the districts according to the percentages of pupils rated proficient in Literacy in English.

TABLE 4.08:	CATEGORIZATION OF DISTRICTS ACCORDING TO
	PERCENTAGES OF P 3 PUPILS RATED PROFICIENT IN
	LITERACY IN ENGLISH

G	Mbarara 97	Kampala 97	Masaka 95	Buhweju 90
R	Sheema 89	Bushenyi 87	Mukono 86	Luweero 81
E	Wakiso 81	Butambala 80	Mityana 78	Rubirizi 77
N	Buikwe 76	Kiruhura 75		14 12%
	Kalangala 74	Nakaseke 74	Amudat 72	Ntungamo 71
v	Mitooma 69	Kyegegwa 68	Rakai 68	Kaabong 67
E	Kalungu 67	Mpigi 67	Lyantonde 64	Rukungiri 63
L	Ntoroko 60	Moroto 59	Sembabule 59	Isingiro 59
	Buvuma 58	Napak 57	Kasese 57	Kiboga 55
w	Adjumani 55	Lwengo 54	Jinja 53	Nakasongola 53
	Ibanda 52	Bukomansimbi 51	Kayunga 51	Hoima 50 29
	Nakapiripirit 50			26%
	Koboko 49	Kotido 48	Bugiri 48	Mayuge 48
	Kamwenge 48	Amuru 47	Kiryandongo 46	Kabale 46
	Gomba 46	Gulu 45	Manafwa 44	Apac 43
	Kween 43	Kanungu 42	Kyankwanzi 41	Lira 41
	Arua 41	Bulambuli 40	Butaleja 40	Bududa 40
	Iganga 40	Yumbe 40	Mubende 40	Kibuku 40
R	Kabarole 40	Bukedea 39	Tororo 38	Serere 38
E	Kisoro 38	Kaliro 37	Abim 36	Kitgum 36
	Busia 36	Soroti 34	Kamuli 34	Namutumba 33
	Otuke 33	Mbale 33	Buyende 32	Maracha 32
	Sironko 31	Bundibugyo 31	Kibaale 30	Dokolo 28
	Zombo 28	Budaka 28	Katakwi 28	Luuka 27
	Amolatar 26	Nebbi 25	Masindi 25	Ngora* 24
	Bukwo* 23	Agago* 22	Buliisa* 22	Kaberamaido* 22
	Kyenjojo* 22	Pader* 20	Moyo* 20	Namayingo* 17
	Oyam* 16	Kumi* 16	Kapchorwa* 14	Lamwo* 12
	Kole* 11	Amuria** 9	Alebtong** 7	Pallisa** 6
	Nwoya** 1			69

Only 12% of the districts were in 'Green' and 'Yellow had 26%. The rest (62%) were in 'Red'. Of these, 14 had an asterisk and four : Amuria, Alebtong, Pallisa and Nwoya, had double asterisks. Apart from

Bullisa and Kyenjojo, all the districts with one or two asterisks are from the Eastern or Northern regions.

Only 13% of the districts were in 'Green', 'Yellow had 26% of the districts. The rest of the districts (62%) were in Red'. Of these, 14 had an asterisk and four : Amuria, Alebtong, Pallisa and Nwoya, had double asterisks. Apart from Bullisa and Kyenjojo, the districts with either one or two asterisks are in the Northern or Eastern regions.

4.9 ACHIEVEMENT OF P 3 PUPILS IN LITERACY IN ENGLISH IN THE YEARS 2007 – 2011

P 3 pupils' achievement in the years 2007 to 2011 is presented in this section. Figure 4.05 shows the percentage of P 3 pupils rated proficient in Literacy in 2007 - 2011.



The proportions of P 3 pupils rated proficient remained nearly the same between 2007 and 2008. It then increased from 44.5% in 2008 to 55.9% in 2009 and further to 57.6% in 2010.

However, this year, 2011 the proportion of pupils rated proficient has dropped to 47.9%.

4.10 CONCLUSION

P 3 pupils did best in the competency of 'associating' and within this competency, 'associating' word to the same word was the best done associating an activity to a sentence describing it. The least well done was 'associating' an object to a word.

Among the other reading competencies, fewer pupils proved competent in 'reading and describing the activities in a picture'.

In writing, pupils found naming the objects in their surroundings difficult. It should be noted that learning the names of objects in the surrounding is one way of developing vocabulary in any language, thereby forming a firm foundation for a child to speak the language.

Similarly, most pupils wrote words with incorrect spellings. It is however, true that vocabulary development among learners is almost incomplete without mastering the correct spellings of the acquired vocabulary. This means that pupils need adequate exercises in spelling.

Chapter 5

ACHIEVEMENT OF P 3 PUPILS IN ORAL READING

5.1 INTRODUCTION

The results of the performance of P 3 pupils in Oral Reading is presented in this chapter. The P 3 Oral Reading test consisted of two parts: Reading and Listening Comprehension. The reading part included reading letters of the English Alphabet, words, sentences and a story. Listening Comprehension comprised a set of instructions given orally, and the pupil was expected to respond appropriately. In presenting the results, the overall achievement of the P 3 pupils in Oral Reading is given, followed by the performance in the specific reading tasks. Lastly, performance is given according to pupil's age, school ownership, location and, district.

5.2 DESCRIPTION OF COMPETENCIES ASSESSED IN ORAL READING

A description of the main competencies assessed in Oral Reading is given in the next section.

NOTE: A pupils is assumed to have mastered all the competencies specified at his/her level, plus the competencies below his/her level

ADVANCED LEVEL

Reading letters	Reading words	Reading sentences	Reading a story	Listening Comprehension	
A pupil at this level is able to: A pupil at this level is able to:		A pupil at this level is able to:	A pupil at this level is able to:	A pupil at this level is able to:	
 Recognise letters of the English alphabet and pronounce them correctly. 	 Recognize and read given words correctly. 	• Recognise and read given sentences using the correct intonation.	 Read a story fluently, expressively and with confidence. 	 Respond immediately and appropriately to all the commands given. 	

ADEQUATE LEVEL

Reading letters	Reading words	Reading sentences	Reading a story	Listening Comprehension	
A pupil at this level is able to:	A pupil at this level is able to:	A pupil at this level is able to:	A pupil at this level is able to:	A pupil at this level is able to:	
• Recognize the letters of the English alphabet, but has problems with pronouncing some of them correctly.	Read only some words correctly.	• Read most of the words that make a sentence, but not fluently.	• Read a story with minor errors in fluency, expressivenes s and confidence.	 Respond to all the commands, but not immediately. 	

BASIC LEVEL

Reading letters	Reading words	Reading	Reading a story	Listening	
5	5	sentences	5 ,	Comprohension	
		Sentences		Comprenension	
A pupil at this	A pupil at this	A pupil at this	A pupil at this	A pupil at this	
level is able to:	level is able to:	level is able	level is able to:	level is able to:	
 Recognize the letters of the English alphabet, but have difficulty in 	 Read only a few words. 	 Read only a few of the words in a sentence. 	 Read words in a story as independent words with little or no fluency, 	 Respond to only a few of the commands appropriately but not 	
pronouncing them.		Sentencer	expressiveness and confidence.	immediately.	

INADEQUATE LEVEL

Reading letters	Reading words	Reading sentences	Reading a story	Listening Comprehension	
A pupil at this level is able to:	upil at thisA pupil at thisel is able to:level is able to:		A pupil at this level is able to:	A pupil at this level is able to:	
 Recognize some of the letters of the English alphabet, but has difficulty pronouncing them. 	Read one or two out of ten words.	 Read one or two of the words in a five- word sentence. 	 Read some words in a story independently, but with a lot of regression and very little or no fluency. 	 Listen to the commands, but does not respond appropriatel y. 	

<u>Note:</u> A pupil is rated proficient if he/she attains the 'Advanced' or 'Adequate' level of proficiency.

5.3 OVERALL LEVEL OF ACHIEVEMENT OF P 3 PUPILS IN ORAL READING

The overall mean score obtained by P 3 pupils in Oral Reading was 43.2% (S.E: 0.76). The mean score of boys was 42.7% (S.E: 0.78) and girls' was 43.7% (S.E: 0.83). This implies that the girls performed slightly better than the boys, but insignificantly. Table 5.01 shows the percentage

of P 3 pupils reaching the various levels of proficiency in Oral reading, by gender.

TABLE 5.01:	PERCEN	ΓAGE	OF	Ρ	3	PUF	PILS	REACH	IING	VARIO	DUS
	LEVELS	OF	PROF	FIC:	IEN	CY	IN	ORAL	REA	DING,	ΒY
	GENDER										

PROFICIENCY LEVEL	BOYS	GIRLS	ALL
Advanced	18.5	19.6	19.0
Adequate	27.1	27.3	27.2
Basic	11.4	10.8	11.1
Inadequate	43.0	42.3	42.7

The proportion of P 3 pupils, rated 'Advanced' was 19.0%. These pupils showed that they had mastery of the reading skills specified at P 3 level.

At the 'Adequate' level, there were 27.2% of the pupils. This category is the required minimum level of proficiency at P 3 level.

About a tenth of the pupils (11.1%) were rated 'Basic' in Oral Reading. These are pupils who exhibited only basic skills in Oral Reading.

Nearly a half of the P 3 pupils (42.7%) were rated 'Inadequate'. These are pupils whose reading skills were far below that of a pupil at P 3 level.



Figure 5.01 shows the percentage of P 3 pupils rated proficient in Oral Reading by gender.

Overall, 46.2% of the P 3 pupils were rated proficient. Slightly more girls (46.9%) than boys (45.6%) were rated proficient but the difference was insignificant.

5.4 ACHIEVEMENT OF P 3 PUPILS IN ORAL READING BY READING TASKS

The letters chosen were 'a' to represent the vowels, and letters 'p', 'r', 's' and 'v' representing consonants that are articulated at particular points in the mouth. These letters were selected because pupils tend to mix up sounds of letters that are articulated at the same or nearly the same

point. For example, plosive sounds /p/ and /b/; trill sound /r/ and the lateral /l/ sound; as well as the fricative sounds /s/ and /z/. Similarly, the English letter names and the sounds of the four consonant letters referred to above are very close to each other when read out. The purpose of the letter reading task, therefore, was to assess whether the pupils could distinctly read the letter names and not sounds.

Similarly, the words selected were from within the recommended vocabulary and were of objects from within the pupils' immediate environment i.e. home and school. They consisted of simple words without digraphs, with digraphs of the same letter and then those with digraphs of different letters. The pupils were evaluated in reading letters of the English alphabet (as letter names in English).

Likewise, pupils were evaluated in reading sentences made up of different number of words ranging from four to six. This was followed with an assessment of the pupils' skills in reading a story, where the emphasis was on the correctness of the reading, fluency and confidence. This section presents the results of pupils' performance in the four Oral Reading Tasks.

Table 5.02 shows the achievement of P 3 pupils in Oral Reading according to the different reading tasks.

READING TASK	BOYS	GIRLS	ALL
Reading letters	69.8	69.8	69.8
Reading sentences	35.7	36.6	36.1
Reading words	33.5	35.6	34.5
Reading a story	22.3	24.3	23.3

TABLE 5.02: PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN VARIOUS READING TASKS

P 3 pupils' performance in Oral Reading was best in reading the letters of the English alphabet, with 69.8% of them rated proficient. This was followed by 36.1% rated proficient in reading sentences, 34.5% in reading words and 23.3% in reading a story.

5.5 ACHIEVEMENT OF P 3 PUPILS IN VARIOUS SKILLS OF ORAL READING

In this section, a description of the performance of pupils in each Oral Reading skill area and Listening Comprehension is made. Tables 5.03-5.07 show the percentages of P3 pupils rated proficient in the skills in each reading task.

	LE	I LER NAI	ME	LEI	TER SOU	JND	YE	I TO REA	AD .
LETTER									
	BOYS	GIRLS	ALL	BOYS	GIRLS	ALL	BOYS	GIRLS	ALL
S	62.9	61.8	62.4	16.6	18.3	17.4	20.5	20.0	20.2
а	56.5	55.2	55.9	30.6	33.0	31.8	12.8	11.8	12.3
р	54.4	53.7	54.0	18.2	19.2	18.7	27.4	27.1	27.2
r	54.6	54.8	54.7	20.0	21.1	20.6	25.4	24.1	24.8
V	54.1	52.6	53.4	10.4	10.3	10.3	35.5	37.1	36.3

TABLE 5.03:	PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN
	READING SELECTED LETTER NAMES BY GENDER

More pupils were able to correctly read letter 's' compared to the other letters. Nearly two thirds (62.4%) of them could read letter's' correctly by name, 17.4% read its sound and 20.2% read it wrongly or did not read at all. On the other hand, fewer and nearly the same percentage of pupils, could read the letters 'a' 'r' 'p' and 'v' by their names. In all cases, the gender difference was negligible.

TABLE 5.04:	PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN
	READING WORDS CORRECTLY

WORDS	BOYS	GIRLS	ALL
book	75.9	75.7	75.8
cow	66.1	66.4	66.2
school	54.8	56.2	55.5
house	39.9	43.5	41.7
mother	31.3	34.4	32.8
read	27.4	26.9	27.2
doctor	26.3	27.5	26.9
dance	19.1	20.7	19.9
friend	17.9	18.5	18.2
cupboard	13.5	14.8	14.1

In reading words, most P 3 pupils could read the word 'book', 75.8% of them rated proficient and next, about two thirds (66.2%) could read the word 'cow'. The proportions of pupils who were able to read the words 'cupboard', 'friend' and 'dance' were small: 14.1%.18.2% and 19.9% respectively. Generally, more girls than boys were able to read the words, though the differences were not significant.

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TABLE 5.05:	PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN
	READING SENTENCES

SENTENCE	BOYS	GIRLS	ALL
A four-word sentence	51.6	53.4	52.5
A five-word sentence	13.9	14.5	14.2
A six-word sentence	11.1	10.7	10.9

Although over a half of the pupils (52.5%), could read a four-word sentence less than a fifth, 14.2% and about 1 in 10 could read a five and six-word sentence respectively – indicating that the proficiency of the pupils declined as they read sentences of more words.

TABLE 5.06:PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN
STORY READING SKILLS.

STORY READING SKILL	BOYS	GIRLS	ALL
Reading a story correctly.	34.0	35.6	34.8
Reading a story fluently.	26.4	28.6	27.5
Reading a story with confidence.	16.6	19.4	17.9

Only 34.8% of the P 3 pupils could read a story correctly; and only 27.5% of them could read the story with fluency. Likewise, only 17.9% of them showed confidence while reading the story.

TABLE 5.07:PERCENTAGE OF P 3 PUPILS WHO RESPONDED
APPRORIATELY TO VERBAL COMMANDS.

COMMAND	BOYS	GIRLS	ALL
Stand up	96.0	96.1	96.1
Jump	74.5	77.7	76.1
Clap your hands	72.8	76.8	74.8
Touch your head	64.5	66.0	65.3

The majority of the pupils (96.1%) could ably respond to the command 'stand up'. About 3 in 4 responded to the commands 'jump' and 'clap your hands'. However, only 65.3% responded correctly to the command 'touch your head'.

5.7 ACHIEVEMENT OF P 3 PUPILS IN ORAL READING BY AGE

The results of the P 3 pupils' achievement in Oral Reading by age is described in this section. Table 5.08 shows the mean scores of the P 3 pupils in Oral Reading by age and gender.

AGE	BOYS		GI	RLS	ALL	
(years)	Mean	S.E	Mean	S.E	Mean	S.E
6–7	60.9	4.14	62.7	3.67	62.0	3.12
8	59.3	2.78	60.7	2.27	60.1	2.29
9	46.3	1.52	46.7	1.18	46.5	1.17
10	40.9	0.92	40.2	0.86	40.6	0.75
11	40.9	0.81	40.3	0.89	40.7	0.71
12	36.6	0.89	37.7	1.22	38.8	0.83
12+	37.8	1.04	37.6	1.31	37.7	0.88

TABLE 5.08:MEAN SCORES (PERCENTAGE) OF P 3 PUPILS IN ORAL
READING BY AGE AND GENDER.

The mean scores of P 3 pupils in Oral Reading declined with increase in age; ranging from 37.7% for pupils aged 12+ years to 62.0% for pupils aged 6–7 years. Generally, girls obtained slightly higher means than the boys, but the differences were not significant. Figure 5.02 shows the percentage of P 3 pupils rated proficient in Oral Reading by age and gender.



The percentage of P 3 pupils rated proficient decreased with increase in age. It first dropped slightly from 71.3% at age 6–7 years to 66.0% of the 8 year olds, then significantly to 50.7% of the 9 year olds and to 43.4% of the 10 year olds. Thereafter it dropped gradually to 39.3% for the 12+ year olds. Although there was no significant gender difference, more girls than boys of 8 and 9 years were rated proficient. The reverse occurred at all the other ages.

5.8 ACHIEVEMENT OF P 3 PUPILS IN ORAL READING BY SCHOOL OWNERSHIP

The results of the P 3 pupils' achievement in Oral Reading according to school ownership are described in this section. Table 5.09 shows the mean scores of P 3 pupils in Oral Reading by school ownership and gender.

TABLE 5.09:	MEAN SCORES (PERCENTAGE) OF P 3 PUPILS IN ORAL
	READING BY SCHOOL OWNERSHIP AND GENDER

OWNERSHIP	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
Government	38.2	0.75	39.1	0.83	38.7	0.75
Private	77.0	2.29	80.1	1.98	78.5	2.06

The mean score of the pupils in government schools was 38.7%, as opposed to a significantly higher mean of 78.5% for the pupils in private schools. There were no significant gender differences in the mean scores in each category of schools, though the girls' means were slightly higher than the boys'. The percentage of P 3 pupils rated proficient in Oral Reading by school ownership is shown in Figure 5.03.



In government schools, 40.6% of the pupils were rated proficient, which was significantly less than the proportion of those in private schools of 74.3%. In each category of schools, more girls than boys were rated proficient, but the differences were not significant.

5.9 ACHIEVEMENT OF P 3 PUPILS IN ORAL READING BY SCHOOL LOCATION

This section gives a description of the P 3 pupils' achievement in Oral Reading by school location. Table 5.10 shows the mean scores of the P 3 pupils in Oral Reading by school location and gender.

TABLE 5.10:	MEAN SCORES (PERCENTAGE) OF P 3 PUPILS IN ORAL
	READING BY SCHOOL LOCATION AND GENDER.

	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
URBAN	61.6	2.57	64.4	2.89	62.9	2.60
RURAL	37.7	0.66	38.5	0.69	38.1	0.63
The pupils in urban schools obtained a mean score of 62.9% while those in rural schools got a significantly lower mean of 38.1%. The gender differences were not significant. Figure 5.04 shows the percentage of P 3 pupils rated proficient in Oral Reading by school location and gender.



Whereas 39.2% of the pupils in the rural schools were rated proficient in Oral Reading, significantly more (68.9%) reached a similar rating in the urban schools. In both locations, more girls than boys were proficient, but the differences were not significant

5.10 ACHIEVEMENT OF P 3 PUPILS IN ORAL READING BY DISTRICT

A description of the performance of P 3 pupils, in Oral Reading, by district, is made in this section. The districts were grouped using the following colours: 'Green', 'Yellow', and 'Red'. Districts grouped in 'Green' are those in which 75% and above of the pupils were rated proficient. Districts in 'Yellow' are those in which at least a half, but less than three quarters of the pupils, reached the desired proficiency. Lastly, districts in 'Red' are those in which less than a half of the pupils attained the desired proficiency level. 'Red' districts with an asterisk (*) had less than a quarter of the pupils rated proficient, and those with double asterisks (**) had 10% or less of the pupils rated proficient.

Table 5.11 shows the categorization of districts according to the percentage of P 3 pupils rated proficient in Oral Reading.

TABLE 5.11:CATEGORIZATION OF DISTRICTS ACCORDING TO
PERCENTAGES OF P 3 PUPILS RATED PROFICIENT IN
ORAL READING

G	Mbarara 96	Masaka 96	Kampala 95	Sheema 90
R	Ruchonvi 90	Virubura 90	Rubwoju 96	
Е	Dushenyi 09 Dubirizi 83	Miniai 82	Makico 78	Mukopo 77 15
E N	Mitooma 77	Rukungiri 76	Nakaseke 75	13%
	Mityana 74	Ntungamo 72	Buikwe 72	Kalangala 72
V	Ibanda 71	Lyantonde 71	Butambala 70	Kalungu 69
E	Rakai 69	Isingiro 67	Nakasongola 63	Amudat 62
L	Lwengo 62	Sembabule 62	Kiboga 61	Bukomansimbi 60
L	Kamwenge 57	Napak 57	Kabale 57	Jinja 55
w	Kaabong 55	Buvuma 53	Kanungu 53	Kyegegwa 52 27
	Moroto 52	Nakapiripirit 51	Mayuge 50	24%
	Kisoro 49	Kabarole 48	Gomba 47	Adjumani 47
	Koboko 46	Mubende 46	Kotido 45	Ntoroko 45
	Kyenjojo 45	Kasese 43	Kyankwanzi 43	Kapchorwa 43
	Hoima 42	Moyo 42	Lira 42	Bududa 42
	Kiryandongo 40	Tororo 40	Arua 39	Kween 37
	Busia 37	Iganga 36	Apac 35	Yumbe 35
	Kaliro 35	Masindi 34	Namutumba 34	Kayunga 34
	Maracha 33	Mbale 33	Butaleja 33	Abim 32
K	Kitgum 31	Kamuli 30	Kibaale 30	Nebbi 30
E	Bulambuli 29	Gulu 29	Bundibugyo 28	Soroti 26
	Namayingo 26	Ngora 26	Katakwi 25	Buliisa 25
	Sironko* 24	Budaka* 24	Otuke* 23	Bukwo* 21
	Serere* 21	Luuka* 20	Buyende* 19	Bugiri* 19
	Agago* 19	Zombo* 17	Kibuku* 17	Amolatar* 15
	Pader* 15	Kumi* 15	Amuria* 15	Oyam* 14
	Kaberamaido* 14	Manafwa* 14	Kole* 13	Dokolo* 12
	Bukedea* 11	Pallisa* 11	Amuru** 9	Lamwo** 9
	Nwoya** 6	Alebtong** 6		
			63%	

In all, 13% of the districts were in 'Green' and 24% in 'Yellow'. The majority of the districts (63%) were in 'Red'. It is worth noting that the districts with double asterisks are all from Lango and Acholi sub-regions. In fact, Nwoya and Alebtong also have double asterisks in Literacy (Table 4.08) and were the last districts in performance in Numeracy, too (Table 3.10).

5.11 ACHIEVEMENT OF P 3 PUPILS IN ORAL READING IN THE YEARS 2003 - 2011

The achievement of P 3 pupils in Oral Reading over the years 2003 – 2011 is presented in this section. Figure 5.05 shows the percentage of P 3 pupils rated proficient in Oral Reading in 2003 – 2011 by gender.



The proportion of P 3 pupils rated proficient in Oral Reading rose from 23.4% in 2003 to 34.6% in 2007 and further to 46.2% in 2011. Throughout the period, boys and girls performed at about the same level.

5.12 ACHIEVEMENT OF P 3 PUPILS IN READING IN LOCAL LANGUAGES

The P 3 pupils in some districts were assessed in reading in the local language. This section presents the achievement of the pupils in reading in the local languages. Table 5.12 shows the nine local languages and the districts where the tests were administered. It also shows the number of pupils who were assessed in each local language.

TABLE 5.12:READING IN LOCAL LANGUAGES AND THE DISTRICTS
WHERE TESTS WERE ADMINISTERED

LANGUAGE	DISTRICT	NO. OF PUPILS
Acoli	Agago, Amuru, Gulu, Lamwo, Kitgum, Nwoya, Pader.	720
Ateso	Amuria, Bukedea, Katakwi, Kumi, Ngora, Serere, Soroti.	98
Lango	Alebtong, Amolatar, Apac, Dokolo, Kole, Lira, Otuke, Oyam.	1,133
Lhukonzo	Bundibugyo, Kasese, Ntoroko.	260
Luganda	Buikwe, Bukomansimbi, Butambala, Buvuma, Gomba, Kalangala, Kalungu, Kayunga, Kiboga, Lyantonde, Lwengo, Masaka, Mpigi, Mukono, Luweero, Mityana, Mubende, Nakaseke, Nakasongola, Rakai.	2,156
Lusoga	Bugiri, Buyende, Iganga, Kaliro, Kamuli, Luuka, Mayuge, Namutumba.	1,022
ŋakarimojoŋ	Amudat, Kaabong, Kotido, Moroto, Nakapiripirit, Napak.	417
Runyankore- Rukiga	Buhweju, Bushenyi, Ibanda, Isingiro, Kabale, Kanungu, Kiruhura, Mbarara, Mitooma, Ntungamo, Rukungiri, Sheema.	1,474
Runyoro-Rutooro	Buliisa, Hoima, Kabarole, Kibaale, Kyegegwa, Kyenjojo, Masindi.	976

Table 5.13 shows the percentage of P 3 pupils who were rated proficient in reading in each of the local languages

	PERCENTAGE
LANGOAGE	OF PUPILS
Runyankore-Rukiga	73.1
Luganda	53.2
Runyoro-Rutooro	37.6
Lhukonzo	36.9
ŋakarimojoŋ	43.7
Lango	34.9
Acoli	24.3
Lusoga	19.4
Ateso	17.0

TABLE 5.13:PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN
READING IN LOCAL LANGUAGES

The performance of P 3 pupils in reading varied from language to language. Runyankore-Rukiga had the highest proportion (73.1%) of the pupils rated proficient. However, the proportions of rated proficient in the other local languages were lower; ranging from merely 17.0% in Ateso to about a half (53.2%) in Luganda.

5.13 CONCLUSION

P 3 pupils could more ably read 'letters' than 'sentences', 'words' and a story. This could be because reading letter names is one aspect which is emphasized to children in schools at the early years of the infant classes. However, many were mixing up the 'letter names' with the 'letter sounds'. It should be noted that in reading, it is letter sound, and not name, that is used.

Pupils could easily read words with no digraphs or with digraphs of the same letter, but found reading words with digraphs of different letters difficult. This could be a sign of slow vocabulary development. It could also partly explain the poor performance in Literacy.

Most pupils could not read the story. It is important to note that this has a direct bearing to reading comprehension. A pupil who cannot read fluently cannot understand what he/she reads. And a pupil who has difficulty in reading words as explained above cannot read a story with fluency and confidence.

Chapter 6

ACHIEVEMENT OF P 6 PUPILS IN NUMERACY

6.1 INTRODUCTION

In this chapter, a presentation of the achievement of P 6 pupils in Numeracy is made. First of all, the overall mean score and the proportions of pupils attaining various proficiency levels is given. This is followed by the percentages of pupils reaching the desired proficiency in each competency. Lastly, the mean scores and percentages of pupils attaining the desired proficiency levels are given by gender and age, school ownership, location and district. The competencies which constitute each proficiency level are highlighted in the next section.

6.2 DESCRIPTION OF THE COMPETENCIES BY PROFICIENCY LEVEL

A description of the competencies by proficiency level is given below.

NOTE: A pupil is assumed to have mastered all the competencies below his/her level, plus the competencies specified at his/her level.

Recognize and complete the next pattern of a given sequence

A pupil is able to:

- Represent data in pictograms.
- Interpret bar graphs.
- Apply the concepts of fractions, capacity and the four basic operations in novel situations.
- Round off decimal numbers to the nearest tenth or whole number.
- Construct a triangle of given sides.

ADEQUATE

A pupil is able to:

- Add up to a 3-digit number to a 3-digit number with carrying.
- Subtract up to a 3-digit number from a 3-digit number with borrowing.
- Multiply a 2-digit number by a 2-digit number.
- Use brackets to carry out two combined operations of addition and multiplication.
- Compute the LCM of three numbers.
- Find the square or square root of a number.
- Read the temperature on a thermometer.
- Use a ruler and a pair of compasses to construct angles of 30° , 60° , 45° and 90° .
- Identify and draw a line of symmetry in a given figure.
- Arrange decimal numbers from the smallest to the largest and vise-versa.
- Carry out household budgeting.
- Carry out the four basic operations on fractions.
- Recognize and complete the next pattern of a given sequence.
- Construct a circle of a given radius.

BASIC

A pupil is able to:

- Change a fraction to a decimal and vise versa.
- Draw/read a fraction.
- Tell the time on a clock face to the hour.
- Identify odd and even numbers from a list of numbers.
- Add two 2-digit numbers without carrying.
- Subtract two 2-digit numbers without borrowing.
- Write up to a 4-digit number in expanded form and vise versa.
- Draw a circle using a pair of compasses.
- Measure the length of a given line.
- Measure an angle.
- State the place value of a digit in a number.
- Change a Roman number to Hindu-Arabic and vise versa
- Find the perimeter of a rectangle whose length and width are given.

INADEQUATE

A pupil is able to:

- Write a number shown on an abacus.
- Write a three digit number in words.

6.3 OVERALL ACHIEVEMENT OF P 6 PUPLS IN NUMERACY

This section describes the overall achievement of P 6 pupils in Numeracy. The overall mean score was 44.0%, with a standard error (S.E) of 0.51; boys and girls obtaining respective mean scores of 45.9% (S:E. 0.54) and 42.1% (S:E. 0.54). This shows that the boys performed significantly better than the girls.

TABLE 6.01:	PERCENTAGE OF P 6 PUPILS REACHING THE VARIOUS
	PROFICIENCYLEVELS IN NUMERACY BY GENDER

PROFICIENCY LEVEL	BOYS	GIRLS	ALL
Advanced	8.9	5.9	7.4
Adequate	40.7	35.8	38.2
Basic	30.0	31.5	30.8
Inadequate	20.4	26.8	23.6
TOTAL	100.0	100.0	100.0

There were 7.4% of the P 6 pupils in the 'Advanced' category. This group of pupils demonstrated superior performance showing in-depth and accurate understanding of the Numeracy skills and concepts specified at this level such that they could apply the skills to solve problems in novel situations.

The second category of pupils, rated 'Adequate', constituted 38.2%. This category demonstrated satisfactory academic performance, indicating a solid understanding of most of the Numeracy skills and concepts specified at this level.

The third group of pupils, rated 'Basic', constituted 30.8%. They demonstrated partial understanding of the Numeracy skills and concepts specified at this level.

The last category of pupils constituted 23.6% and were rated 'Inadequate'. They demonstrated skills only in a few elementary concepts.

Figure 6.01 shows the percentage of P 6 pupils rated proficient in Numeracy.



Nearly a half of the pupils (45.6%) attained the desired proficiency. The proportion of the boys rated proficient of 49.6% was significantly higher than the girls', 41.7%.

6.4 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY BY TOPICAL AREA

In this section, the percentages of pupils rated proficient in Numeracy by topical area are presented. Table 6.02 shows the percentage of pupils rated proficient in the topical areas of Numeracy.

TABLE 6.02:	PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN
TOPICAL AREAS	S OF NUMERACY

TOPICAL AREA	BOYS	GIRLS	ALL
Number system and place value.	P 81.3	P74.3	P77.8 🖗
Operations on numbers.	P78.6 🕈	P71.9	P75.2
Number patterns and sequence.	P 54.0	P 45.2	P 49.6
Graphs	P 40.4	P 38.4	P 39.4
Fractions	P 34.0	P 30.5	P 32.2
Measures	P 25.3	┡ 15.4	P 20.4
Geometry	₱8.1	P 6.0	P.0 🎙

The majority of the pupils were rated proficient in 'Number systems and place value' and 'Operations on numbers': 77.8% and 75.2% respectively. However, less than a half of the pupils exhibited ability and skills in the other topical areas. Worst performance was in Geometry, in which only 7.0% of the pupils were proficient. More boys than girls reached the desired proficiency level in all the topical areas, however the difference was not significant in 'Graphs'.

6.5 ACHIEVEMENT OF P 6 PUPILS IN THE COMPETENCIES OF NUMERACY

In this section, an account of the performance of P 6 pupils in each competency of Numeracy is made. The flags against the competencies were assigned the colours; 'Green', 'Yellow', and 'Red' where: 'Green' represents the competencies in which at least three quarters of the pupils were rated proficient. 'Yellow' represents the competencies in which at least a half, but less than three quarters of the pupils attained the desired proficiency. Lastly, 'Red' represents the competencies in which less than a half of the pupils attained the desired rating.

Tables 6.03 - 6.09 give the percentages of P 6 pupils rated proficient in the competencies, grouped in topics.

TABLE 6.03:	PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN
	THE COMPETENCIES OF 'NUMBER SYSTEM AND PLACE
	VALUE'

COMPETENCIES	BOYS	GIRLS	ALL
Writing a number shown on an abacus.	P7.4 🎙	P7.4 🖗	P7.4 🎙
Writing numbers given in figures (up to 4 digits) in words and vise versa.	₱ 88.6	P 83.7	₱ 86.2
Converting Roman numbers to Hindu - Arabic and vice versa.	P77.8	P 68.8	P73.3
Rounding off decimals to the nearest whole number.	P 27.8	P 26.2	P 27.0

Over a half of the pupils were proficient in most competencies of 'Number system and place value'. For example, nearly all the pupils (97.4%) could write a number shown on an abacus. The only competency where pupils found difficulty was 'rounding off decimals to the nearest whole numbers' in which less than a third of the pupils (27.0%) were competent. Boys and girls performed at about the same level in 'writing a number shown on an abacus'. More boys than girls were proficient in all other competencies but the difference was not significant, in 'rounding off decimals'.

TABLE 6.04:PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN
THE COMPETENCIES OF 'OPERATIONS ON NUMBERS'

COMPETENCIES	BOYS	GIRLS	ALL
Adding 3-digit numbers:			
· Without carrying.	P7.7 🎙	P7.7 🎙	┡ 97.7
· With carrying.	Pe 94.7	P3.4 🖗	P94.0 🖗
Applying addition in real life situations (up to 4 digits).	Prime 84.5	P 82.3	P 83.4
Subtracting 4-digit numbers:			
· Without borrowing.	₱ 89.1	₱ 85.2	P 87.1
· With borrowing.	Prime 85.3	P 83.8	Prime 84.5
Multiplying a two-digit number by a one-digit number.	₱87.2	P 83.3	P 85.2
Applying subtraction in real life situations.	P73.1	66.6 প	P 69.8
Multiplying a 2-digit number by a 2-digit number.	P70.5	P 65.3	P 67.9
Applying multiplication in real life situations, involving a 2-digit number by a one-digit number.	P74.2	P 65.3	P 69.7
Dividing a two digit number by a one digit number.	89.2 🎙	Prime 86.1	┡ 87.7
Carrying out long division.	P 49.3	P 41.7	P 45.5
Applying division in real life situations (a 3-digit number by a 2-digit number).	№ 51.8	P 43.8	P 47.5
Using symbols >, <, to compare numbers.	Pri 62.5 🖗	Presidente 🖗	P 62.2
Using brackets to show the order in which combined operations $(x, +)$ must be performed.	P 62.9	P 55.8	₽ 59.3

The percentage of the pupils rated proficient decreased in moving from 'addition' to 'subtraction', 'multiplication' and then 'division'. While nearly all the pupils (97.7%) reached the desired rating in 'adding numbers without carrying', 87.1% obtained a similar rating in 'subtracting numbers without borrowing'. The proportion of pupils that were able to multiply a 2-digit number by a 2-digit number was 67.9%, compared to 45.5% that could carry out long division.

Within each form of number operations, pupils' performance declined as the complexity of the task increased. For instance, whereas 97.7% of the pupils could perform 'addition without carrying', this figure dropped to 94.0% in 'addition with carrying' and further to 83.4% in 'applying addition in real life situations'. In subtraction, 87.1% of the pupils could subtract numbers without borrowing, but a smaller number (84.5%) were able to do so when there was borrowing.

More boys than girls were proficient in all the competencies of 'Operations on numbers'. However, the differences were significant only when the tasks demanded application of concepts in novel situations.

TABLE 6.05: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN THE COMPETENCES OF 'NUMBER PATTERNS AND SEQUENCE'

COMPETENCIES	BOYS	GIRLS	ALL
Completing number sequence.	P 95.9	P 93.7	┡ 94.8
Finding the LCM of up to 3 numbers each of which is less than 50.	P 57.3	P 54.8	P 56.1
Forming number patterns.	┡ 47.4	┡ 40.3	┡ 43.9
Finding the square roots of numbers up to 50.	┡ 38.7	┡ 34.6	┡ 36.7
Identifying even and odd numbers.	P 25.4	P 22.4	P 23.9
Finding the squares of numbers up to 50.	隆 24.4	┡ 22.6	隆 23.4
Arranging numbers according to size .	┡ 15.9	P 13.2	P 14.5

P 6 pupils were more competent in elementary competencies, which are introduced in lower primary. While almost all of them (94.8%) were able to complete a number sequence, only about a half (56.1%) could find the LCM and merely 14.5% could arrange numbers according size.

The difference in the proportions of boys and girls rated proficient was significant in all the competencies, except 'finding the squires of numbers'. More boys were rated proficient.

TABLE 6.06:	PERCENTAGE OF P 6 PUPILS RATED PROFICIENT II	V			
THE COMPETENCIES OF 'GRAPHS'					

COMPETENCIES	BOYS	GIRLS	ALL
Interpreting pictograms	P 76.6	P 73.8	P 75.2
Drawing bar graphs	P 30.1	P 28.6	P 29.3

The majority of P 6 pupils demonstrated skills in 'interpreting pictograms' with 75.2% of them rated proficient. On the other hand, less than a third (29.3%) did so in 'drawing bar graphs'. Girls were rated proficient

in 'interpreting pictograms', while the two genders performed at about the same proportions in drawing graphs.

TABLE 6.07:PERCENTAGE OF P 6 PUPILS RATED PROFICIENT INTHECOMPETENCIES OF 'FRACTIONS'

COMPETENCIES	BOYS	GIRLS	ALL
Drawing, shading non-unit fractions.	P 75.9	P74.2	P75.1
Writing non-unit fractions.	P72.4	P 73.3	P72.8
Adding fractions with the same denominator.	P74.8 🖗	P75.1	P74.9
Adding fractions with different denominators.	┡ 39.9	┡ 35.8	┡ 37.8
Subtracting fractions with same denominator.	P74.6 🖗	P 74.9	P74.8 🖗
Subtracting fractions with different denominators.	18.0 🎙	┡ 33.1	┡ 35.5
Multiplying a fraction by a fraction.	P 62.8	P 61.4	┡ 62.1
Multiplying a fraction by a natural number.	P 54.3	P 53.5	P 53.9
Applying the concept of fractions in daily life.	P 52.9	P 52.1	P 52.5
Dividing a fraction by a natural number.	┡ 34.0	┡ 32.2	┡ 33.1
Dividing s fraction by a fraction.	┡ 13.4	9.3 🖗	┡ 11.4
Subtracting two decimal fractions of up to tho the to the to the term of t	P 69.3	P 66.7	P 68.0
Adding two decimal fractions of up to thousandths without carrying.	P 65.3	₱ 60.4	P 62.8
Changing fractions to decimals and vise versa.	P 42.4	┡ 44.1	P 43.3

Best performance in fractions was exhibited in the elementary competencies such as shading a non-unit fraction, adding and subtracting fractions with the same denominators; where about three quarters of the pupils were rated proficient.

However, few pupils were able to add or subtract fractions with different denominators: 37.8% and 35.5% respectively. Similarly, just 33.1% of pupils could divide a fraction by a natural number. Worse still, only 11.4% of the pupils could divide a fraction by a fraction.

The girls performed better than the boys in addition and subtraction of fractions with the same denominator and also writing of non-unit fractions. Otherwise more boys were rated proficient in all the other competencies of 'Fractions'. The differences were not significant, except in operations on decimal fractions; and the more complex competencies, such as 'diving a fraction by a fraction'.

TABLE 6.08:PERCENTAGE OF P 6 PUPILS RATED PROFICIENT INTHE COMPETENCIES OF 'MEASURES'

COMPETENCIES	BOYS	GIRLS	ALL
Solving problems involving money (buying and selling).	P 69.7	P 60.7	P 65.1
Solving problems involving time and distance.	58.0 🖗	P 50.2	P 54.1
Carrying out household budgeting.	52.0	P 46.6	P 49.3
Reading a thermometer.	┡ 49.7	┡ 31.9	┡ 40.8
Telling the time shown on a clock face.	┡ 44.3	┡ 30.8	┡ 37.5
Calculating the perimeter of a polygon.	┡ 36.0	┡ 29.9	┡ 32.9
Finding number of small containers that can fill a large one.	P 20.4	P 12.8	P 16.6

Nearly two thirds of the pupils (65.1%) were able to solve problems involving money. Over a half of them (54.1%) could solve problems involving time and distance. However, fewer pupils proved competent in other competencies. For example, only about 3 in 10 pupils could calculate the perimeter of a polygon; and only 16.6% were able to find the number of small containers needed to fill a larger one.

The difference in the proportions of boys and girls rated proficient was significant, with fewer girls than boys attaining the desired proficiency level, especially in 'reading a thermometer' and 'telling the time'.

TABLE 6.09:PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN
THE COMPETENCIES OF 'GEOMETRY'

COMPETENCIES	BOYS	GIRLS	ALL
Constructing circles and regular polygons.	Pri 34.5	┡ 35.5	P 35.0
Constructing an angle of 90 ⁰ .	┡ 29.1	┡ 26.1	P 27.6 🖗
Recognizing lines of symmetry.	P 25.9	P 22.2	P 24.1
Measuring lengths.	P 25.4	P 21.8	P 23.6
Measuring angles.	P 6.3	P 2.8	P 4.5
Drawing parallel lines.	P 4.7	P 3.2	P 3.9

With the exception of 'constructing circles', where about a third of the pupils (35.0%) were rated proficient, less than 3 in 10 pupils were proficient in the rest of the competencies of 'Geometry'; particularly in 'measuring angles' and 'drawing parallel lines'.

Significantly more boys than girls were proficient in all the competencies, except in 'constructing circles and regular polygons', where the girls were better, though not significantly.

6.6 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY BY AGE

This section describes the achievement of P 6 pupils in Numeracy by age. Table 6.10 shows the mean scores of pupils in Numeracy by age and gender.

TABLE 6.10:MEAN SCORES (PERCENTAGE) OF P 6 PUPILS IN
NUMERACY, BY AGE AND GENDER

AGE	BO	ΥS	GI	GIRLS		L
(years)	Mean	S.E	Mean	S.E	Mean	S.E
9-10	56.2	3.0	53.7	2.8	54.3	2.2
11	58.2	1.4	55.2	1.6	56.4	1.4
12	51.0	1.0	46.5	0.8	48.6	0.8
13	46.3	0.8	41.9	0.6	43.9	0.6
14	43.6	0.6	38.7	0.6	41.1	0.5
15	43.4	0.6	37.2	0.6	40.7	0.5
15+ ^Υ	42.0	0.9	36.3	1.0	40.2	0.8

The mean scores of the P 6 pupils first increased with age, from 54.3% at age 9 – 10 years to 56.4% for age 11 years, and then decreased steadily to 40.2% at age 15+ years. At each age, boys had a higher mean score than the girls, and the differences between them increased with age, with significant differences occurring at ages 15 and 15+ years.

Figure 6.02 shows the percentages of P 6 pupils rated proficient in Numeracy, by age and gender.

 $^{^{\}scriptscriptstyle \Upsilon}$ Age above 15 years



The percentage of P 6 pupils rated proficient first increased with age and then declined. It rose from 66.8% at age 9-10 years to 70.5% for the 11 year olds, then decreased to 55.7% at age 12 years, and further to 37.5% at age 15+ years.

Although at each age, more boys than girls were rated proficient, the differences were insignificant the younger pupils: below 12 years.

6.7 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY BY SCHOOL OWNERSHIP

In this section, a description of the achievement of P 6 pupils in Numeracy by school ownership is made. Table 6.11 shows the mean scores of pupils in Numeracy by school ownership and gender.

SCHOOL	BOYS		GIRLS		ALL	
OWNERSHIP	Mean	S.E	Mean	S.E	Mean	S.E
Government	43.3	0.54	39.2	0.55	41.2	0.52
Private	64.2	1.33	60.3	1.24	62.2	1.22

TABLE 6.11:	MEAN SCORES (PERCENTAGE) OF P 6 PUPILS IN
	NUMERACY BY SCHOOL OWNERSHIP AND GENDER

Pupils from government and private schools obtained respective mean scores of 41.2% and 62.2%, implying that pupils from the private schools performed significantly better. There was a significant difference

in the mean scores of boys and girls in either school ownership with boys attaining higher mean scores.

Figure 6.03 shows the percentage of pupils rated proficient in Numeracy by school ownership.



The proportion of pupils in private schools rated proficient was about twice that of the pupils from the government schools. There was a significant gender difference, with more boys than girls rated proficient in schools of either ownership.

6.8 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY BY SCHOOL LOCATION

In this section, a presentation of the achievement of P 6 pupils in Numeracy by school location is made. Table 6.12 shows the mean scores of pupils in Numeracy by school location and gender.

TABLE 6.12:	MEAN SCORES	(PERCENTAGE)	OF	Ρ	6	PUPILS	IN
	NUMERACY BY S	CHOOL LOCATIO	N AN	D	GEI	VDER	

SCHOOL	L BOYS		GI	RLS	ALL		
LOCATION	Mean	S.E	Mean	S.E	Mean	S.E	
Urban	57.8	1.25	53.2	1.46	55.5	1.31	
Rural	42.5	0.46	38.7	0.50	40.6	0.44	

Pupils from urban and rural schools obtained mean scores of 55.5% and 40.6% respectively. The difference in the mean scores was significant, pupils from urban schools scoring 14.9 points above those of the rural schools. Boys from either school location obtained significantly higher mean scores than girls from the same location.

Figure 6.04 shows the proportion of pupils rated proficient in Numeracy by school location.



The proportions of pupils rated proficient from urban and rural schools were 71.0% and 38.1% respectively. The difference was significant. Significantly higher proportions of boys than girls reached the desired rating in either school location.

6.9 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY BY DISTRICT

A description of the performance of P 6 pupils in Numeracy, by district is made in this section. The districts were categorized in the following colours: 'Green', 'Yellow', and 'Red'. Districts in 'Green' are those in which 75% and above of the pupils were rated proficient. Districts in 'Yellow' are those in which at least a half, but less than three quarters of the pupils reached the desired proficiency. Lastly, districts in 'Red' are those in which less than a half of the pupils attained the desired proficiency level. 'Red' districts with an asterisk (*) had less than a quarter of the pupils rated proficient, and those with double asterisks (**) had 10% or less of the pupils rated proficient.

Table 6.13 shows the categorization of the districts according to the percentages of P 6 pupils rated proficient in Numeracy.

TABLE 6.12:CATEGORIZATION OF DISTRICTS ACCORDING TOPERCENTAGES OF P 6 PUPILS RATED PROFICIENT IN NUMERACY

GREEN		YELLOW				RED			
Mbarara	91	Rubirizi	73	Agago	49	Pallisa	35	Sironko*	24
Sheema	88	Wakiso	72	Kamwenge	49	Zombo	35	Kamuli*	24
Kiruhura	87	Kabarole	70	Yumbe	48	Kaberamaido	34	Serere*	24
Bushenyi	84	Kanungu	69	Abim	47	Kumi	34	Oyam*	23
Rukungiri	80	Mitooma	69	Kalangala	47	Mityana	34	Buyende*	23
Kampala	80	Kisoro	67	Kiboga	47	Iganga	33	Kween*	22
Masaka	76	Ibanda	66	Lwengo	47	Bududa	32	Lamwo*	22
		Isingiro	66	Kaabong	46	Buvuma	32	Buliisa*	21
		Моуо	65	Kiryandongo	45	Lira	32	Kapchorwa*	20
		Ntungamo	64	Kitgum	45	Bukomansimbi	31	Namayingo*	19
/ 7:		Jinja	63	Kabale	45	Dokolo	31	Kaliro*	18
)	Amudat	62	Adjumani	44	Hoima	31	Mubende*	18
6%		Mukono	60	Gulu	44	Gomba	29	Nwoya*	18
	/	Kotido	57	Katakwi	44	Mbale	29	Alebtong*	16
		Lyantonde	57	Kasese	43	Namutumba	29	Kole*	15
		Buhweju	56	Nakasongola	43	Ngora	29	Bukedea*	15
		Napak	56	Pader	42	Amuria	28	Amolatar*	11
		Arua	55	Арас	41	Kyankwanzi	27	Luuka*	11
		Kyegegwa	55	Nakaseke	41	Kyenjojo	27	Bukwo**	7
		Buikwe	54	Otuke	41	Ssembabule	27		
		Moroto	53	Soroti	41	Bulambuli	26	19:	
		Masindi	52	Mpigi	40	Butambala	26)
		Nakapiripirit	52	Luweero	39	Kalungu	26	17%	
		Ntoroko	52	Maracha	39	Bundibugyo	26		
		Koboko	51	Kibuku	38	Nebbi	26		
		Busia	50	Amuru	37	Bugiri	25		
				Rakai	37	Kibaale	25		
		26.		Budaka	36				
		20.)	Butaleja	36	60.			
		23%	/	Manafwa	36				
				Tororo	36	54%			
				Kayunga	35				
				Mayuge	35				

Seven out of the 112 districts were rated 'Green'. These were Mbarara, Kiruhura, Bushenyi, Kampala, Rukungiri, Sheema, Masaka. Only 25

were in 'Yellow', Sixty were in 'Red' and twenty were in 'Red' with an asterisk. One district Bukwo: was in 'Red' with double asterisks.

6.10 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY IN 2007 – 2011

In this section, a presentation of the achievements of P 6 pupils in Numeracy in the years 2007 - 2011 is made. Figure 6.04 shows the percentages of P 6 pupils rated proficient in Numeracy in 2007 - 2011 by gender.



The proportions of pupils increased over the years from 41.4% in 2007 to 53.5% in 2008, then remained approximately constant up to 2010, when it declined to 45.6% in 2011. Boys performed better than the girls in all the years, though the differences in 2010 and in 2011, were less than in 2008 and 2009.

6.11 CONCLUSION

Across the various topics, P 6 pupils demonstrated more competence in 'number system and place value' and 'operation on numbers'; particularly in addition; where they were not only able to add numbers with carrying, but could also correctly apply addition in novel situations. However, they had particular difficulty in multiplying a 2-digit number by a 2-digit number and in carrying out long division.

The pupils could add and subtract fractions with the same denominators, but they showed lack of ability in dealing with fractions with different denominators. The majority of the pupils were also competent in writing a number on an abacus and converting a Roman number to Hindu Arabic, but they found difficulty in rounding off decimals to the nearest whole numbers.

P 6 pupils also found difficulty in telling the time on a clock face as well as applying capacity in real life situations. They also demonstrated lack of competence in the concepts of capacity.

Furthermore, pupils had difficulty in the use of geometrical instruments as they could not even measure the size of an angle accurately.

Chapter 7

ACHIEVEMENT OF P 6 PUPILS IN LITERACY IN ENGLISH

7.1 INTRODUCTION

The achievement of P 6 pupils in Literacy in English⁸ is presented in this chapter. It is presented in terms of mean scores and percentages of pupils rated proficient, overall first and by competency. After this, pupil achievement by gender and age, school ownership, location and district is described. The next section gives description of the competencies assessed in the P 6 Literacy in English test by proficiency levels.

7.2 DESCRIPTION OF THE COMPETENCIES BY PROFICIENCY LEVELS

This section gives a description of the competencies expected of a pupil at each proficiency level.

NOTE: A pupil at a given proficiency level is assumed to have mastered all the competencies below his/her level, plus the competencies specified at his/her level.

ADVANCED LEVEL						
Reading Comprehension	Writing	Elements of Grammar				
 A pupil is able to: Read a text and answer questions requiring making predictions, inferences and deriving lessons from the text. Read a picture sequence and write a logical story about it. Read a sign post and interpret its message. 	 A pupil is able to: Write an invitation card with the correct format. Write a well sequenced composition relevant to the topic. 	 A pupil is able to: Use the future tense. Use given structures correctly. 				

⁸ Also referred to as Literacy

ADEQUATE LEVEL							
Reading Comprehension	Writing	Elements of Grammar					
 Reading Comprehension A pupil is able to: Name objects and correctly spell them. Describe the activities in a picture using full sentences. Read a text and derive the meaning of words as used in the text. Read a picture sequence and write sentences about it, but the sentences may not make a logical story. 	Writing A pupil is able to: • Fill an Application Form correctly and neatly. • Write a simple guided composition. • Write an invitation card, but with errors in the format. • Write a composition	 Elements of Grammar A pupil is able to: Give the opposite of most words. Use a given vocabulary in a full sentence. Use the present continuous tense correctly. Use most structures correctly. Use comparatives which are formed by modification of the 					
	topic but lacking in sequence.	stem.					

	BASIC LEVEL		
Reading Comprehension	Writing	Elements of Grammar	
 Reading Comprehension A pupil is able to: Describe the activities in a picture using short phrases. Associate words to actions. Read simple texts and answer questions requiring direct responses from the texts. Read and describe the pictures in a sequence. 	 Writing A pupil is able to: Draw and label objects. Write most words, beginning or ending with given sounds. Fill in most words in a guided composition. Write an invitation card, but with many errors and omissions. Write a short composition, making many errors. 	 Elements of Grammar A pupil is able to: Give the opposites of simple common words. Give the plurals of common words. Use prepositions correctly. Use a given vocabulary, but make grammatical errors. Use the simple past tense. Use a few simple structures correctly. Use comparatives which are formed by 	

]	NADEQUATE LEVEL			
Reading Comprehension	Writing	Elements of Grammar		
A pupil is able to:	A pupil is able to:	A pupil is able to:		
 Name some objects correctly. 	 Draw and label common objects. 	 Give the plurals of words that need 		
 Describe the activities in a picture using single words. 	 write simple words from 	 Use a few 		
 Associate words to objects. Read a picture sequence and write about the pictures using single words or phrases 	jumbled letters and some words ending with given syllables. Fill in a few words	prepositions.Use the present tense.		
 Fill in basic information, e.g. name, on an Application Form. 	in a guided composition.			

7.3 OVERALL LEVEL OF ACHIEVEMENT OF P 6 PUPILS IN LITERACY IN ENGLISH

The overall mean score was 33.0% (S.E: 0.74), with boys and girls obtaining means of 33.2% (S.E: 0.80) and 32.8% (S.E: 0.74) respectively; implying that boys and girls performed at about the same level. The percentage of pupils who obtained the different levels of proficiency in Literacy in English is shown in Table 7.01.

TABLE 7.01:	PERCENTAGE OF P 6 PUPILS REACHING THE VARIOUS
	LEVELS OF PROFICIENCY IN LITERACY IN ENGLISH, BY
	GENDER

PROFICIENCY LEVELS	BOYS	GIRLS	ALL
Advanced	3.5	4.1	3.8
Adequate	38.6	36.5	37.5
Basic	26.5	25.9	26.2
Inadequate	31.4	33.5	32.5

The proportion of P 6 pupils rated 'Advanced' was 3.8%. This category of pupils demonstrated complete mastery of the Literacy skills specified at P 6 level. Just over a third of the pupils (37.5%) were 'Adequate'. This is the category which reached the desired minimum level of proficiency. Slightly more than a quarter of the pupils (26.2%) were in the 'Basic' category. These are pupils who could perform elementary

Literacy skills but had not yet reached the adequate level. Finally, 32.5% of the pupils were 'Inadequate'. They could only carry out minor elementary Literacy tasks like associating, drawing and labelling common objects.

Figure 7.01 shows the percentage of P 6 pupils who were rated proficient in Literacy in English by gender.



Overall, 41.3% of the P 6 pupils were rated proficient in Literacy in English. The proportions of boys and girls rated proficient were 42.1% and 40.6% respectively, implying that they performed at about the same level.

7.4 ACHIEVEMENT OF P 6 PUPILS IN LITERACY IN ENGLISH BY SKILL AREA

7.4.1 Achievement of P 6 pupils in Reading Comprehension

This section describes the performance of P 6 pupils in the sub-skill areas and competencies of Reading Comprehension. Table 7.02 shows the percentage of P 6 pupils rated proficient in the sub-skill areas of Reading Comprehension.

TABLE 7.02:PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN
THE SUB-SKILL AREAS OF READING COMPREHENSION
BY GENDER

SUB-SKILL AREAS	BOYS	GIRLS	ALL
Associating words to objects and actions.	P5.6 🎙	₱96.1	P5.9 🎙
Reading and interpreting a sign post.	P 64.0	P 58.3	61.2
Reading a poem.	P 56.8	P 56.0	P 56.4
Reading and describing the activities in a picture.	P 44.8	P 42.9	P 43.9
Reading a picture sequence.	Pri 40.9 🖗	Pri 40.2 🖗	Pri 40.5
Reading and comprehending a story.	P 38.9	Pri 37.3 🖗	P 38.1
Reading tabular information (e.g. a calendar).	┡ 33.0	P 28.8	P 30.9

P 6 pupils exhibited more competence in the sub-skill areas which are taught in lower primary. For instance, nearly all the pupils (95.9%) were able to associate words to objects and actions.

Up to 61.2% of the pupils were able to read and interpret a sign post. However, the proportions that could read and comprehend a story or read a picture sequence and write a logical story about it were small: 38.1% and 40.5% respectively. Significant gender disparity in performance was noted in 'reading a sign post', with more boys reaching the desired proficiency level.

Table 7.03 shows the percentage of P 6 pupils rated proficient in selected competencies of Reading Comprehension.

TABLE 7.03:PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN
SELECTEDSELECTEDCOMPETENCIESCOMPREHENSION

COMPETENCIES	BOYS	GIRLS	ALL
Sign Post Reading			
Read a sign post and answer questions requiring direct responses.	P71.9	P 68.9	P70.4
Read a sign post and interpret its message.	Pri 49.5	Pri 44.1	P 46.8
Poem Reading			
Read a poem and suggest a suitable title for it.	P71.1	P71.6 🖗	71.3
Read a poem and interpret message.	P 26.4	P 26.4	P 26.4
Story Reading			
Read a story and making inferences, based on it.	P 30.4	P 35.8	P 33.1
Read a story and derive lessons from the story.	P 14.4	P 16.4	P 15.4

The performance of the pupils on a particular competency varied with the complexity of the task. For instance, 71.3% of the pupils could read a poem and suggest a title for it, while a lower proportion of 50.7% could read the poem and interpret its message. In story reading, 33.1% of the pupils were able to read a story and answer questions requiring making inferences. However, merely 15.4% could derive lessons from the story.

Significant gender differences were exhibited in 'reading a sign post and interpreting its message', in which the boys were better, and in reading a story and making inferences based on it', where the girls were better.

7.4.2 Achievement of P 6 Pupils in Writing

This section describes the performance of P 6 pupils in the sub-skill areas and competencies of Writing. Table 7.04 shows the percentages of P 6 pupils rated proficient in the sub-skill areas of Writing

SUB-SKILL AREAS OF WRITING	BOYS	GIRLS	ALL
Drawing and labelling objects.	P7.6 🎙	P 68.2	P72.9 🎙
Writing a guided composition.	P 54.9	P 55.8	P 55.3
Writing words.	P 55.4	P 53.4	P 54.4
Completing an Application Form.	P 51.0	PP 49.2	P 50.1
Writing a letter.	P 29.4	┡ 31.0	┡ 30.2
Writing a composition.	P 27.8	┡ 30.6	P 29.2
Naming objects.	P 21.9	P 22.6	P 22.3

TABLE 7.04:PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN
THE SUB-SKILL AREAS OF WRITING

While the majority of the P 6 pupils (72.9%) could adeptly draw and label objects, only about a half of them (50.1%) could `complete an application form.

In composition writing, more pupils (55.3%) could write a guided composition, as opposed to only 29.2% that were able to write a narrative composition with the correct attributes. Significant gender difference was only registered in 'drawing and labelling objects', where more boys achieved the desired proficiency.

TABLE 7.05:	PERCENTAGE	OF	Ρ	6	PUPILS	WHO	WERE	RATED
PROFICIENT IN	SELECTED AT	TRIB	UTE	5	OF COMP	OSITIO	N WRIT	ING

ATTRIBUTE	BOYS	GIRLS	ALL
Legibility	P 53.3	PF 56.2	P 54.7
Punctuation and spelling	┡ 34.4	P 37.9	┡ 36.1
Format	┡ 31.6	P 33.2	P 32.4
Content	┡ 23.7	P 26.4	P 25.1
Suitable title	P 11.3	<u></u> 12.4	P 11.9

While more than half of the P 6 pupils (54.7%) could write legibly, only 32.4% were able to use the correct format in writing a composition; and only 25.1% had relevant content. In addition, just a paltry 11.9% were able to choose a suitable title for their compositions. More girls than boys were rated proficient in each competency of composition writing. The differences were significant in 'legibility', 'content', 'punctuation' and 'spellings'.

7.4.3 Achievement of P 6 pupils in Grammar

This section shows the performance of P 6 pupils in the competencies of Grammar. The percentages of P 6 pupils rated proficient in the competencies of Grammar are shown in Table 7.06.

COMPETENCES	BOYS	GIRLS	ALL
Giving plurals.	P 56.9	P 55.8	P 56.4
Using comparatives.	┡ 41.9	P 42.7	P 42.3
Using prepositions.	┡ 48.9	P 50.1	P 49.5
Identifying opposites.	┡ 41.6	P 43.8	P 42.7
Using tenses.	P 25.1	P 26.2	P 25.6
Using given structures.	<u></u> 48.4	<u></u> 50.9	<u></u> 49.6
Using given vocabulary.	P 37.2	P 35.9	<u></u> 36.6

 TABLE 7.06:
 PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN THE

 COMPETENCIES OF GRAMMAR

While 56.4% of the P 6 pupils were rated proficient in 'giving plural form of words' and about a half (49.6%) could use given structures and prepositions correctly, only 36.6% of them were able to use given vocabulary correctly. Besides, only a quarter (25.6%) could 'use tenses' correctly. However, the performance of boys and girls in each competency did not differ much, even if girls were better in most competencies.

7.5 ACHIEVEMENT OF P 6 PUPILS IN LITERACY IN ENGLISH BY AGE

This section describes the achievement of P 6 pupils in Literacy by age. The mean scores of P 6 pupils in Literacy by age and gender are shown in Table 7.07.

AGE	E	BOYS GIRLS				ALL
(years)	Mean	S.E	Mean	S.E	Mean	S.E
9-10	50.8	4.31	54.9	5.17	53.9	4.05
11	55.5	2.31	55.4	2.27	55.4	2.16
12	42.9	1.31	40.0	1.03	41.4	1.02
13	35.2	1.19	32.2	0.74	33.6	0.79
14	28.9	0.62	27.6	0.62	28.2	0.52
15	27.2	0.57	24.6	0.57	26.1	0.46
15+ ^ω	25.2	0.79	22.3	0.85	24.3	0.66

TABLE 7.07:MEANSCORES(PERCENTAGE)OFP6PUPILSINLITERACY BY AGE AND GENDER.

The mean score first increased with age from 53.9% for the 9 - 10 year olds to 55.4% at age 11 years. The mean score then declined with a rise in age, dropping to 41.4% for the 12 year olds and finally to 24.3% for the 15+ year olds. No significant gender differences in performance were observed, although at age 9 - 10 years, girls had a higher mean score, and boys' mean scores were higher for the rest of the age groups. Figure 7.02 shows the percentage of P 6 pupils rated proficient in Literacy in English by age.



 $^{^{\}omega}$ Age above 15 years.

Between ages 9 – 10 years and 11 years, the percentage of the pupils rated proficient in Literacy in English increased from 68.5% to 78.2%. Thereafter, there was a decline in the proportion of pupils rated proficient with increasing age: dropping to 57.5% at age 12 years, to 33.2% for the 14 year olds and then to only 23.0% at age 15+ years. On the whole, significant gender difference in performance occurred only at ages 12 years and above, with more boys rated proficient.

7.6 ACHIEVEMENT OF P 6 PUPILS IN LITERACY IN ENGLISH BY SCHOOL OWNERSHIP

The achievement of P 6 pupils in Literacy by school ownership is described in this section. The mean scores of P 6 pupils rated proficient in Literacy by school ownership and gender are shown in Table 7.08.

TABLE 7.08:	MEAN SCORES (PERCENTAGE) OF P 6 PUPILS IN
	LITERACY BY SCHOOL OWNERSHIP AND GENDER

SCHOOL	BOYS		GIRLS		ALL	
OWNERSHIP	Mean	S.E	Mean	S.E	Mean	S.E
Government	29.7	0.87	28.9	0.78	29.3	0.79
Private	57.7	1.72	57.6	1.74	57.6	1.69

The mean score of P 6 pupils in government schools was 29.3%, which was significantly lower than the 57.6% obtained by the pupils in private schools. In government schools, boys obtained a marginally higher mean score than girls, whereas in private schools both genders performed at nearly the same level.

The percentage of P 6 pupils rated proficient in Literacy in English by school ownership and gender is shown in Figure 7.03.



Although the majority of pupils (84.5%) in private schools had the desired rating in Literacy in English, in government schools, only about a third (34.7%) had a similar rating. Additionally, the proportions of boys and girls rated proficient were almost the same in private schools, but more boys than girls in government schools reached the desired proficiency level, though the difference was not significant.

7.7 ACHIEVEMENT OF P 6 PUPILS IN LITERACY IN ENGLISH BY SCHOOL LOCATION

The mean scores of P 6 pupils rated proficient in Literacy by school location and gender is shown in Table 7.09.

SCHOOL	BOYS		GIRLS		ALL	
LOCATION	Mean	S.E	Mean	S.E	Mean	S.E
URBAN	51.4	1.96	51.2	2.10	51.3	1.96
RURAL	27.9	0.48	27.3	0.55	27.6	0.48

TABLE 7.09:MEAN SCORES (PERCENTAGE)OF P 6 PUPILS IN
LITERACY BY SCHOOL LOCATION AND GENDER.

The mean score of P 6 pupils in urban schools was 51.3%, compared to a lower mean of 27.6% for those in rural schools. No significant gender difference in performance was noted in either school location.

The percentage of P 6 pupils rated proficient in Literacy by school location and gender is shown in Figure 7.04.



Although about three quarters of the pupils (75.2%) in the schools in urban areas were rated proficient in Literacy, the proportion of their counterparts in rural schools with the same rating was significantly lower – 31.3%. Slightly more boys than girls were rated proficient in each location, but the differences were not significant.

7.8 ACHIEVEMENT OF P6 PUPILS IN LITERACY IN ENGLISH BY DISTRICT

A description of the performance of P 6 pupils in Literacy, by district is made in this section. The districts were grouped, using the following colours: 'Green', 'Yellow', and 'Red'. Districts grouped in 'Green' are those in which 75% and above of the pupils were rated proficient. Districts in 'Yellow' are those in which at least a half, but less than three quarters of the pupils reached the desired proficiency. Lastly, districts in 'Red' are those in which less than a half of the pupils attained the desired proficiency level. Districts in 'Red' with an asterisk (*) had less than a quarter of the pupils rated proficient, and those with double asterisks (**) had 10% or less of the pupils rated proficient.

The categorization of districts according to the proportion of P 6 pupils rated proficient in Literacy in English is shown in Table 7.10.

		IERACI		
G	Kampala 89	Mbarara 88	Amudat 83	Masaka 82
R	Wakiso 81	Moroto 80	Sheema 75	Kiruhura 75
Е				8
Е				7%
Ν				
Y	Bushenyi 71	Nakapiripirit 69	Kotido 67	Rukungiri 63
Е	Arua 58	Mukono 58	Rubirizi 58	Napak 58
L	Buikwe 57	Kabarole 55	Ibanda 55	Jinja 55
L	Isingiro 54	Moyo 53	Masindi 53	Koboko 52 ²¹
0	Kanungu 52	Kitgum 52	Kaabong 52	Kalangala 51 ^{19%}
W	Gulu 50			
	Lyantonde 49	Soroti 48	Luweero 48	Kyegegwa 48
	Kiryandongo 47	Abim 46	Ntoroko 44	Buhweju 42
	Zombo 42	Tororo 42	Nakasongola 42	Katakwi 41
	Buliisa 41	Lwengo 41	Mitooma 41	Ntungamo 40
	Mpigi 40	Pader 39	Rakai 39	Adjumani 39
	Mbale 37	Kaberamaido 37	Kiboga 37	Agago 36
	Bulambuli 36	Busia 35	Mayuge 34	Bududa 34
	Kisoro 33	Manafwa 32	Ngora 32	Nakaseke 32
	Iganga 32	Lira 31	Kasese 30	Buvuma 30
R	Butaleja 30	Gomba 30	Bukomansimbi 30	Kumi 30
Е	Maracha 29	Kabale 29	Dokolo 29	Kamwenge 29
D	Amuria 28	Budaka 28	Butambala 28	Mityana 27
	Kyankwanzi 27	Yumbe 27	Kalungu 26	Hoima 26
	Apac 26	Serere 25	Kayunga 25	Kapchorwa* 24
	Namutumba* 23	Nebbi* 23	Sembabule* 22	Kween* 21
	Pallisa* 21	Amuru* 21	Bundibugyo* 20	Bugiri* 19
	Namayingo* 19	Kibuku* 17	Kyenjojo* 16	Bukedea* 15
	Kibaale* 15	Sironko* 15	Otuke* 15	Oyam* 15
	Kamuli* 15	Mubende* 14	Kaliro* 14	Lamwo* 14 / 83
	Buyende* 13	Amolatar* 12	Kole* 12	Nwoya* 11 74%
	Alebtong* 10	Bukwo** 9	Luuka** 6	

Wakiso, Moroto, Sheema and Kiruhura were in "Green"; while only 19% were in "Yellow". Districts in "Red" comprised nearly three-quarters (74%) of the districts in the country. Of these, 27 districts had an asterisk, meaning less than a quarter of the pupils were rated proficient in Literacy. Two districts: Luuka and Bukwo were in 'Red' with double asterisks, indicating that less than 10 percent of the P 6 pupils were proficient in Literacy.

Only eight of the 112 districts; Kampala, Mbarara, Amudat, Masaka,

7.9 ACHIEVEMENT OF P 6 PUPILS IN LITERACY IN ENGLISH IN THE YEARS 2007 – 2011

P 6 pupils' performance in Literacy in the years 2007 - 2011 is presented in this section. Figure 7.05 shows the percentage of P 6 pupils reaching the defined level of proficiency in 2007 - 2011.



Between 2007 and 2010, the proportions of the pupils rated proficient remained almost constant. However, it dropped from 50.2% in 2010 to 41.3% in 2011. Throughout the period, boys and girls performed at about the same level.

7.10 CONCLUSION

In Reading comprehension, pupils performed well in pre-reading tasks, such as 'associating words to objects or actions'. Few pupils were able to read and comprehend a story and a picture sequence. In addition, pupils performed better in answering questions which required direct responses from a text, rather than those which demanded transfer and use of information in a different situation.

In writing, more pupils could write a guided composition, compared to a composition. About half of them could also neatly complete an Application Form, but only about one in five could name objects with the correct spelling.

In Grammar, pupils were more competent in 'giving plural of words', 'using given structures' and 'using prepositions'. They performed at low levels in the other competencies of Grammar, particularly 'using tenses' and 'using given vocabulary' to make correct sentences.

Chapter 8

ACHIEVEMENT OF PRIMARY SCHOOL TEACHERS IN NUMERACY AND LITERACY

8.1 INTRODUCTION

This chapter presents a description of the distribution of the P 3 and P 6 teachers the achievement of the teachers in Numeracy, Literacy⁹ and Oral Reading. However, the association of the teacher factors and pupil achievement was not done, because teacher assessment was not administered in all the primary schools in the national sample.

8.2 DISTRIBUTION OF TEACHERS

This section describes the distribution of the teachers by gender, age, marital status, the highest academic and teaching qualifications and teaching experience.

8.2.1 DISTRIBUTION OF TEACHERS BY GENDER

In all, 1,808 teachers were assessed. Of these, 1,261 (69.7%) were males and 547 females (30.3%). The sample consisted of 88.7% and 11.3% of teachers in government and private schools respectively. The respective proportions of teachers from urban and rural schools were 14.1% and 85.9%.

Overall, there were 863 P 3 teachers and 941 P 6 teachers¹⁰. The majority of the male teachers (62.4%) taught P 6 and only 37.6% taught P 3. On the contrary, 71.9% and 28.1% of the female teachers taught P 3 and P 6 respectively.

As far as subjects are concerned, 57.8% of the male teachers taught Numeracy as opposed to 42.2% who were teachers of Literacy. However, the corresponding proportions of the females were 43.1% and 56.9%. The distribution of the teachers by class, subject and gender is shown in Figure 8.01.

⁹ The term 'Literacy' will be used to refer to 'Literacy in English'.

¹⁰ Discrepancy in the total number due to 4 teachers who did not specify the class they taught.


The greatest proportion of the male teachers (34.9%) taught P 6 Numeracy. This was followed by 27.5% who taught P 6 Literacy. Less than a quarter of them (22.9%) taught Numeracy in P 3 and the remaining 14.7% taught P 3 Literacy. The female teachers, on the other hand, mainly taught P 3: 34.9% and 37.0% of them taught Numeracy and Literacy respectively in

P 3, and less than ten percent (8.2%) taught Numeracy in P 6.

8.2.2 DISTRIBUTION OF TEACHERS BY AGE

The teachers had a mean age of 34.8 years: 35.4 years for males and 33.4 years for females. The mean age of the P 3 teachers of 35.0 years was about the same as the P 6 teachers' of 34.7 years. Teachers in government schools had a mean age of 35.7 years, in comparison to a significantly lower mean age of the teachers in private schools of 28.0 years.

Table 8.01 shows the distribution of teachers by age group and gender.

AGE	M	ALE	FEI	MALE	TOTAL		
(years)	Ν	Percent	Ν	Percent	Ν	Percent	
20 – 29	395	31.4	187	34.3	582	32.3	
30 – 39	468	37.2	248	45.5	716	39.7	
40 – 49	285	22.6	92	16.9	377	20.9	
50 - 60	111	8.8	18	3.3	129	7.1	
Total	1,259	69.8	545	30.2	1,804	100	

TABLE 8.01:DISTRIBUTION OF TEACHERS BY AGE GROUP AND
GENDER

The majority of the teachers were less than 40 years old. The greatest proportion (39.7%) were aged 30 - 39 years, and 32.3% were in the age bracket 20 - 29 years.

8.2.3 DISTRIBUTION OF TEACHERS BY MARITAL STATUS

The distribution of teachers according to marital status and gender is shown in Table 8.02.

TABLE 8.02:	DISTRIBUTION	OF	TEACHERS	BY	MARITAL	STATUS
	AND GENDER					

MARITAL	М	ALE	FE	MALE	TOTAL		
STATUS	S N Percent N	Ν	Percent	Ν	Percent		
Single	205	17.2	108	21.2	313	18.4	
Married	977	82.0	374	73.5	1,351	79.5	
Separated	6	0.5	7	1.4	13	0.8	
widowed	3	0.3	20	3.9	23	1.4	
Total	1,191	70.1	509	29.9	1,700	100.0	

The majority of the teachers (79.5%) were married, as opposed to only 18.4% who were single. Small proportions were separated or widowed: 0.8% and 1.4% respectively. There were more married males than females; 82.0% and 73.5% respectively. Conversely, more females than males were single or widowed.

8.2.4 DISTRIBUTION OF TEACHERS BY THE HIGHEST ACADEMIC QUALIFICATION

The distribution of teachers by the highest academic qualification is given in Table 8.03.

HIGHEST	Р 3		I	P 6	TOTAL		
ACADEMIC QUALIFICATION	N	Percent	Ν	Percent	N	Percent	
UCE	690	48.1	744	51.9	1,434	87.0	
UACE	91	42.3	124	57.7	215	13.0	
TOTAL	781	47.4	868	52.6	1,649	100.0	

TABLE 8.03:DISTRIBUTION OF TEACHERS BY THE HIGHESTACADEMIC QUALIFICATION AND CLASS

The majority of the teachers (87.0%) had UCE as the highest academic qualification. And oly 13.0% had UACE. Nearly equal proportions of the teachers who had UCE as the highest academic qualification were deployed in P 3 and P 6: 48.1% and 51.9% respectively. However slightly more of the UACE holders were deployed in P6: 52.6%, as opposed to 47.4% who taught P 3.

8.2.5 DISTRIBUTION OF TEACHERS BY THE HIGHEST TEACHING QUALIFICATION

The distribution of the teachers by the highest teaching qualification and class is shown in Table 8.04.

HIGHEST TEACHING QUALIFICATION		Р3		P 6	TOTAL		
	Ν	PERCENTAGE	Ν	PERCENTAGE	N	PERCENTAGE	
Grade III	590	50.2	586	49.8	1,176	71.3	
Grade V (Primary)	168	42.3	229	57.7	397	24.1	
Grade V (Secondary)	8	42.1	11	57.9	19	1.1	
Bachelors in Education	7	25.0	21	75.0	28	1.7	
Others	13	44.8	16	55.2	29	1.8	
TOTAL	786	47.7	863	52.3	1,649	100.0	

TABLE 8.04:DISTRIBUTIONOFTEACHERSBYTHEHIGHESTTEACHING QUALIFICATION AND CLASS

Nearly three-quarters of the primary school teachers (71.3%) were holders of Grade III Teaching Certificate. The next biggest category comprised Grade V (Primary) holders, who constituted 24.1%. The proportions of those with Grade V (Secondary) and Bachelor in Education were very small: 1.1% and 1.7% respectively. The category 'others' included teachers with a Diploma in Teacher Education, student teachers, holders of UCE and UACE, as well as one licensed teacher. There was also one teacher who had a Certificate in Community Development among this group. On the whole, although the percentages of Grade III teachers who taught P 3 and P 6 pupils were almost the same, more holders of Grade V (both Primary and Secondary) and Bachelor in Education Certificates taught P 6, and the percentage increased with a rise in the highest teaching qualification.

8.2.6 DISTRIBUTION OF TEACHERS BY TEACHING EXPERIENCE

Table 8.05 shows the distribution of teachers by teaching experience.

TEACHING		P 3		P 6	TOTAL		
EXPERIEN	Ν	PERCENTA	Ν	PERCENTA	Ν	PERCENTA	
CE		GE		GE		GE	
1 - 5	21	44.8	26	55.2	475	29.4	
	3		2				
6 - 10	22	46.2	26	53.8	494	30.5	
	8		6				
11 – 15	16	50.1	16	49.9	335	20.7	
	8		7				
16 – 20	78	47.7	86	52.3	164	10.1	
Over 20	76	50.7	74	49.3	150	9.3	
Total	76	47.2	85	52.8	1,61	100.0	
	3		5		8		

TABLE 8.05: DISTRIBUTION OF TEACHERS BY TEACHING EXPERIENCE AND CLASS

Most of the teachers had teaching experience of 15 years and below. There was no significant difference in the way teachers of different teaching experiences were deployed in P 3 and P 6 classes. However, slightly more of the young teachers in the profession; with teaching experience of 10 years or less, were deployed in P 6.

8.3 ACHIEVEMENT OF P 3 AND P 6 TEACHERS IN NUMERACY, LITERACY AND ORAL READING

The achievement of P 3 and P 6 teachers in Numeracy, Literacy and Oral Reading is described in this section. First, the overall level of achievement is described in terms of mean scores and the percentage of teachers rated proficient in each subject. Then, the achievement of teachers in the skill areas/topics and competencies of each subject is presented. Finally, the teachers' achievement by various factors is described.

8.3.1 OVERALL ACHIEVEMENT LEVEL OF TEACHERS IN NUMERACY, LITERACY AND ORAL READING

The overall level of achievement of teachers in the various subjects is described in this section.

Table 8.06 shows the mean scores of the teachers in Numeracy, Literacy and Oral Reading by gender.

CENDED	NUMERACY		LITE	RACY	ORAL READING		
GENDER	Mean	S.E	Mean	S.E	Mean	S.E	
MALE	80.5	0.60	77.6	0.66	73.8	0.73	
FEMALE	73.9	0.99	79.3	0.91	76.6	1.07	
TOTAL	78.4	0.53	78.0	0.54	74.5	0.61	

TABLE 8.06:MEANSCORES(PERCENTAGE)OFTEACHERSINNUMERACY, LITERACY AND ORAL READING BY GENDER

The overall mean score in Numeracy was 78.4% standard error (S.E) of 0.53. In Literacy, the overall mean was 78.0% (S.E: 0.54), which was nearly equal to that of Numeracy. The teachers' mean score in Oral Reading of 74.5% (SE. 0.61) was, however, slightly lower. The teachers' mean scores were therefore high in all the subjects, implying that the teachers had mastery of the subjects, as specified in the curriculum for P 6 class. Male teachers obtained a mean in Numeracy (80.5%) that was significantly higher than the females' (73.9%). Nonetheless, the females had slightly higher means in Literacy and Oral Reading, though the differences were not significant.



Figure 8.02 shows the percentage of teachers rated proficient in various subjects by gender.

While nearly three quarters of the teachers (72.6%) were rated proficient in Literacy, about two thirds (66.1%) obtained a similar rating in numeracy, and fewer (37.5%) did so in Oral Reading.

Significantly more males (73.1%) than females (50.5%) were rated proficient in Numeracy. While the proportions of males and females rated proficient in Literacy were nearly the same, slightly more females than males were proficient in Oral Reading: 41.5% versus 35.9%. However, the difference was not significant.

8.3.2 ACHIEVEMENT OF TEACHERS IN THE TOPICS AND COMPETENCIES OF NUMERACY

In this section, the achievement of teachers in various topics of Numeracy is described first. Following this, the achievement of teachers in selected competencies of Numeracy, grouped in topics, is presented. Table 8.07 shows the percentage of teachers rated proficient in various topics of Numeracy.

TOPICS	P 3	P 6	ALL
Operations on numbers.	89.8	90.6	90.2
Number system and place value.	82.6	86.6	84.5
Measures.	69.8	80.7	75.3
Fractions.	61.2	74.4	68.0
Graphs and interpretation.	48.8	54.2	51.4
Geometry.	38.1	55.7	47.2
Number patterns and sequences.	25.1	33.3	29.4

TABLE 8.07:PERCENTAGE OF TEACHERS RATED PROFICIENT IN
VARIOUS TOPICS OF NUMERACY

Most of the teachers (90.2%) demonstrated skills in 'Operations on numbers'. The majority also proved competent in 'Number system and place value' and 'Measures', with 84.5% and 75.3% respectively rated proficient. Just over two thirds (68.0%) were proficient in 'Fractions' and about a half (51.4%) had a similar rating in 'Graphs and interpretation'. However, less than a third of the teachers (29.4%) reached the desired level of proficiency in 'Number patterns and sequences' and less than a half did so in 'Geometry'. P 6 teachers performed better than those of P 3 in all the topics. The differences were significant in 'Measures' 'Fractions', 'Geometry' and 'Number patterns and sequences'.

Tables 8.08–8.13 show the percentages of teachers rated proficient in selected competencies of each Numeracy topic.

TABLE 8.08: PERCENTAGE OF TEACHERS RATED PROFICIENT IN SELECTED COMPETENCIES OF 'OPERATIONS ON NUMBERS'

COMPETENCIES	P 3	P 6	ALL
Addition of 4 digit numbers:			
Without carrying	98.5	98.9	98.7
With carrying	93.0	92.8	92.9
Application of addition in real life situations, up to 4 digits.	90.6	91.9	91.3
Subtraction of 4 digit numbers:			
Without borrowing	97.7	97.4	97.5
With borrowing	93.3	96.0	94.7
Application of subtraction in real life situations, up to 4 digits.	88.7	90.6	89.7
Multiplication of a two digit number by a one digit number.	95.3	96.1	95.7
Application of multiplication in real life situations, involving a 2 digit number by a one digit number.	92.7	92.7	92.7
Multiplication of a 2 digit number by a 2 digit number.	90.3	92.4	91.4
Division of a two digit number by a one digit number.	97.2	98.3	97.9
Carrying out long division.	89.5	92.7	91.2
Application of division in real life situations (a 3 digit number by a 2 digit number).	87.8	91.5	89.7

A big number of the teachers were proficient in all the competencies of 'Operations on numbers'. The proportion of teachers rated proficient in each competency ranged from 89.7% for application of subtraction and division in real life situations to 98.7% for 'addition of numbers without carrying'. There was a gradual decline in performance, though, in moving from 'addition' to 'subtraction', 'multiplication' and then 'division'. In most of the competencies, the proportions of the P 6 teachers rated proficient exceeded the P 3 teachers'; with wider gaps in 'division'. However the differences were not significant.

TABLE 8.09: PERCENTAGE OF TEACHERS RATED PROFICIENT IN THE COMPETENCIES OF 'NUMBER SYSTEM AND PLACE VALUE'

COMPETENCIES	P 3	P 6	ALL
Writing a number shown on an abacus.	98.8	98.7	98.7
Writing numbers given in figures (up to 4 digits) in words and vice versa.	85.3	83.6	84.3
Converting Roman numbers to Hindu Arabic.	83.4	86.3	84.8
Rounding off decimals to the nearest number.	36.7	53.6	45.9

The majority of teachers (over 80%) were proficient in all the competencies of 'Number system and place value'; except 'rounding off decimals to the nearest number', in which less than a half (45.9%) reached the defined proficiency level. It was also only in this competency that there was a significant difference in the performance of P 3 and P 6 teachers – the latter were superior.

TABLE 8.10:	PERCENTAGE	OF	TEACHERS	RATED	PROFICIENT	IN
	SELECTED COM	IPE	TENCIES OF	'MEASUH	RES'	

COMPETENCIES	Р3	P 6	ALL
Telling the time on a clock face.	94.0	92.8	93.3
Solving problems involving time and distance.	87.4	92.7	90.1
Carrying out household budgeting.	86.3	92.6	89.5
Reading a thermometer.	86.4	91.0	88.8
Solving problems involving money.	84.0	88.3	86.1
Finding the perimeter of a rectangle.	75.8	82.2	79.1
Finding the number of small containers that can fill a large one.	67.6	80.6	74.3

Teachers exhibited skills in almost all the competencies of 'Measures'. Best performance was in 'telling the time on a clock face' with 93.3% of the teachers rated proficient. The majority (about 80% and above) were also rated proficient in five out of the remaining six competencies. It was only in 'finding the number of small containers that can fill a large one' where just less than three quarters of the teachers (74.3%) were rated proficient. It was also in this competency that the difference in the

performance levels of P 3 and P 6 was widest, with the latter doing better. The other competencies in which the P 6 teachers were significantly better are 'carrying out household budget' 'solving problems involving time and distance', 'finding the perimeter of a rectangle' and 'reading a thermometer'.

TABLE 8.11:	PERCENTAGE OF TEACHERS RATED PROFICIENT IN
	SELECTED COMPETENCIES OF 'FRACTIONS'

COMPETENCIES	P 3	P 6	ALL
Adding fractions with the same denominator.	91.4	92.9	92.2
Adding fractions with different denominators.	77.4	85.7	81.6
Subtracting fractions with the same	90.7	91.8	91.2
denominator.			
Subtracting fractions with different	76.0	83.3	79.8
denominators.			
Multiplying a fraction by a natural number.	80.3	87.7	84.1
Multiplying a fraction by a fraction.	70.3	81.7	76.2
Dividing a fraction by a natural number.	67.6	82.3	75.2
Dividing a fraction by a fraction.	61.6	77.5	69.9
Adding three decimal fractions of up to	92.4	92.9	92.6
hundredths with carrying.			
Subtracting two decimal fractions of up to	89.5	89.9	89.7
thousandths without borrowing.			
Changing fractions to decimals and vice versa.	72.5	81.8	77.3
Applying the concept of fractions in daily life	67.7	77.7	72.5
situations.			

The majority of the teachers demonstrated skills in most of the competencies of 'Fractions'. It was only in two competencies: 'dividing a fraction by a fraction' and 'applying the concept of factions in daily life situations' that less than three-quarters of the teachers reached the defined proficiency levels. In addition, teachers' performance in operations on fractions followed a similar trend as their performance in operations on natural numbers. Performance was best in 'addition' followed by 'subtraction', 'multiplication' and then 'division'. More P 6 than P 3 teachers were rated proficient in each of the competencies of 'Fractions'. The differences, though, were not significant in 'adding or

subtracting fractions with the same denominator' and 'adding or subtracting decimal fractions'.

TABLE 8.12:	PERCENTAGE OF TEACHERS RATED PROFICIENT IN
	SELECTED COMPETENCIES OF 'GRAPHS'

COMPETENCIES	P 3	P 6	ALL
Interpreting pictograms.	73.2	82.4	77.8
Drawing bar graphs.	0.4	1.0	0.7

Teachers' performance in 'Graphs' varied widely between the competencies. Although as many as 77.8% of them were rated proficient in 'interpreting pictograms', a paltry 0.7% reached a similar rating in 'drawing bar graphs'. P 6 teachers performed significantly better than their colleagues of P 3 in 'interpreting pictograms'. Their performance in 'drawing graphs' was comparable.

TABLE 8.13:PERCENTAGE OF TEACHERS RATED PROFICIENT IN
SELECTED COMPETENCIES OF GEOMETRY

COMPETENCIES	P 3	P 6	ALL
Drawing a circle accurately.	74.7	83.3	79.1
Measuring length.	76.2	80.9	78.6
Drawing an angle of 90 ⁰ .	70.3	82.3	76.4
Recognizing lines of symmetry.	67.4	81.5	74.7
Measuring an angle.	53.7	65.1	59.6
Drawing a line parallel to another.	29.4	36.0	32.9

Teachers' performance in related competencies of 'Geometry' varied. While up to 79.1% of the teachers could draw a circle accurately and 76.4% could draw an angle of 90° , less than a third (32.9%) were able to draw a line parallel to another. Similarly 78.6% demonstrated skills in measuring lengths but only 59.6% showed similar skills in measuring angles.

In all the competencies of 'Geometry', more P 6 than P 3 teachers were proficient. The differences in the performance were significant in all the competencies, except 'measuring length'.

			0.0
AND SEQUENCE'			
COMPETENCIES	P 3	P 6	ALL
Identifying even and odd numbers.	95.1	96.4	95.7
Completing number sequence.	94.1	94.0	93.9
Arranging numbers according to size.	87.6	90.1	88.9
Finding the square of numbers, up to 50.	57.0	75.2	66.6
Forming number patterns.	60.2	67.6	64.1
Finding the square roots of numbers up to	34.1	58.6	47.0

37.8

43.2

40.6

Finding the lowest common multiple (LCM)

50.

of up to 3 numbers.

TABLE 8.14: PERCENTAGE OF TEACHERS RATED PROFICIENT IN SELECTED COMPETENCIES OF 'NUMBER PATTERNS AND SEQUENCE'

In 'Number patterns and sequence', many teachers exhibited skills in 'identifying even and odd numbers' and 'completing number sequence': 95.7% and 93.9% respectively were proficient. A big proportion (88.9%) was also able to arrange numbers by size. Moreover, two thirds of the teachers were rated proficient in 'finding the squares of numbers', and about 6 in 10 attained a similar rating in 'forming number patterns'. However, they experienced difficulty in 'finding the LCM of numbers' and 'finding the square roots of numbers'. The respective proportions rated proficient were only 40.6% and 47.0%. The proportion of the P 6 teachers rated proficient in each competency exceeded the P 3 teachers', except in 'completing number sequence; where the proportions were comparable. The differences were significant in 'forming number patterns'.

8.3.3 ACHIEVEMENT OF TEACHERS IN THE SUB-SKILL AREAS AND COMPETENCIES OF LITERACY

The achievement of teachers in the sub-skill areas and competencies of Literacy is presented in this section. Tables 8.15–8.17 show the percentages of teachers rated proficient in the sub-skill areas and competencies of Literacy, grouped in the skill areas: Reading Comprehension, Writing and Grammar respectively.

TABLE 8.15:PERCENTAGE OF TEACHERS RATED PROFICIENT IN
THE SUB-SKILL AREAS OF READING COMPREHENSION

SUB-SKILL AREAS	P 3	P 6	ALL
Associating words to objects and actions.	99.0	99.3	99.2
Reading and describing the activities in a picture.	86.9	87.6	87.3
Reading and interpreting a sign post.	83.5	87.7	85.6
Reading and comprehending a story.	81.5	81.6	81.5
Reading tabular information (a calendar).	77.8	80.2	79.0
Reading a picture sequence.	43.9	49.2	46.5
Reading and interpreting a poem.	44.4	46.9	45.6

The performance of the teachers was good in most of the sub-skill areas of Reading Comprehension. Almost all the teachers (99.2%) could associate objects and actions to their descriptions in words, fewer, (87.3%) were able to read and describe the activities in a picture. The respective proportions of teachers who could read and interpret a sign post, and read and comprehend a story, of 85.6% and 81.5%, were also high. In addition, 79.0% of them could read and interpret a calendar. On the other hand, the proportion of 45.6% of teachers rated proficient in 'reading and interpreting a poem' was much less. Likewise, only 46.5% showed skills in 'reading and interpreting a picture sequence'. P 6 teachers performed better than their colleagues of P 3, but the differences were not significant.

SUB-SKILL AREAS	P 3	P 6	ALL
Writing a guided composition.	86.7	88.8	87.7
Completing an application form.	86.1	86.5	86.2
Writing words correctly.	82.6	83.4	82.9
Writing an invitation.	73.2	78.9	76.1
Drawing named objects.	66.7	70.5	68.7
Naming objects.	48.9	49.3	49.1
Writing a composition.	42.4	49.9	46.3

TABLE 8.16:	PERCENTAGE C	F TEACHERS	RATED	PROFICIENT	IN
	THE SUB-SKILL /	AREAS OF WR	ITING		

The performance of the teachers varied across the competencies of Writing. Although 87.7% of the teachers could write a guided composition, and 86.2% could complete an application form correctly, only 46.3% were able to write a well sequenced narrative composition, using the correct format. Similarly, many of the teachers (82.9%) could write words correctly and 76.1% demonstrated skills in writing an invitation. However, just about two thirds showed skills in 'drawing named objects' and only 49.1% could name objects correctly. The P 6 teachers performed better than the P 3 teachers in all the sub-skill areas of Writing, though the differences were significant only in 'writing an invitation' and 'writing a composition'.

COMPETENCIES	P 3	P 6	ALL
Using given structures.	89.1	91.0	90.0
Using given vocabulary.	88.5	89.8	89.1
Using prepositions.	84.6	86.9	85.8
Using the correct tenses.	70.2	77.6	74.0
Using comparatives.	68.9	76.0	72.5
Giving plurals.	69.4	69.8	69.5
Identifying opposites.	61.2	71.5	66.5

TABLE 8.17:PERCENTAGE OF TEACHERS RATED PROFICIENT IN
THE COMPETENCIES OF GRAMMAR

The majority of teachers were rated proficient in each of the competencies of Grammar. More of them showed competence in using given structures, vocabulary and prepositions, in which over 80% were proficient. A big number, about 7 in 10 also demonstrated skills in using tenses and comparatives and giving plurals. However, fewer teachers (66.5%) showed similar skills in 'identifying opposites'. There were significant differences in the performance of P 3 and P 6 teachers in 'using comparatives', 'identifying opposites' and 'using the correct tenses', with the latter performing better. Even if, the performance of P 3 and P6 teachers in the remaining competencies were not significantly different though, P 6 teachers performed better in each one.

8.3.4 ACHIEVEMENT OF TEACHERS IN VARIOUS ORAL READING TASKS

This section describes the achievement of teachers in various Oral Reading tasks. Table 8.18 shows the percentage of teachers rated proficient in the Oral Reading tasks.

READING TASKS	P 3	P 6	ALL
Reading sentences.	51.9	55.8	53.9
Reading a story.	35.9	39.4	37.7
Reading words.	32.1	33.4	32.7

TABLE 8.18: PERCENTAGE OF TEACHERS RATED PROFICIENT IN ORAL READING TASKS

Teachers demonstrated more skills in reading sentences compared to reading a story or reading words. About a half of them (53.9%) reached the defined proficiency level in reading sentences; in comparison to 37.7% and 32.7% who reached similar ratings in 'reading a story' and 'reading words' respectively. Although more P 6 teachers were proficient in each reading task, the differences were not significant. Table 8.19 shows the percentage of teachers rated proficient in reading words.

TABLE 8.19:	PERCENTAGE OF TEACHERS RATED PROFICIENT IN
	READING DIFFERENT WORDS

WORDS	P 3	P 6	ALL
confidence	91.7	92.5	92.1
beautiful	89.0	90.3	89.7
borrow	84.7	84.9	84.9
tongue	83.3	85.5	84.5
arrest	80.3	82.2	81.3
know	84.2	83.8	84.0
bathe	76.9	76.8	76.9
built	72.9	73.8	73.2
engage	61.6	60.9	61.2
advertisement	45.5	50.0	47.9

The teachers performed very well in reading six words: 'confidence', 'beautiful', 'borrow', 'tongue', 'know', and 'arrest' with over 80% rated proficient in reading each one. Teachers, however, had deficiencies in reading the remaining four words. For instance, some teachers read the word 'bathe' with the pronunciation of 'bath'.

Similarly, the word 'built' was read as /bju:lt/ instead of the correct pronunciation /bilt/. Likewise, the word 'engage' was read by some teachers as /'en'geidz/ instead of the correct /in'geidz/. Reading the word 'advertisement' posed a challenge to most of the teachers, less than a half (47.9%) of them were able to read it correctly. The majority read the word as 'adver-tize-ment' instead of the most correct pronunciation of 'adver-tize-ment'. The P 6 teachers' performance was slightly better than that of the P 3 teachers' in reading almost all the words except 'bathe', 'engage', and 'know'; where the reverse occurred. However, the differences were not significant. Table 8.20 shows the percentage of teachers rated proficient in reading sentences.

TABLE 8.20:	PERCENTAGE	OF	TEACHER	RATED	PROFICIENT	IN
	READING SEN	TENC	CES			

SENTENCES	P 3	P 6	ALL
A sentence comprised a list of items and the conjunction 'and'.	91.0	92.0	91.6
A sentence with two exclamation marks.	89.7	91.7	90.7
A sentence with a question tag, `aren't you?'	76.1	79.2	77.6
A sentence with the word 'present' used as a verb.	68.0	69.5	68.8
A sentence with a question mark.	64.0	65.7	64.9

The teachers' performance in reading sentences was best in reading the sentence which required reading a list of items following the correct punctuation and stress on the conjunction 'and': 91.6% of the teachers read the sentence correctly. The sentence with two exclamation marks was read correctly by 90.7% of the teachers. A smaller proportion of the teachers (77.6%) was able to read the sentence with a question tag 'aren't you'. Some teachers did not respect the comma just before the tag, and others pronounced the '-re-' in the word 'aren't' instead of the correct pronunciation /a:nt/. The sentence with the word 'present' was read correctly by 68.8% of the teachers. The teachers who did not get it

correct, read it as if it was used as a noun. Hence they read it as /prez ∂ nt/instead of/prizent/. In reading the sentence with a question mark, some teachers failed to sing out the intonation signified by the question mark, leading to only 64.9% of them reading it correctly. It was pleasing to note the non-significant differences in the performance of P 3 and P 6 teachers, even if more of the latter read each of the sentences correctly. The percentage of teachers rated proficient in reading a story is given in Table 8.21.

TABLE 8.21: PERCENTAGE OF TEACHERS RATED PROFICIENT IN READING A STORY

COMPETENCIES	P 3	P 6	ALL
Reading a story following the correct intonation.	42.2	45.4	43.7
Reading expressively.	73.7	76.3	75.1
Reading coherently.	80.6	81.6	81.2

The majority of the teachers (81.2%) were able to read the story coherently. However, a lesser percentage of 75.1% read the story expressively as well. Less than a half of the teachers (43.7%) read the story with the correct intonation following the punctuation. In all cases, the P 6 teachers were slightly better than the P 3 teachers, but the differences were not significant.

8.3.5 ACHIEVEMENT OF TEACHERS IN NUMERACY, LITERACY AND ORAL READING BY AGE

This section presents the achievement of teachers by age. Table 8.22 shows the mean scores of teachers by age.

NUMERACT, LITERACT AND ORAL READING BY AGE							
1.05	NUMERACY		LITE	LITERACY		ORAL	
AGE					REA	DING	
(YEARS)	Mean	S.E	Mean	S.E	Mean	S.E	
20 – 29	79.8	0.96	78.2	0.97	73.3	1.07	
30 – 39	77.2	0.79	78.3	0.83	75.1	0.94	
40 – 49	78.4	1.19	78.2	1.13	75.4	1.32	
50 - 60	80.6	1.77	77.2	2.10	77.4	2.31	

TABLE 8.22:MEAN SCORES (PERCENTAGE) OF TEACHERS IN
NUMERACY, LITERACY AND ORAL READING BY AGE

There was no significant difference in the teachers' means in all the subjects as their age increased. Nonetheless there was a gradual increase in the mean score, with age, in Oral Reading. In Numeracy, the mean score first decreased and then rose from age group 30-39 years. The percentages of teachers rated proficient in Numeracy, Literacy and Oral Reading by age is given in Table 8.23.

AGE (YEARS)	NUMERACY	LITERACY	ORAL READING
20 – 29	71.3	74.7	73.3
30 - 39	59.8	72.1	75.1
40 - 49	69.0	70.3	75.4
50 – 60	72.1	73.6	77.4

TABLE 8.23: PERCENTAGES OF TEACHERS RATED PROFICIENT BY AGE

For both Numeracy and Literacy, the percentage of teachers rated proficient first dropped with increase in age and then rose. However, the rise began at age group 40-49 years for Numeracy and at 50-60 years for Literacy. The pattern in performance in Oral Reading differed, in that the proportion of teachers rated proficient increased with age, the differences were insignificant.

8.3.6 ACHIEVEMENT OF TEACHERS IN NUMERACY , LITERACY AND ORAL READING BY MARITAL STATUS

The achievement of teachers according to marital status is described in this section. The mean scores of teachers by marital status are given in Table 8.24.

TABLE 8.24:	MEAN	SCORES	(PERCENTAGE)	OF	TEACHERS	BY
	MARITAL STATUS					

MARITAL	NUMERACY		LITE	LITERACY		ORAL READING	
STATUS	Mean	S.E	Mean	S.E	Mean	S.E	
Single	80.1	1.18	78.5	1.25	77.8	1.20	
Married	79.3	0.56	79.9	0.55	76.4	0.63	

There was no significant difference in the mean scores of teachers in any subject by marital status. Table 8.25 shows the percentages of teachers rated proficient by marital status.

TABLE 8.25:	PERCENTAGES OF TEACHERS RATED PROFICIENT BY
	MARITAL STATUS

MARITAL STATUS	NUMERACY	LITERACY	ORAL READING
SINGLE	62.8	77.9	43.8
MARRIED	68.6	73.4	37.8

The percentage of the married teachers rated proficient in Numeracy exceeded that of the single teachers. The reverse occurred in Literacy and Oral Reading. However, the differences were not significant.

8.3.7 ACHIEVEMENT OF TEACHERS IN NUMERACY, LITERACY AND ORAL READING BY THE HIGHEST ACADEMIC QUALIFICATION

In this section, the performance of teachers in Numeracy, Literacy and Oral Reading by the highest academic qualification is described. Table 8.26 shows the mean scores of teachers by the highest academic qualification.

TABLE 8.26:	MEAN SCORES (PERCENTAGE) OF TEACHERS BY THE
	HIGHEST ACADEMIC QUALIFICATION

HIGHEST	NUMERACY		LITERACY		ORAL RADING	
ACADEMIC QUALIFICATION	Mean	S.E	Mean	S.E	Mean	S.E
UCE	79.1	0.65	78.8	0.65	75.1	0.73
UACE	82.3	1.36	79.8	1.49	78.0	1.65
Diploma	79.0	1.03	80.6	1.03	79.8	1.03
Bachelors degree	86.2	2.11	82.9	4.36	82.1	4.51

The mean scores of teachers with UACE were higher than for teachers whose highest academic qualification was UCE. The difference was significant in Numeracy.

The mean scores of teachers generally increased with a rise in the level of the highest academic qualification. The difference in the mean scores of teachers with UCE and Bachelors degree holders was significant for each subject, with the latter having a higher mean. However, the diploma holders had a slightly lower mean score in Numeracy, in comparison to those with UACE. It is worth noting two things: firstly, most of the diploma holders could have been teachers who upgraded from Grade III, who therefore, had UCE as the highest academic qualification; and secondly, there were few (20) teachers with Bachelors degree.

The proportion of teachers rated proficient in Numeracy and Literacy by the highest academic qualification is given in Figure 8.03.



Although the proportions of teachers with UACE rated proficient exceeded that of UCE holder the differences were not significant.

Overall, there was better performance as the teachers' level of highest academic qualification rose. In Oral Reading for instance, 35.7% of the teachers with UCE were rated proficient compared to 40.0% of UACE

holders, 45.3% of the diploma holders and 45.0% of the teachers with a Bachelors degree. The difference in the performance of the teachers with UCE and those with UACE was not significant for each subject. However, the difference in the performance of the teachers with UCE on one hand, and diploma and degree holders on the other, was significant in Literacy and Oral Reading. In Numeracy, the significant differences were for UACE and diploma holders versus degree holders.

8.3.8 ACHIEVEMENT OF TEACHERS IN NUMERACY, LITERACY AND ORAL READING BY THE HIGHEST TEACHING QUALIFICATION

The achievement of teachers by the highest teaching qualification is described in this section. Table 8.27 shows the mean scores of teachers by the highest teaching qualification.

TABLE 8.27:	MEAN	SCORES	(PERCENTAGE)	OF	TEACHERS	BY	THE
	HIGHES	ST TEACH	ING QUALIFICAT	ION			

HIGHEST TEACHING	NUMERACY		LITERACY		ORAL READING		
QUALIFICATION	Mean	S.E	Mean	S.E	Mean	S.E	
Bachelor in Education	82.7	3.54	77.9	5.18	76.8	5.27	
Grade V Secondary	76.5	3.70	84.1	1.86	83.8	2.53	
Grade V Primary	79.1	1.10	80.4	1.08	79.6	1.08	
Grade III	79.7	0.61	79.2	0.60	75.8	0.68	
Others	82.2	1.91	82.0	3.06	81.1	2.15	

The comparison in this section is based mainly on the performance of the teachers with Grade V (Primary) and Grade III Teaching certificates as there were very few teachers with the other qualifications. The category 'others' comprised teachers with Diploma in Teacher Education; UCE and UACE holders; student teachers and Community Development Certificate, among others.

There was no significant difference in the mean scores of Grade III and grade V (Primary) teachers in each subject, but the gap was wider in Oral Reading: 79.6% and 75.8% for Grade V (Primary) and Grade III teachers. The corresponding mean scores for Numeracy were 79.1% and 79.7%. In Literacy, the Grade V (Primary) teachers obtained a mean of 80.4% compared to 79.2% of the Grade III holders. The percentage of teachers rated proficient by the highest teaching qualification is given in Figure 8.04.



More Grade V (Primary) than Grade III teachers were rated proficient in Literacy and Oral Reading. The reverse pattern prevailed in performance in Numeracy. The differences in the performance were not significant. In Numeracy, the performance of the 'others' was close to that of the Grade V (Primary) teachers, while in Literacy and Oral Reading, it was close to the Grade III's performance.

8.3.9 ACHIEVEMENT OF TEACHERS IN NUMERACY, LITERACY AND ORAL READING BY TEACHING EXPERIENCE.

The achievement of teachers by teaching experience is presented in this section. The mean scores of teachers in Numeracy and Literacy by teaching experience are shown in Table 8.28

TEACHING	NUMERACY		LITER	ACY	ORAL READING		
EXPERIENCE (YEARS)	Mean	S.E	Mean	S.E	Mean	S.E	
1 – 5	81.3	0.93	79.3	0.20	75.8	1.04	
6 - 10	78.3	0.97	81.3	0.02	74.8	1.08	
11 – 15	79.0	1.06	69.6	0.03	77.5	1.25	
16 – 20	78.9	1.67	76.8	0.03	81.7	1.43	
Over 20	79.8	1.71	79.3	0.03	80.1	1.88	

TABLE 8.28:MEAN SCORES (PERCENTAGE) OF TEACHERS BY
TEACHING EXPERIENCE

There was no significant difference in the teachers' mean scores by their teaching experience.

Teachers' mean scores in Numeracy and Oral Reading first declined with teaching experience and then rose slightly for teachers with teaching experience of over 20 years. For Literacy, the mean rose between teaching experience of 1 - 5 years and 6 - 10 years. Then it declined for teachers who had taught for 11 - 20 years, and finally, rose again for teaching experience of over 20 years. However these differences were not significant. The percentage of teachers rated proficient by teaching experience is given in Table 8.29.

TEACHING	NUMERACY	LITERACY	ORAL READING
EXPERIENCE (YEARS)			
1 – 5	72.1	73.9	36.4
6 – 10	64.1	76.8	34.1
11 – 15	64.0	69.6	40.2
16 – 20	65.8	76.8	50.6
Over 20	70.7	79.3	54.0

TABLE 8.29: PERCENTAGES OF TEACHERS RATED PROFICIENT BY TEACHING EXPERIENCE

The trend in the variation of teachers' performance by teaching experience varied across subjects. In Numeracy and Oral Reading, the proportions of teachers rated proficient first dropped between teaching experience of 1-5 years and 6-10 years, with a significant difference in Numeracy. After this, the proportions increased, with significant leaps in Oral Reading between teaching experience of 6-10 and 11-15 years, and 11-15 and 16-20 years. In Literacy, teachers' level of performance first increased between the initial two intervals. Thereafter, it dropped significantly from 76.8% to 69.6%; and then rose again significantly.

8.3.10 ACHIEVEMENT OF TEACHERS IN NUMERACY AND LITERACY BY CLASS

The achievement of teachers in Numeracy, Literacy and Oral Reading by the class they taught is described in this section.

The mean scores of teachers by class are shown in Table 8.30.

TABLE 8.30:	MEAN SCORES	(PERCENTAGE) OF TFACHE	RS BY CLASS
17 IDEL 0.50.	TIL/ IN SCORES			

	NUMERACY		LITER	RACY	ORAL READING		
CLASS	Mean	S.E	Mean	S.E	Mean	S.E	
Р3	76.1	0.75	77.0	0.77	74.4	0.86	
P 6	80.7	0.72	79.1	0.75	74.8	0.86	

In each subject, the mean scores of P 6 teachers were higher than for their counterparts of P 3 and the difference was significant for Numeracy, in which the former had a mean of 76.1% against the latter's 80.7%. The percentage of teachers rated proficient by class is given in Figure 8.05.



In each subject, the proportion of the P 6 teachers rated proficient was higher than for the P 3 teachers. The difference was greatest and significant in Numeracy.

8.3.11 Achievement of Teachers in Numeracy, Literacy and Oral Reading by Subject They Taught Most.

This section describes the achievement of teachers by the subject they taught most. The mean scores of teachers by the subject they taught most are shown in Table 8.31.

TABLE 8.31:MEAN SCORES (PERCENTAGE) OF TEACHERS BY THE
SUBJECT THEY TAUGHT MOST

SUBJECT	NUME	RACY	LITEF	RACY	ORAL R	EADING
TAUGHT MOST	Mean	S.E	Mean	S.E	Mean	S.E
Mathematics	83.9	0.48	74.8	0.85	72.9	0.84
English	72.4	0.93	81.9	0.59	76.5	0.87

In Numeracy, teachers of Mathematics obtained a significantly higher mean (83.9%) than the 72.4% for those who taught English. Similarly, teachers of English got a significantly higher mean (81.9%) in Literacy in comparison to that of Mathematics teachers of 74.8%. Nonetheless, the difference in means was greater in Numeracy compared to Literacy. In Oral Reading, teachers of English obtained a higher mean of 76.5%, as opposed to the 72.9% for those who taught Mathematics. This difference was not significant. Figure 8.06 shows the percentages of teachers rated proficient in Numeracy and Literacy by the subject they taught most.



It was pleasing to note that teachers performed significantly better in their main teaching subject than in the subject they did not teach or taught just occasionally. For instance, in Numeracy, 75.6% of the Mathematics teachers were rated proficient, compared to 55.7% of the teachers of English. The difference was widest in Numeracy.

8.3.12 Achievement of Teachers in Numeracy, Literacy and Oral Reading by School Ownership

The achievement of teachers in Numeracy Literacy and Oral Reading by school ownership is described in this section. The description is made in two ways. First the mean scores of the teachers in each subject by school ownership is presented. Then the proportions of the teachers rated proficient in each subject by school ownership and class is presented separately for Numeracy, Literacy and Oral Reading.

The mean scores of teachers in Numeracy, Literacy and Oral Reading by school ownership are presented in Table 8.32.

TABLE 8.32:	MEAN SCORES (PERCENTAGE) OF TEACHERS BY SCHOOL
	OWNERSHIP

SCHOOL	NUMERACY		LITERACY		ORAL READING	
OWNERSHIP	Mean	S.E	Mean	S.E	Mean	S.E
Government	78.2	0.57	77.7	0.58	74.6	0.64
Private	80.0	1.32	80.7	1.40	74.0	1.92

Although the mean scores of teachers in Numeracy and Literacy were slightly higher in private schools compared to government ones, the differences were not significant. Likewise, in Oral Reading, the mean scores of teachers from the two types of schools; 74.6% and 74.0% for government and private schools respectively were comparable.

The percentage of teachers rated proficient in Numeracy by school ownership and class are shown in Figure 8.07.



More teachers in government schools than those in private schools were proficient in Numeracy; the proportions were 66.3% and 64.7% respectively, but this difference was not significant. Additionally, the proportions of P 6 teachers in both school types who were rated proficient were significantly higher than the P 3 teachers'. In the government schools, for example, 59.0% of the P 3 teachers, as opposed to 74.4% of the P 6 teachers were proficient.

The percentage of teachers rated proficient in Literacy by school ownership and class are given in Figure 8.08.



More teachers from private schools (77.9%) were rated proficient in Literacy, as opposed to 71.9% of those in government schools. The difference, though, was not significant. The difference in the percentages of P 3 and P 6 teachers rated proficient in each school type was also not significant.

Figure 8.09 shows the percentage of teachers rated proficient in Oral Reading by school ownership and class.



In Oral Reading, 40.2% of the teachers in private schools were rated proficient, in comparison to a lower proportion of 37.2% of those in government schools. However, the difference was not significant. Further, more of the P 6 teachers than the P 3 teachers in each type of schools reached the defined proficiency level, with a significant difference in the private schools.

8.3.13 ACHIEVEMENT OF TEACHERS IN NUMERACY, LITERACY AND ORAL READING BY SCHOOL LOCATION

The achievement of teachers in Numeracy, Literacy and Oral Reading by school location is presented in this section. First, the mean scores of the teachers in each of the subjects by school location are presented. Secondly, the percentage of teachers rated proficient in Numeracy, Literacy and Oral Reading by school location and class is presented separately for each subject. Table 8.33 shows the mean scores of teachers by school location.

TABLE 8.33:MEANS SCORES (PERCENTAGE) OF TEACHERS BY SCHOOL
LOCATION

SCHOOL	NUMER	RACY	LITER	RACY	ORAL RE	ADING
LOCATION	Mean	S.E	Mean	S.E	Mean	S.E
URBAN	77.5	1.50	78.0	1.54	74.3	1.72
RURAL	78.5	0.56	78.1	0.58	74.5	0.65

In each subject, there was no significant difference in the mean scores of the teachers by school location. For example, in Numeracy, where there was the widest gap, the teachers in urban schools obtained a mean of 77.5% and their counterparts in rural schools got a mean of 78.5%.

Figure 8.10 shows the percentage of teachers rated proficient in Numeracy by school location and class.



Teachers in rural schools performed better than those in urban schools, in Numeracy: the respective proportions rated proficient were 66.5% and 63.9%, which were not significantly different. In contrast, the difference in the performance of P 3 and P 6 teachers in each location was significant, with the latter performing better. For instance, in urban schools, 57.6% of the P 3 teachers were proficient, compared to 70.0% of the P 6 teachers.



Figure 8.11 gives the percentage of teachers rated proficient in Literacy by school location and class.

In Literacy, teachers in urban schools performed better than those in rural schools; the respective percentages rated proficient were 74.5% and 72.2%. However, the difference was not significant. Further, in a particular location, P 6 teachers performed better than their colleagues who taught P 3. The proportions of P 3 and P 6 teachers in urban schools rated proficient were 70.4% and 78.5% respectively. The difference, though, was not significant.

The percentage of teachers rated proficient in Oral Reading by school location and class is shown in Figure 8.12.



While 4 in 10 teachers in the urban schools were rated proficient in Oral Reading, the proportion of 37.1% of those from the rural schools with a similar rating was slightly lower. This difference was not significant. In a particular school location, the performance of the P 6 teachers surpassed the P 3 teachers'. The difference was significant in the urban schools, where 34.4% of the P 3 and 45.4% of the P 6 teachers reached the desired level of proficiency.

8.3.14 ACHIEVEMENT OF TEACHERS IN NUMERACY, LITERACY AND ORAL READING BY ZONE

The performance of teachers in Numeracy, Literacy and Oral Reading by zone is described in this section. Table 8.34 shows the percentage of teachers rated proficient by zone.

ZONE	NUMERACY	LITERACY	ORAL READING
West Nile	P 74	P 81	P 39
Mid North II	P 73	P 67	P 20
North West	P 72	P 78	P 40
Far East	P 72	₹78	P 38
Mid West	P 70	72	P 36
Far West	P 70	P 62	P 48
Central I	P 69	78	P 45
Mid North I	P 68	P 64	P 26
Central II	P 67	77 👎	P 45
North East	P 66	71	P 44
Mid East II	P 65	P 72	P 43
Central III	P 62	P 75	P 29
Near East	P 60	P 72	P 35
Mid East I	P 59	65 প	P 32
South West	P 58	P 68	* 37
Kampala	P 57	₹ 82	* 47

TABLE 8.34: PERCENTAGE OF TEACHERS RATED PROFICIENT BY ZONE

KEY

P75 🖗	75% and above rated proficient.
50 প	50-74% rated proficient.
P 49	Less than a half rated proficient.

At least a half of the teachers from each of the zones was rated proficient in Numeracy and Literacy. The proportions of teachers rated proficient in Numeracy ranged from 57% in Kampala to 74% in West Nile. The corresponding figures for Literacy were 62% in Far West and 82% in Kampala. On the whole, therefore, performance of teachers from many zones in Numeracy and Literacy was good, and better in Literacy. However, no zone had at least a half of the teachers rated proficient in Oral Reading. The zone that performed best was Far West, with 48% of the teachers rated proficient. Mid North II had the least proportion of teachers (20%) rated proficient in Oral Reading.

8.4 CONCLUSION

<u>NUMERACY</u>

Nearly all the primary school teachers were proficient in all the competencies of 'Operations on numbers': There was a gradual decline in performance, though, in moving from 'addition' to 'subtraction', multiplication and then 'division'.

In 'Number system and place value', the majority of teachers were proficient in all the competencies; except 'rounding off decimals to the nearest number', in which less than a half reached the defined proficiency level.

In 'Graphs', although the majority of teachers could interpret pictograms, very few were able to draw bar graphs with suitable scales and labelled axes.

In 'Fractions', it was only in two competencies: 'dividing a fraction by a fraction' and 'applying the concept of fractions in daily life situations" that less than three-quarters of the teachers reached the defined proficiency levels.

In 'Number patterns and sequence', teachers exhibited skills in all the competencies, but experienced difficulty in finding the LCM and square roots of numbers.

In Measures, teachers' performance was good in all the competencies and best in 'telling the time on a clock face'.

In Geometry, while many of the teachers could draw a circle and measure lengths accurately, fewer were able to draw a line parallel to another or measuring angles accurately.

<u>LITERACY</u>

In Reading Comprehension, almost all the teachers could read and describe the activities in a picture and also read and interpret a calendar. On the other hand, few of them could read and answer questions on a poem or read and interpret a picture sequence'. In Writing, the majority of teachers could write a guided composition and neatly complete an application form. However few were able to write a well sequence composition, using the correct format. They also found difficulty in naming objects using the correct spellings.

In Grammar, teachers showed skills in most of the competencies, particularly using given structures and vocabulary. However few showed similar skills in 'identifying opposites' and 'giving plurals'.

ORAL READING

Teachers demonstrated more skills in reading sentences compared to reading a story or words. In reading words, generally the majority of the teachers read most of the words correctly. However, a reasonable number of them read the word 'advertisement', 'engage', 'built' and 'know' with incorrect pronunciations.

In reading sentences, the teachers performed well in reading a sentence comprising a list of items and the conjunction 'and', and a sentence with an exclamation mark. Reading a sentence with the question tag 'aren't you' was also fairly well done. However, smaller proportions of teachers were able to read a sentence in which the word 'present' was used as a verb, as well as one with a question mark.

In story reading, the majority of the teachers read the story coherently, but a lesser proportion read the story using the correct intonation.

Chapter 9

CHALLENGES FACED BY PRIMARY SCHOOLS

9.1 INTRODUCTION

To corraborate, the NAPE findings of 2011, some headteachers of selected primary schools in the national sample were interviewed on a one to one basis. In the interview, each headteacher was asked to give the main challenges that the school had faced in the period of one year prior to the survey. The challenges were divided into two categories: challenges in administration and management, and challenges in pedagogy.

This chapter presents the views of the headteachers about the major challenges their schools had faced. Firstly, the distribution of the primary headteachers who were interviewed is given. Secondly, the percentages of schools that reportedly faced various challenges in administration and management is described; followed by the percentages of schools that faced various challenges in pedagogy. The description of the challenges is made for all the schools and also by school ownership.

9.2 DISTRIBUTION OF PRIMARY SCHOOL HEADTEACHERS

This section presents the distribution of the headteachers interviewed by district and region. Table 9.01 shows the distribution of headteachers by district and region.

10020020				
REGION	DISTRICT			
Central: 18 (18.9%)	Butambala (5), Masaka (5), Mityana (4) and Mukono (4)			
East 25 (26.3%)	6) Jinja (6), Kaberamadio (4), Katakwi (3),			
	Mbale (4) Namutumba (4) and Tororo (4)			
North, $26(27.40/)$	Apac (4), Arua (6), Gulu (5), Lira (4), Moyo			
NOTULE 20 (27.4%)	(3) and Nebbi (4)			
W_{oct} 10 (20 0 %)	Hoima (4), Kabarole (3), Kyenjonjo (4),			
West: 19 (20.0 %)	Ntungamo (4) and Rukungiri (4)			
Kampala: 7 (7.4%)	Kampala (7)			
Uganda	95 (100%)			

TABLE: 9.01:THE DISTRIBUTION OF PRIMARY HEADTEACHERSINTERVIEWED

In all, 95 headteachers responded to the interview schedules. The headteachers were from 22 districts of the country, which had been selected in such a manner that would allow for a fair regional representation. In all, there were 77 government schools and 18 private schools.

9.3 CHALLENGES IN SCHOOL ADMINISTRATION AND MANAGEMENT

In this section, a description of the major challenges in administration and management, as reported by the headteachers, is made. Table 9.02 shows the percentages of primary schools according to the major challenges faced in administration and management by school ownership.

TABLE 9.02:	THE PERCENTAGES OF PRIMARY SCHOOLS BY THE
	CHALLENGES IN ADMINISTRATION AND MANAGEMENT

CHALLENGES	GOVERNMENT	PRIVATE	OVERALL
 Absenteeism/late coming among 	70.5	11.1	59.4
teachers and pupils.			
• Parents' laxity in providing the	66.7	5.5	55.2
requirements for pupils' education.			
• Lack of lunch for pupils and teachers.	60.2	5.5	50.0
Lack of accommodation for teachers.	50.0	22.2	44.8
High pupil-teacher ratio.	30.8	16.7	28.1
High dropout rate.	16.7	16.7	16.7
Absence of safe water source.	15.4	16.7	15.6
• High cost of living (inflation).	6.4	33.3	11.5
Unstable electricity (load shedding).	9.0	16.7	10.4
• Others	8.0	_	6.5

Most of the primary schools (59.4%) reported absenteeism and late coming of teachers and pupils as the major challenge they had in administration and management. Because of this, the syllabus cannot be fully covered. Just over a half (55.2%) said parents were not providing the requirements for pupils' education and this made it hard for them to teach effectively. Another challenge, mentioned by 50.0% of the schools, was lack of lunch for both pupils and teachers. Sometimes pupils, or even teachers, go home for lunch and cannot return for afternoon lessons because their homes are far. The schools also cited lack of accommodation for teachers, high pupilteacher ratio, high dropout rate, absence of safe water source, high cost of living and unstable electricity as some of the other major challenges they had in administration and management.
As many as 70.5% of government schools indicated that absenteeism and late coming was the main challenge they had. About two thirds claimed parents were not providing school requirements for their children.

In addition, a smaller number of government schools cited 'other' challenges, which included: inadequate teachers, insufficient furniture in the classrooms, interference from politicians and foundation bodies, inadequate pit latrines and low salaries leading to laxity.

Private schools, on the other hand, cited high cost of living and lack of accommodation for teachers as the two main challenges they faced.

9.4 CHALLENGES FACED IN PEDAGOGY

This section describes the challenges schools reportedly faced in pedagogy. Table 9.03 shows the percentages of primary schools by the challenges in pedagogy by school ownership.

TABLE 9.03:THE PERCENTAGE OF SCHOOLS BY THE CHALLENGES IN
PEDAGOGY.

CHALLENGES	GOVERNMENT	PRIVATE	TOTAL
• Inadequate instructional materials.	70.5	72.2	70.8
• Teaching thematic curriculum is difficult.	23.1	27.8	24.0
• Teachers do not make schemes and lesson plans.	14.1	-	11.4
 Incomplete classrooms affect display of learning aids. 	12.8	-	10.4
• No refresher courses for teachers.	10.2	-	8.3
 High turnover of teachers affecting syllabus coverage. 	_	38.9	7.4
• Inadequate sports time and space.	-	16.7	3.2
• Frequent changes in the curriculum.	2.6	-	2.1
• Irregular inspection of schools.	1.3	-	1.1
Lack of stationery leads to irregular assessment.	_	5.5	1.0

Nearly three quarters of the schools (70.8%) indicated that inadequate instructional materials was the major challenge they faced in pedagogy. They claimed that this negatively affected the quality of teaching. The next major challenge, cited by 24.0% of the schools, was difficulty of teaching the Thematic curriculum. They said there were no textbooks in the local language, which the teachers could use. The assumption that teachers could translate the texts from English into the local language, was unrealistic, as not all the teachers had this skill. It is not noting that these two challenges were mentioned by both government and private schools in the same order.

A smaller number of headteachers in the government schools said they faced the following challenges: incomplete classrooms, lack of refresher courses for teachers, teachers not making schemes of work / lesson plans and irregular inspection of schools. On the other hand, a few private schools felt that high turnover of teachers, inadequate sports time and space and irregular assessment due to lack of stationery were the other challenges they faced.

9.5 CONCLUSION

According to the headteachers, the major challenges primary schools faced in administration and management were absenteeism of teachers and pupils, and parents' laxity in providing school requirements for their children. In pedagogy, the main challenges the headteachers mentioned were inadequate instructional materials and difficulty of teaching the Thematic Curriculum.

Chapter 10

CONCLUSIONS, DISCUSSIONS AND RECOMMENDATIONS

10.1 INTRODUCTION

In this chapter, the main findings are presented together with the probable reasons for the performance patterns as well as the recommended actions to be taken to improve teaching and learning in schools, and learning achievement. The chapter is divided into two sections. The first section gives the achievement of pupils; and the second, the achievement of teachers.

10.2. ACHIEVEMENT OF PUPILS

10.2.1 OVERALL LEVEL OF PUPILS' ACHIEVEMENT

Results:

- Overall, 63.1% of the P 3 pupils reached the defined proficiency level in Numeracy and 47.9% attained a similar rating in Literacy in English. This means that nearly two thirds of the pupils in P 3 demonstrated that they had acquired the Numeracy competencies as spelt out in the national curriculum. However, less than a half of the pupils showed such proficiency in Literacy in English. In Oral Reading, 46.2% of the pupils were proficient.
- At P 6, the proportions of the pupils who reached the defined proficiency levels in Numeracy and Literacy in English were 45.6% and 41.3% respectively. These are the pupils who showed that they had acquired most of the competencies specified in the P 6 curriculum.

Reasons:

- Because Numeracy is taught in the local language, perhaps pupils are able to understand the concepts better.
- Maybe the pupils' deficiency in reading skills could have affected their performance in Literacy.
- Insufficient reading materials, which would foster the development of pupils' reading skills.
- Letter names are emphasized instead of sounds at the beginners' stage of reading.

- Increasing number of pupils, especially in government schools, which is not matched by the resources.
- High rate of absenteeism among teachers and pupils, as they sometimes remain at home to work in the gardens or get involved in petty trade instead of going to school. Headteachers cited absenteeism as the main challenge they had (Table 9.02)

Recommendations:

- Continue training teachers in the implementation of the thematic curriculum.
- Re-train tutors in Primary PTCs on how to teach reading and writing.
- Provide enough reading materials.
- Encourage schools to allow pupils to borrow books.
- Endeavour to provide the necessary resources in adequate quantities.
- Intensify on monitoring and supervision at all levels.

10.2.1.1 ACHIEVEMENT OF PUPILS IN NUMERACY

Results:

In Numeracy, P 3 pupils could, for example, do the following:

- Associate a number of objects to the corresponding number in figures.
- Count in ones or tens.
- Add or subtract numbers without carrying or borrowing.
- Carry out multiplication as repeated addition.
- P 3 pupils had difficulty in the following Numeracy competencies:
 - Addition with carrying.
 - Subtraction with borrowing.
 - Multiplication.
 - Division.

In Numeracy, P 6 pupils were able to:

- Add, subtract, multiply numbers by a one-digit number and divide by a one-digit number.
- Solve problems involving money.

P 6 pupils had difficulty in:

- Performing long division.
- Measuring lengths and angles.
- Drawing parallel lines
- Drawing angles.
- Applying the concept of capacity in novel situations.

Reasons:

- Teaching in an abstract manner, without practical demonstration.
- Introducing a new concept before pupils have fully mastered the pre-requisite concepts.
- Inadequate practice by pupils.
- Inability of teachers to appropriately use assessment to guide the teaching-learning process.
- Teaching theoretically, without showing practical application.
- Some teachers are deficient in the skills of geometry. (Teacher's results: Table 8.13)
- Insufficient geometrical instruments for teachers and pupils.
- Inadequate practice by pupils.
- Giving exercises and tests which do not encourage application of learnt concepts in novel situations.
- Ineffective use of assessment.

- Train teachers to practically relate what is taught to real life situations.
- Ensure that pupils have mastered pre-requisite concepts before introducing a new one.
- Train teachers in assessment techniques.
- Organise workshops for tutors with particular emphasis on methodology.

- Organise workshops for teachers focusing on enhancing their skills in teaching Geometry.
- Provide geometrical instruments for teachers and encourage parents to buy for their children.
- Give pupils exercises frequently and regularly and mark them in order to gauge their level of understanding of the topic taught.
- Train tutors and teachers in assessment techniques.

10.2.1.2 ACHIEVEMENT OF PUPILS IN LITERACY IN ENGLISH AND ORAL READING

In Literacy and Oral Reading, P 3 pupils were able, among others to:

Read and complete words.

- Write the letters of the alphabet with the correct shape and position.
- Copy a story, with the correct spacing between the words.
- Read the letters `a', `s', and `r'.
- Read the words 'book' and 'cow'.

Problem areas of Literacy and Oral Reading at P 3:

- Reading and comprehending a story.
- Reading and describing the activities in a picture.
- Writing names of objects with the correct spelling.
- Writing sentences.
- Reading letter 'v'
- Reading the words 'cupboard', 'friend', 'doctor', 'read' and 'mother'.

In Literacy in English, P 6 pupils could:

- Associate words to objects and actions.
- Read a text and answer questions which require responses directly from the texts.
- Draw and label named objects.

P 6 pupils had difficulty in:

- Reading a story and other texts and comprehending it so as to be able to answer questions requiring deeper understanding, such as deriving lessons from the story.
- Writing a relevant composition with the correct format.

Reasons:

- Inability of some teachers to teach reading skills using phonic and syllabic methods.
- Lessons for teaching reading and writing used to teach something else.
- Insufficient readers.
- Pupils' limited practice and exposure to suitable reading materials.
- Lack of appropriate displays in and outside the classroom in some schools.
- Lack of guidance in independent reading and writing.
- Insufficient reading materials.
- Some teachers lack reading skills. (Teachers' results, Table 8.18)
- Lack of practice because teachers find it hard to write comprehension passages.
- Limited exposure, especially in rural areas.
- Inappropriate assessment, which does not enhance critical thinking skills.

- Organize workshops for tutors and teachers, targeting at imparting the skills of teaching reading and writing.
- Teach reading and writing as timetabled.
- Provide enough readers.
- Encourage parents and the community to engage their children in reading activities.
- Prepare appropriate displays and guide pupils also to prepare some.
- Guide pupils in independent reading and writing.
- Introduce intra and inter class reading and writing competitions.
- Provide enough reading materials and encourage parents to buy some for their children.
- Hold refresher courses for tutors and teachers on a regular basis and focus on methodology.
- Guide pupils to write stories and display some of their work.
- The community to involve children in reading and writing activities, such as taking readings in places of worship.
- Organise intra and inter class as well as inter school reading and writing competitions.
- Train teachers in assessment techniques.

10.2.2 ACHIEVEMENT OF PUPILS BY GENDER

Result:

In both P 3 and P 6, boys and girls performed at about the same level in Literacy. However, boys performed better than the girls in Numeracy.

Reasons:

- Gender stereotyping, especially in the rural areas.
- Lack of female role models. For instance, of the 547 female teachers in the sample, only 45 (8.2%) taught Numeracy in P 6.

Recommendations:

- Sensitize the community.
- Popularise Mathematics and Science to female students in secondary schools.
- Use affirmative action to increase the enrolment of females into the PTCs.

10.2.3 ACHIEVEMENT OF PUPILS BY AGE

Result:

Pupils of about 8 years in P 3 and 11 years in P 6 performed best. The performance of pupils then declined as age increased.

Reasons:

- Children who are too young may not have the intellectual capacity to understand certain concepts and older children may have distractors to school attendance, such as petty trade.
- Some of the older pupils Maybe orphans, who are family heads.
- Some of the older pupils may have learning difficulties.

- Encourage parents to send children to school at the right age.
- Introduce programs that can interest older pupils in schools.
- Schools to obtain comprehensive bio data on every pupil.

10.2.4 ACHIEVEMENT OF PUPILS BY SCHOOL OWNERSHIP

Result:

 Both P 3 and P 6 pupils in private schools performed better than their counterparts in government schools in the two subjects. The difference was greater for P 6 than P 3 and in Literacy in comparison to Numeracy. Besides, boys and girls in private schools performed at about the same levels in both subjects, while in government schools, P 6 boys did better than girls in Numeracy.

Reasons:

- Many government schools have high pupil-teacher ratio.
- Better time management in private schools, therefore more time on task.
- More and better utilized reading materials in private schools.
- Demand for accountability by parents compels the school administration in private schools to strive to deliver.
- Competition by private schools for 'good' clientele'.
- More parental involvement in their children's daily school work in private schools. (Headteachers' report, Table 9.02)
- Most private schools are in urban centres, therefore more exposure to newspapers, and TVs, which is likely to aid one's reading skills.
- Most pupils in private schools use English at home and they attend nursery schools, where they learn the basic competencies of Numeracy and Literacy.
- Lower rate of absenteeism among teachers and pupils in private schools. (Headteachers' reported this Table 9.02)
- Pupils in private schools mainly come from homes with educated parents who treat boys and girls equally. Parents in government schools, especially in rural areas, still have gender stereotyping.

- Reduce the class sizes in government schools by recruiting more teachers and building more classrooms.
- Strengthen the mechanism of tracking teachers' and pupils' attendance in government schools.
- Ensure increased monitoring and supervision in government schools.
- Sensitize and devise measures to ensure that parents play roles in the education of their children.

10.2.5 ACHIEVEMENT OF PUPILS BY SCHOOL LOCATION

Results:

Pupils in urban schools performed better than those in schools in rural areas, particularly at P 6. The disparity was also wider for Literacy compared to Numeracy.

Reasons:

- More exposure in urban schools, due to availability of newspapers and televisions.
- Social amenities in urban areas makes it possible for pupils to study even at home.
- Most parents in urban areas are educated and are in gainful employment, so can buy the school requirements for their children. Headteachers of government schools, which are mainly in rural areas, reported parents' laxity to provide school requirements as a key challenge (Table 9.02)
- Teachers in rural areas are more frequently absent. They engage in agriculture and other activities during school time. Less contact time.
- Less supervision support.

Recommendations:

- Train teachers to make instructional materials, and to help pupils also to make some.
- Enact and enforce a bylaw which compels parents to play their roles effectively.
- Increase supervision in rural schools

10.2.6 ACHIEVEMENT OF PUPILS BY DISTRICT

Results:

- Generally each district obtained the same ranking in both classes. In other words if a district is rated 'green' at P 3 it is most likely to be rated 'green' at P 6 as well. The few that did not follow this trend, had lower rating at P 6 compared to the rating at P 3.
- In both P 3 and P 6, the majority of pupils (over 75%) from Bushenyi, Kampala, Kiruhura, Masaka, Mbarara and Sheema districts were rated proficient.

• The following districts: Agago, Alebtong, Amuria, Amuru, Bukedea, Bukwo, Dokolo, Kole, Kumi, Luuka, Manafwa, Nwoya, Oyam, Pader and Pallisa had very few pupils in both classes rated proficient.

Reasons:

- Kampala is the capital of the country with urbanized setting and social amenities, which promote learning.
- Perhaps there is more parental involvement in the districts which performed well.
- Most of the districts which had few pupils rated proficient are new and may be facing challenges, such as absence of a fully functional education department in the district.
- Rice growing in Pallisa could lead to pupils' absenteeism.

Recommendation:

- Find out the good practices in the well performing districts and replicate them in other districts.
- Identify and address the challenges currently faced by the new districts.

10.2.7 ACHIEVEMENT OF PUPILS IN THE YEARS 2007 -2011

Results:

- In Numeracy, the achievement of both P 3 and P 6 pupils improved in 2008, as reflected by the increase in the percentages of pupils who reached the defined proficiency levels. The achievement levels then remained almost constant in 2008-2010, with about 72% of the P 3 pupils and 55% of the P 6 pupils rated proficient. This year, 2011, however, the proportions of the pupils rated proficient dropped to 63.0% at P 3 and 45.6% at P 6.
- In Literacy, the achievement level of P 3 pupils rose in 2009 and remained almost constant, with about 55% of the pupils rated proficient. At P6 in 2007-2011 the proportions of the pupils reaching the defined proficiency level remained approximately the same; about 50%. However, in 2011, the respective proportions of P 3 and P 6 pupils rated proficient dropped to 47.9% and 41.3%.

Reasons:

- Sudden increase in the number of districts, from 80 in 2009 to 87 in 2010, and then to 112 in 2011; an increase of 29%. Many of the new districts could have faced challenges; such as high rate of absenteeism among pupils and teachers, because the education administrators and inspectors who could supervise and monitor the teaching-learning process, mostly operated from the mother district. Even the services in the mother district could have been adversely affected, as it had to share the personnel and facilities with the new districts. Indeed, of the four districts that performed at a very low levels in all the subjects: Alebtong, Nwoya, Kole and Pallisa, the first three gained district status in 2011.
- Rising school enrolments, unmatched by increase in resources. Consequently, primary schools faced a number of challenges: high pupil-teacher ratio and inadequate instructional materials. The schools also confirmed this. (Tables 9.02 and 9.03)
- Global economic crisis, which led to a rise in the cost of many commodities; fuel, food stuff and even scholastic materials. A number of families could hardly afford more than one meal a day. School reported that pupils and teachers had no lunch (Tables 9.02)
- Natural disasters: land slides, floods and lightning. These disrupted the flow of school programs, as some pupils and teachers were not able to access schools and others were displaced. Lack of accommodation for teachers in most schools made the situation worse.
- Unreliable electricity (load shedding) could have made it difficult for some children to do their homework properly.
- The political campaigns which preceded the national elections of 2011 probably affected the school operations. Perhaps teachers were involved in the campaigns and in the preparation and organization for the polls in their areas. Maybe pupils were also attracted to political rallies, especially by the music blaring from loud speakers. The public holidays on voting days and the celebrations that followed; all could have led to loss in time on task.

Recommendations:

- Continue and expedite the provision of the necessary infrastructure and facilities in all the districts.
- Reduce the pupil-teacher ratio by training and recruiting more teachers.
- Provide sufficient instructional materials, especially for the thematic curriculum (some teachers claimed teaching the thematic curriculum was difficult, (Tables 9.03).
- Release the UPE funds on time to allow schools to plan how to effectively use it.

10.3 ACHIEVEMENT OF TEACHERS

10.3.1 OVERALL LEVEL OF ACHIEVEMENT OF TEACHERS

Results:

The majority (about 7 in 10) of the teachers reached the defined proficiency level in each of Numeracy and Literacy, but only about 4 in 10 reached a similar rating in Oral Reading.

Reasons:

- Perhaps Oral Reading is not emphasized in the Teacher Training Colleges. Maybe it is assumed that it is adequately covered in the lower levels of education.
- Lack of reading culture.
- Use of slang in spoken English.
- Insufficient books.

- Train student teachers and in-service teachers in reading skills.
- Introduce reading contests in training colleges.
- Provide sufficient and a variety of books in schools.

Results:

- Nearly all the teachers performed well in the competencies of 'Measures' and 'Operations on numbers'.
- Teachers were also able to among others.
 - Interpret pictograms.
 - Draw a circle and measure lengths accurately.

Teachers had difficulty in

- Rounding off numbers to a specified number of decimal points.
- Dividing a fraction by a fraction.
- Applying the concept of fractions in novel situations.
- Finding the LCM and square roots of numbers.
- Drawing bar graphs, with well labelled axes and suitable scales.
- Drawing parallel lines and measuring angels accurately.

Reasons:

- Absence of mental arithmetic in colleges and schools.
- Teaching and learning abstract concepts without relating to real life situations.
- Inadequate geometrical instruments.
- Use of assessment which tests LOTS, other than HOTS, in colleges and schools.

- Re-introduce mental arithmetic in colleges and schools.
- Train pre and in-service teachers to practically relate what they teach to real life situations.
- Provide enough geometrical instruments.
- Train tutors and teachers to use teaching approaches which enhance the development of critical thinking skills.
- Train tutors and teachers in assessment techniques.
- Introduce mathematics contest in colleges and among teachers in schools.

10.3.2.2 ACHIEVEMENT OF TEACHERS IN LITERACY

Results:

- The teachers could read and interpret a sign post and a calendar.
- Read and describe the activities in a picture.
- Write a guided composition and neatly complete an application form.
- Use given structures and vocabularies correctly.

Teachers had difficulty in

- Reading and answering questions on a poem.
- Reading and interpreting a picture sequence.
- Writing a well sequenced narrative composition, using the correct format.
- Naming objects with the correct spellings.
- Identifying opposites and giving plurals.

Reasons:

- High student-tutor ratio in colleges.
- Some tutors may lack the skills to teach reading.
- Insufficient reading materials for teachers. Headteachers cited this as the major challenge they had in pedagogy.
- Limited exposure.
- Limited practice in writing composition, while in college because of the difficulty of marking it.
- Inadequate time for the teacher to have personal study.

Recommendations:

- Train and recruit more tutors so as to lower the student-tutor ratio.
- Train tutors in the skills to teach reading.
- Stock the libraries in colleges and schools with a variety of reading materials.
- Encourage teachers to make more effective use of the resource centres.

10.3.2.3 ACHIEVEMENT OF TEACHERS IN ORAL READING

Results:

- Teachers could
 - read most of the words correctly, especially the words; 'confidence' and 'beautiful'.
 - read a sentence comprising a list of items and a sentence with exclamation marks.
 - read a story coherently.

Teacher had difficulty in:

- reading the words: 'advertisement', 'engage', 'built' and 'bathe'.
- reading a sentence in which the word 'present' was used as a verb; and a sentence with a question mark, as well as one with the question tag 'aren't you?'
- reading a story with the correct punctuation and intonation.

Reasons:

- Mother tongue interference.
- Inadequate reading skills. For instance, reading a sentence, by reading one word at a time.
- Limited use of spoken English.

Recommendations:

- Train tutors on how to teach reading.
- Encourage the use of correct English by holding reading and writing contests for pre- and in-service teachers.

10.3.3 ACHIEVEMENT OF TEACHERS BY GENDER

Result:

• Male and female teachers performed at about the same level in Literacy and Oral Reading, male teachers performed better in Numeracy.

Reason:

• Gender stereotyping, especially in the rural areas. For instance more of the male teachers taught Mathematics, while more females taught English.

Recommendations:

- Devise a strategy, to attract females into the tutor training colleges, so that they can be role models to female student teachers.
- Apply affirmative action, so as to admit more female Mathematics and Science students into the tutor's and teacher training colleges.

10.3.4 ACHIEVEMENT OF TEACHERS BY AGE

Result:

There was no significant variation in the performance of teachers with age.

10.3.5 ACHIEVEMENT OF TEACHERS BY MARITAL STATUS

Result:

• Both single and married teachers performed at the same level.

Reason:

• Being single or married, per se cannot affect one's performance. Other factors, such as parenting and family responsibility, are the ones that could affect performance.

Recommendation:

• Provide psycho-social support services for teachers which they can use in case of challenges in the family.

10.3.6 ACHIEVEMENT OF TEACHERS BY THE HIGHEST ACADEMIC QUALIFICATION

Result:

• Teachers who had UACE as the highest academic qualification performed better than those with UCE.

Reason:

• The teachers with UACE could have been more grounded in the subject matter.

Recommendation:

- Consider raising entry qualification in PTCs to UACE.
- 10.3.7 ACHIEVEMENT OF TEACHERS BY THE HIGHEST TEACHING QUALIFICATION

Result:

• There was no significant difference in the performance of teachers by the highest teaching qualification, though the grade V holders performed slightly better than grade III holders in Oral Reading.

Reasons:

- Most of the grade V teachers, start as grade III and then upgrade, implying that the two categories of teachers have the same level of academic qualification.
- Maybe during the grade V course teachers do more personal study as they carry out a research and write a dissertation. This could help them to improve on their reading skills.

Recommendation:

• Identify teachers who are good at reading in every district, re-train them and use them to train the others during school holidays.

10.3.8 ACHIEVEMENT OF TEACHERS BY TEACHING EXPERIENCE

Results:

• There was no difference in the performance of teachers of different teaching experiences.

Reason:

It is not the length of teaching experience per se that matters, but the professional experiences that one gets in the course of service.

Recommendation:

Ensure that there is opportunity for teachers' regular in-service professional development.

10.3.9 ACHIEVEMENT OF TEACHERS BY THE CLASS THEY TAUGHT

Results:

• In each subject, more P 6 than P 3 teachers were rated proficient. The gap was widest in Numeracy.

Reasons:

- P 6 teachers deal with a wider subject matter. They are likely to read and research more.
- As the P 6 teachers prepare and teach, they also learn and so are able to keep abreast with a larger portion of the curriculum.
- P 3 teachers teach simpler concepts and skills, which do not call for a lot of research and preparation. As a result, they may even forget some of the content they had learnt earlier on in secondary school and college.

Recommendations:

- Hold refresher courses regularly, with a focus on both subject matter and methodology.
- Within the school, rotate the classes among the teachers, say on yearly basis.

10.3.10 ACHIEVEMENT OF TEACHERS BY THE SUBJECT THEY TAUGHT MOST

Result:

• Teachers performed better in their main teaching subject than in the subject they did not teach or taught just occasionally.

Reasons:

- Teachers get practice as they plan, prepare and teach a subject. Those who do not teach a particular subject may forget even what they had learnt earlier on in life.
- Some teachers may not have interest in certain subjects.

Recommendation:

• Allow subject specialization at the school level, especially in upper primary classes.

10.3.11 ACHIEVEMENT OF TEACHERS BY SCHOOL OWNERSHIP

Result:

• Slightly more teachers in government schools than those in private schools were rated proficient in Numeracy. In Literacy and Oral Reading, teachers in private schools were slightly better, but the differences were not significant.

Reasons:

- Teachers in both government and private schools are trained in the same training institutions, so not much difference is expected in their performance.
- Teachers in private schools are more exposed to reading materials, since most private schools are in urban areas. This may enhance their reading skills.
- More use of English in private schools.

- Provide more reading and reference materials for teachers in government schools.
- Encourage sharing and replication of good practice among teachers and schools.

Result:

• Though the differences were not significant, teachers in the rural schools performed slightly better in Numeracy in comparison to those in urban schools. Conversely, teachers in urban schools performed better in Literacy and Oral Reading.

Reasons:

- There are more activities in rural areas which can enhance Numeracy skills. For example, construction of huts and stands for drying crockery; measuring gardens to demarcate portions to be dug; and estimating the amount of food items to be stored in a particular container.
- There is more literature in urban areas; therefore more exposure.
- More use of English in urban areas.

Recommendations:

- Provide more reading and reference materials for teachers.
- Encourage sharing and replication of good practice among teachers and schools.

10.3.13 ACHIEVEMENT OF TEACHERS BY ZONE

Results:

• Teachers in all the zones did fairly well in Numeracy and Literacy. However, the teachers' level of performance in Oral Reading was low especially in Mid North I and II, Central III and Mid East I, where less than a third of the teachers reached the defined proficiency level.

Reasons:

 Mid North I and II: As a result of the war in the region, infrastructure and facilities were destroyed. These are just being replaced. Moreover, teachers' main concern, like everyone else was survival means, leading to a dearth of reading culture.

- Central III: One of the districts in this zone is Kalangala, which is an island on Lake Victoria. Other districts are located by the shores of the lake. Maybe teachers engage in fishing, which distracts them from their professional work.
- Mid East I: The zone around Mt. Elgon. The zone constantly suffers from natural disasters, like land slides and floods. It is also at the Kenya boarder. Perhaps the teacher spend a lot of time in cross border trade.

- Apply targeted interventions to the districts with poor performance.
- Identify good practices in certain districts and replicate them in others.

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