THE ACHIEVEMENT OF PRIMARY SCHOOL PUPILS IN UGANDA IN NUMERACY AND LITERACY IN ENGILISH

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ACRONYMS AND ABBREVIATIONS

CCT	Centre Coordinating Tutor
DC	District Coordinator
DEO	District Education Officer
DES	Directorate of Education Standards
DIS	District Inspector of Schools
DTE	Diploma in Teacher Education
EFA	Education For All
EMIS	Education Management Information System
EPRC	Education Policy Review Commission
ESC	Education Service Commission
HOTS	Higher Order Thinking Skills
LCM	Lowest Common Multiple
LG	Local Government
LOTS	Low Order Thinking Skills
MDGs	Millennium Development Goals
MoES	Ministry of Education and Sports
MoLG	Ministry of Local Government
NAPE	National Assessment of Progress in Education
NCDC	National Curriculum Development Centre
PTA	Parents Teachers' Association
P 3	Primary Three
P 6	Primary Six
PLE	Primary Leaving Examination
PTCs	Primary Teachers College
QEIs	Quality Enhancement Initiatives
S.E	Standard Error
SMCs	School Management Committees
TIE	Teacher Instructor Education
TLs	Team Leaders
UNEB	Uganda National Examinations Board
UPE	Universal Primary Education

A WORD FROM THE MINISTER

The economic growth and development of a country depends on its education system. This is because the quality of education in a country determines the quality of the population and workforce of a country. With the target year 2015 for the realization of the eight Millennium Development Goals (MDGs), there is clear indication that much has been achieved though still a lot more needs to be done.

As a country, we have made remarkable progress in the realization of the MDGs, especially in the sphere of Primary Education, through the Universal Primary Education (UPE) programme. There is no doubt that UPE has helped a lot of our children and it still has many upcoming citizens to see through.

The Ministry of Education and Sports is doing a lot in the construction and renovation of schools, and equipping them with personnel and instructional materials. The Ministry plans to have model UPE schools which can always be used as examples for other schools in the country. With proper management of schools by stakeholders, we should have excellent free education in the near future.

Over the years, Uganda National Examinations Board (UNEB) has been implementing national assessment at the primary education level. National assessment is, among others, aimed at determining pupils' learning achievement levels and monitoring the effectiveness of the education system and the changes in achievement levels over time. All this is done with the primary objective of improving the pupils' learning achievement through improving the quality of teaching and learning.

National Assessment of Progress in Education (NAPE) provides information about the achievement levels of learners, which information greatly opens our eyes on the health of our education system and its processes.

The findings of NAPE have, over the years, continued to provide information that has helped government and all other stakeholders in education to steer the education system in the right direction.

This report is an addition to the many other findings that have been reported by NAPE over the years. It is, therefore, my humble request to all stakeholders in education to use the findings for the betterment of our children's learning and the education system in general.

Hon. Major (Rtd) Alupo Jessica Rose Epel, (MP)
Minister of Education & Sports

FOREWORD

National assessment has become increasingly necessary, not only for determining and monitoring pupils' learning achievement levels but for improving the quality of education as well.

The government of Uganda, through the Education Sector, continues to put effort and resources towards the expansion of opportunities for access to equitable and quality education at all levels of education. This is done hand in hand with enhancement of efficiency and effectiveness in service delivery. For instance, extension of universal education to cover upper secondary and enhancing Public Private Partnership (PPP) from 2007 in 363 schools to 2011 in 743 schools.

The government has also catered for cross-cutting issues. For instance HIV/AIDS awareness, gender in education, monitoring school inspection, resourcing special needs education (SNE), guidance and counseling and emphasizing physical education and sports, which, if undermined, would negatively affect the intended goals of learning.

National Assessment of Progress in Education (NAPE) annually carries out assessment of learners' achievement, to determine the achieved proficiency levels in, among other areas, Numeracy and Literacy in English at the Primary education level in the classes of Primary Three and Six. This started in 1996.

This is the eleventh volume of the annual publication of NAPE at the primary level. It contains invaluable findings and suggested recommendations that are useful to different stakeholders. 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 learners to politicians and academicians.

It is my hope, that all stakeholders in education make use of this report for the improvement of the quality of education in Uganda. We do welcome any feedback that you care to give.

M B B Bukenya
EXECUTIVE SECRETARY

EXECUTIVE SUMMARY

Among the objectives of the 2012 NAPE survey were to determine the level of achievement of P 3 and P 6 pupils in Numeracy and Literacy in English, and to establish the variables that influence achievement.

The sample consisted of 24,358 P 3 pupils and 24,193 P 6 pupils, drawn from 1,232 primary schools selected from the 112 districts of Uganda.

Overall Level of Achievement

More than a half of the P 3 pupils were rated proficient in Numeracy and Literacy in English and there was no significant gender disparity in the achievement levels. At P 6, pupil's performance was slightly below average in the two subject areas and more boys than girls attained the desired rating in Numeracy. Boys and girls performed at nearly the same level in Literacy in English.

Variables that influence Achievement:

Gender

P 3 boys and girls performed very well in Numeracy and Literacy in English and there was no significant gender difference in their achievement levels. Performance of P 6 boys and girls was relatively below average in both subject areas, and only significantly different in Numeracy with more boys than girls rated proficient. Though more girls than boys were rated proficient in Literacy in English, the difference was not significant. May be, equal continued support to the girl children will create a more positive difference in their achievement.

Age

High performance of above average was registered by pupils aged 8 years old and below at P 3, and by those aged 12 years and below at P 6. This calls for parents to send children to school in P 1 at the recommended age of six years and to ensure a conducive environment for them to enjoy staying in school.

School ownership

Generally, pupils in private schools performed better than their counterparts in government schools. This could be partly due to better time management and effective supervision which is more common in private schools compared to government schools.

School location

Performance of pupils in urban schools was better compared to their counterparts in rural schools. This trend of achievement is possibly due to better conducive environment for teaching and learning in the urban setting compared to what pertains in the rural area.

Districts

High proportions of pupils in both P 3 and P 6 in the districts of Bushenyi, Kiruhura, Mbarara, Rubirizi and Sheema were rated proficient. However, very low achievement levels in both classes were registered in the districts of Alebtong, Amolatar, Amuru, Bukomansimbi, Bukwo, Buliisa, Gomba, Dokolo, Kaberamaido, Kamuli, Kaliro, Kole, Kween, Kyankwanzi, Lamwo, Luuka, Manafwa, Mbale, Nwoya, Oyam, Pallisa, Serere and Zombo. This signifies the need to identify and address the challenges currently faced by the new districts in particular, and any other districts with few pupils rated proficient.

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 29^0 34'E and 35^0 0' E; astride the equator. It has a total area of 241,550.7 square kilometers of which land accounts for 199,807.4 square kilometers and the rest, 41,743.2 square kilometers, is open water and swamps[1]. 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 Southern 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 of 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; indicating 29% increase (see map on page 4). Owing to the decentralization policy, the districts are administered by the Local Governments, which are supervised by the Central Government's Ministry of Local Government.

Uganda's population has continued to grow rapidly over time. It increased from 9.5 million in 1969 to 24.2 million as at 13th September 2002 and it was projected at 34.1 million by mid-2012[2]. The population is increasingly becoming urban from less than 0.8 million persons in 1980 to 5.0 million persons in 2012[3]. This is good news in the struggle to provide quality education as urban areas tend to have better social amenities which attract better skilled manpower to work in the schools. On the other hand, 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

[1] Uganda Bureau of Statistics, 2012 Statistical Abstract, Page 1 http://www.ubos.org
[2] Uganda Bureau of Statistics, 2012 Statistical Abstract, Page 9 http://www.ubos.org
[3] Uganda Bureau of Statistics, 2012 Statistical Abstract, Page 10 http://www.ubos.org

increase from 8.4 million in 2010 to 18.4 million in 2037[4]. 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. According to the language policy in the country the local language of an area is supposed to be used as the medium of instruction in lower primary in the rural areas, while English is taught as a subject. On the other hand, English is the medium of instruction in the upper primary level and in institutions of higher learning. Kiswahili is also taught in some primary and secondary schools.
A list of the districts in Uganda showing the zones and regions as well as the major languages is shown in Table 1.01

TABLE 1.01: REGIONS, ZONES AND DISTRICTS IN UGANDA AND 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,	Alur, Kakwa,

[4] Ministry of Finance and Economic Development, Population Secretariat: *Uganda – Population Factors and National Development, January 2010, Pg 2*

REGION	ZONE	DISTRICTS	MAJOR LANGUAGES
		Moyo, Nebbi, Yumbe, Zombo.	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, Lugungu.
	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 a 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 Cons titution 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* JOMOTEIN *World Conference on Education for All* (EFA) and *The Millennium Development Goals* (MDGs), Government introduced Universal Primary Education (UPE) in 1997, followed by Universal Secondary Education ten years later.

Regarding equity, gender parity has almost been achieved at the primary level. In 2010, the then Minister of Education and Sports launched *The Gender Policy in Education* 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 of pupils.

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 was first carried out in the year 1996 at the primary level.

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 primary six (P 6), before pupils reach the final year

of the cycle, to allow for the necessary remedial measures to be implemented.

1.3.1 Objectives Of NAPE

The main objectives of NAPE are to:

- 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.

1.4 THE 2012 NAPE STUDY

This volume presents the results of the 2012 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 English[5] in Chapter 4, Numeracy for P 6 pupils in Chapter 5, and P 6 Literacy in English in Chapter 6. Finally, the conclusions, discussion and recommendations are given in Chapter 7. The results are presented in terms of the overall mean scores and percentages of pupils achieving the desired levels of proficiency. Statistics are also provided by gender, age, school ownership (government or private), location (urban or rural) and district.

The 2012 survey had the following objectives:

1. Determine the level of pupils' achievement in Numeracy and Literacy.
2. Examine pupils' performance in the competencies of Numeracy and Literacy.
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 2012.

[5] Also referred to as Literacy in this Report.

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. 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, 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	18
Associating a number of objects to a number	9
Writing number symbols from words & vice versa	5
Identifying place values	11
Adding numbers	11
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 selling	6
Solving sums involving capacity in daily life	2
Interpreting and drawing graphs	8
Writing and drawing fractions, and forming sets	4
TOTAL	**104**

TABLE 2.02: COMPOSITION OF P 3 LITERACY TEST BY COMPETENCIES

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

TABLE 2.03: COMPOSITION OF P 6 NUMERACY BY TOPICAL AREAS

TOPICAL AREAS		**WEIGHT (%)**
Operation on Numbers:		
	Addition of numbers	5
	Subtraction of numbers	5
	Multiplication of numbers	6
	Division of numbers	5
	Use of symbols >, < to compare numbers	1
	Use brackets to show order in which combined operations (x, +) must be performed.	2
Number Systems and Place Values		10
Number Patterns and Sequence		13
Measures		18
Graphs and Interpretations		10
Fractions		29
Geometry		14
TOTAL		**118**

TABLE 2.04: COMPOSITION OF P 6 LITERACY IN ENGLISH TEST BY COMPETENCIES

SKILL AREA	COMPETENCIES	WEIGHT (%)	
Reading Comprehension	• Associating names in words to the objects	1	
	• 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 cartoon	5	
	• Reading and answering questions on a poem	7	
	• Reading and answering questions on a story	9	
Writing	• Drawing named objects	3	
	• Writing words correctly	3	
	• Completing an application form	7	
	• Writing a letter giving specific information	10	40
	• Naming objects	2	
	• Writing a simple guided composition	5	
	• Writing a short composition	10	
Grammar	• Using comparatives and superlatives 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 THE ATTENDANCE REGISTER

The attendance register was used to obtain information on the pupil enrolment and actual attendance of pupils by gender in each of the sampled schools. The Head teacher's contact was also obtained to help UNEB in cross-checking the correctness of information provided on schools.

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 by July 2012.

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 within a district 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, it eases manageability, since most classrooms in Uganda take up to about 20 test takers, with appropriate spacing. Thirdly, 20 test takers can be effectively supervised by one test administrator.

2.3.5 SAMPLE SIZE

The national sample comprised of 1,232 primary schools: 24,193 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 2.05: NUMBER OF SCHOOLS IN THE SAMPLE AND IN THE SAMPLING FRAME, BY DISTRICT

REGION	ZONE	DISTRICTS
Central (279; 4519)	Central I (111; 2031)	Buikwe (16; 278)*, Butambala (10; 86), Buvuma (10; 20), Gomba (10; 110), Kayunga (10; 232), Mpigi (10; 150), Mukono† (19; 383), Wakiso (26; 772).
	Central II (83; 1430)	Kiboga (10; 108), Kyankwanzi (10; 133), Luweero (17; 316), Mityana (10; 236), Mubende (16; 315), Nakaseke (10; 138), Nakasongola (10; 184).
	Central III (85; 1058)	Bukomansimbi (10; 93), Kalangala (9; 27), Kalungu (10; 98), Lwengo (10; 157), Lyantonde (10; 46), Masaka (10; 147), Rakai (16; 269), Sembabule (10; 221).
East (330; 3903)	Far East (82; 774)	Amuria (10; 121), Bukedea (10; 88),Kaberamaido (10; 99), Katakwi (10; 76), Kumi (10; 95), Ngora† (11; 63), Serere (10; 56), Soroti† (11; 176).
	Mid East I (81; 837)	Bududa (10; 120), Bukwo (10; 64), Bulambuli (10; 59), Kapchorwa (10; 64), Kween (10; 60), Manafwa† (11; 167), Mbale (10; 182), Sironko (10; 121).
	Mid East II (61; 748)	Budaka† (11; 68), Busia (10; 145), Butaleja (10; 115), Kibuku (10; 60), Pallisa (10; 145), Tororo (10; 215).
	Near East (106; 1544)	Bugiri (10; 213), Buyende (10; 100), Iganga† (11; 192), Jinja (10; 185), Kaliro (10; 124), Kamuli (15; 223), Luuka (10; 104), Mayuge (10; 180), Namayingo (10; 104), Namutumba (10; 119).
North (303; 2598)	Mid North I (83; 688)	Alebtong (10; 78), Amolatar (10; 58), Apac† (11; 131), Dokolo (10; 71), Kole (10; 62), Lira† (12; 128), Otuke (10; 47), Oyam (10; 113).
	Mid North II (70; 670)	Agago (10; 116), Amuru (10; 56), Gulu (10; 160), Kitgum (10; 110), Lamwo (10; 73), Nwoya (10; 44), Pader (10; 111).
	North East (63; 252)	Abim (10; 48), Amudat (3; 11), Kaabong (10; 63), Kotido (10; 26), Moroto (10; 24), Nakapiripirit (10; 44), Napak (10; 36).
	West Nile (87; 988)	Adjumani (10; 77), Arua (17; 293), Koboko (10; 68), Maracha (10; 65), Moyo (10; 76), Nebbi (10; 185), Yumbe (10; 128), Zombo (10; 96).
West (296; 5461)	Far West (48; 967)	Kabale (18; 353), Kanungu (10; 190), Kisoro (10; 157), Rukungiri (10; 267).
	Mid West (79; 1228)	Bundibugyo (10; 111), Kabarole (10; 167), Kamwenge (10; 225), Kasese (19; 432),Kyegegwa (10; 86), Kyenjojo (10; 166), Ntoroko (10; 41).
	North West (57; 1029)	Buliisa (10; 35), Hoima (10; 223), Kibaale (17; 561), Kiryandongo (10; 95), Masindi (10; 115).
	South West (112; 2237)	Buhweju (10; 73), Bushenyi (10; 196), Ibanda (10; 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)

* 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.

2.3.6 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.

2.3.6.1.1 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.

TABLE 2.06: DISTRIBUTION OF P 3 PUPILS IN THE ACHIEVED SAMPLE BY AGE AND GENDER

AGE (YEARS)	BOYS		GIRLS		ALL	
	N	Percentage	N	Percentage	N	Percentage
6 – 7	106	0.9	159	1.3	265	1.1
8	803	6.4	1,315	11.1	2,118	8.7
9	1,749	14.0	2,362	19.9	4,111	16.9
10	3,377	27.0	3,574	30.2	6,951	28.5
11	2,399	19.2	1,897	16.0	4,296	17.6
12	2,542	20.3	1,821	15.4	4,363	17.9
12+[γ]	1,527	12.2	727	6.1	2,254	9.3
Total	**12,503**	**100.0**	**11,855**	**100.0**	**24,358[6]**	**100.0**

The mean age at P 3 was 10.3 years: boys–10.6 years and girls 10.1 years.

[γ]Age above 12 years

[6]Discrepancy due to two pupils who did not indicate their age.

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

SCHOOL OWNERSHIP	BOYS		GIRLS		ALL	
	N	Percentage	N	Percentage	N	Percentage
Government	11,052	51.4	10,432	48.6	21,484	88.2
Private	1,451	50.5	1,423	49.5	2,874	11.8
Total	**12,503**	**51.3**	**11,855**	**48.7**	**24,358**	**100.0**

TABLE 2.08: DISTRIBUTION OF P 3 PUPILS IN THE ACHIEVED SAMPLE BY SCHOOL LOCATION AND GENDER

SCHOOL LOCATION	BOYS		GIRLS		ALL	
	N	Percentage	N	Percentage	N	Percentage
Urban	2,075	49.9	2,083	50.1	4,158	17.1
Rural	10,428	51.6	9,772	48.4	20,200	82.9
Total	**12,503**	**51.3**	**11,855**	**48.7**	**24,358**	**100.0**

TABLE 2.09: THE DISTRIBUTION OF P 3 PUPILS IN THE ACHIEVED SAMPLE BY DISTRICT AND GENDER

REGION	ZONE	DISTRICT
Central (5523; 2691)	Central I (2176; 1061)	Buikwe (320; 145)[α], Butambala (198; 98) Buvuma (200;104), Gomba (190; 92), Kayunga (200; 97), Mpigi (198; 97), Mukono (357; 186), Wakiso (520; 276).
	Central II (1652; 782)	Kiboga (200; 94), Kyankwanzi (200; 101), Luweero(331; 161) Mityana (190; 90), Mubende (320; 159), Nakaseke (193; 88), Nakasongola (197; 97).
	Central III (1695; 848)	Bukomansimbi (200; 102), Kalangala (163; 72), Kalungu (200; 105), Lwengo (193; 120), Lyantonde (194; 89), Masaka (200; 99), Rakai (320; 159), Sembabule (200; 95).
East (6541; 3252)	Far East (1616; 777)	Amuria (200; 101), Bukedea (200; 106), Kaberamaido (200; 106), Katakwi (200; 91), Kumi (200; 98), Ngora (218; 113), Serere (200; 82), Soroti (200; 1006).
	Mid East I (1606; 806)	Bududa (200; 99), Bukwo (200; 93), Bulambuli (198; 109), Kapchorwa (200; 108), Kween (200; 101), Manafwa (200; 101), Mbale (200; 95), Sironko (200; 94).
	Mid East II (1208; 594)	Budaka (209; 91), Busia (200; 115), Butaleja (200; 96), Kibuku (200; 98),Pallisa (200; 104), Tororo (200; 92).
	Near East (2111; 1075)	Bugiri (200; 104), Buyende (200; 103), Iganga (200; 103), Jinja (200; 88), Kaliro (200; 102), Kamuli (300; 131), Luuka (196; 100), Mayuge (200; 97), Namayingo (200; 92), Namutumba (200; 98).
North (6114; 2888)	Mid North I (1657; 824)	Alebtong (200; 88), Amolatar (191; 87), Apac (220; 96), Dokolo (200; 91), Kole (200; 102), Lira (235; 103), Otuke (200; 97), Oyam (200; 106).
	Mid North II (1398; 679)	Agago (198; 95), Amuru (198; 98), Gulu (200; 103), Lamwo (200; 87), Kitgum (200; 86), Nwoya (200; 108), Pader (200; 99).
	North East (1319; 530)	Abim (198; 90), Amudat (60; 26), Kaabong (200; 57), Kotido (200; 84), Moroto (194; 69), Nakapiripirit (200; 79), Napak (200; 71).
	West Nile (1740; 855)	Adjumani (200; 91), Arua (335; 158), Koboko (198; 102), Maracha (200; 90), Moyo (192; 92), Nebbi (200; 99), Yumbe (200; 94), Zombo (200; 85).
West (5881; 2785)	Far West (944; 450)	Kabale (359; 172), Kanungu (197; 102), Kisoro (200; 99), Rukungiri (200; 101).
	Mid West (1579; 737)	Bundibugyo (189; 88), Kabarole (200; 102), Kamwenge (199; 103), Kasese (373; 191), Kyegegwa (200; 103), Kyenjojo (200; 87), Ntoroko (200; 101).
	North West (1140; 535)	Buliisa (200; 83), Hoima (200; 111), Kibaale (340; 156), Kiryandongo (194; 112), Masindi (200; 89).
	South West (2218; 1063)	Buhweju (198; 106), Bushenyi (200; 102), Ibanda (200; 106), Isingiro (200; 102), Kiruhura (194; 108), Mbarara (320; 154), Mitooma(185; 100), Ntungamo (318; 162), Rubirizi (200; 105), Sheema (193; 101).
Kampala	Kampala	Kampala (475; 233).
Uganda		(24,358; 11,855)

[α] The first figure shows the number of pupils in the sample. The second is the number of girls in the sample.

2.3.6.1.2 DISTRIBUTION OF P 6 PUPILS IN THE ACHIEVED SAMPLE

The distributions 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.

TABLE 2.10: DISTRIBUTION OF P 6 PUPILS IN THE ACHIEVED SAMPLE BY AGE AND GENDER

AGE (years)	BOYS		GIRLS		ALL	
	N	Percentage	N	Percentage	N	Percentage
9 – 10	83	0.7	129	1.1	212	0.9
11	395	3.2	601	5.0	996	4.0
12	1,652	13.5	2,016	16.9	3,668	15.2
13	3,025	24.7	3,534	29.5	6,559	27.1
14	3,496	28.6	3,440	28.8	6,936	28.7
15	2,149	17.6	1,618	13.5	3,767	15.6
15+[γ]	1,426	11.7	625	5.2	2,051	8.5
Total	12,226	100.0	11,963	100.0	24,189[7]	100.00

[γ]Age above 15 years
[7]Discrepancy in number due to one pupil who did not indicate her age.

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

SCHOOL OWNERSHIP	BOYS		GIRLS		ALL	
	N	Percentage	N	Percentage	N	Percentage
Government	803	88.4	507	87.8	21,310	88.1
Private	1,424	11.6	1,459	12.2	2,883	11.9
Total	12,227	100.0	11,966	100.0	24,193	100.0

TABLE 2.12: DISTRIBUTION OF P 6 PUPILS IN THE ACHIEVED SAMPLE BY SCHOOL LOCATION AND GENDER

SCHOOL LOCATION	BOYS		GIRLS		ALL	
	N	Percentage	N	Percentage	N	Percentage
Urban	2,040	16.7	2,195	18.3	4,235	17.5
Rural	10,187	83.3	9,771	81.7	19,958	82.5
Total	12,227	100.0	11,966	100.0	24,193	100.0

TABLE 2.13: DISTRIBUTION OF P 6 PUPILS IN THE ACHIEVED SAMPLE BY DISTRICT AND GENDER

REGION	ZONE	DISTRICT
Central (5377; 2870)	Central I (2103; 1135)	Buikwe (310; 163),[α]Butambala (200; 120), Buvuma (187; 104), Gomba (188; 93), Kayunga (200; 111), Mpigi (187; 97), Mukono (343; 194), Wakiso (512; 257).
	Central II (1645; 849)	Kiboga (200; 104), Kyankwanzi (200; 91), Luweero (328; 188), Mityana (190; 96), Mubende (320; 168), Nakaseke (188; 107), Nakasongola (197; 99).
	Central III (1629; 886)	Bukomansimbi (195; 106), Kalangala (163; 85), Kalungu (198; 107), Lwengo (188; 97), Lyantonde (190; 107), Masaka (195; 111), Rakai (306; 174), Sembabule (215; 107).
East (6497; 3282)	Far East (1612; 836)	Amuria (200; 97), Bukedea (195; 93), Kaberamaido (200; 98), Katakwi (200; 101), Kumi (200; 100), Ngora (219; 107), Serere (200; 106), Soroti (200; 114).
	Mid East I (1600; 813)	Bududa (200; 110), Bukwo (200; 112), Bulambuli (192; 113), Kapchorwa (189; 96), Kween (200; 92), Manafwa (194; 106), Mbale (197; 106), Sironko (200; 91).
	Mid East II (1199; 568)	Budaka (207; 99), Busia (200; 99), Butaleja (200; 87), Kibuku (220; 107), Pallisa (198; 96), Tororo (200; 105).
	Near East (2086; 1065)	Bugiri (200; 97), Buyende (200; 101), Iganga (198; 102), Jinja (197; 109), Kaliro (220; 105), Kamuli (295; 144), Luuka (198, 83), Mayuge (194; 94), Namayingo (191; 91), Namutumba (200; 94).
North (6025; 2529)	Mid North I (1659; 739)	Alebtong (200; 81), Amolatar (203; 92), Apac (220; 95), Dokolo (200;103), Kole (200; 90), Lira (220; 110), Otuke (200; 95), Oyam (200; 96).
	Mid North II (1389; 582)	Agago (200; 82), Amuru (208; 100), Gulu (201; 95), Lamwo (200; 97), Kitgum (190; 83), Nwoya (200; 84), Pader (220; 86).
	North East (1279; 514)	Abim (199; 77), Amudat (47; 20), Kaabong (200; 59), Kotido (199; 89), Moroto (192; 83), Nakapiripirit (196; 88), Napak (200; 82).
	West Nile (1698; 694)	Adjumani (194; 86), Arua (325; 149), Koboko (190; 82), Maracha (219; 93), Moyo (189; 87), Nebbi (200; 68), Yumbe (194; 82), Zombo (188; 82).
West (5778; 2931)	Far West (947; 514)	Kabale (357; 206), Kanungu (181; 96), Kisoro (200; 92), Rukungiri (196; 107).
	Mid West (1540; 765)	Bundibugyo (172; 74), Kabarole (189; 103), Kamwenge (191; 94), Kasese (389; 213), Kyegegwa (200; 99), Kyenjojo (200; 99), Ntoroko (193; 94).
	North West (1120; 529)	Buliisa (200; 90), Hoima (200; 101), Kibaale (328; 159), Kiryandongo (197; 99), Masindi (200; 90).
	South West (2171; 1123)	Buhweju (187; 90), Bushenyi (199; 104), Ibanda (195; 99), Isingiro (198; 102), Kiruhura (189; 99), Mbarara (318; 157), Mitooma (194; 110), Ntungamo (319; 160), Rubirizi (198; 98), Sheema (190; 102).
Kampala	Kampala	(515; 272).
Uganda		(24,193; 11,966).

[α] The first figure shows the number of pupils in the sample. The second is the number of girls in the sample.

2.3.7 SAMPLING WEIGHTS

Sampling weights were computed to reflect the probability of pupils sampled and adjustments for non-responses, as well as post-stratification 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 720 officers were appointed to work as District Coordinators (DCs) and Team Leaders (TLs) of the data collection Process in schools. These officers included Secondary School teachers and personnel from UNEB, DES, NCDC, Kyambogo University, Primary Teachers' Colleges (PTCs) and the headquarters of the Ministry of Education and Sports (MoES).

The DCs and TLs had a one-day training in Kampala, guided by a pre-prepared 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 two 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 the 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, the TL and one team member attended to P 3 class while the other team member attended to P 6 class.

There was a team of monitors comprising 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 at a central venue in Kampala. The test scores and information from the Attendance Register were captured using EpiDATA (version 3.02), and analysis was done using the STATA (version 12.0) 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 level:	demonstrates competence in only rudimentary concepts and skills and the pupil is performing far below the expected level of his/her class.

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

Chapter 3

ACHIEVEMENT OF P 3 PUPILS IN NUMERACY

3.1 INTRODUCTION

This chapter presents the achievement of P 3 pupils in Numeracy. First, the general 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 competence at P 3 level. 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 specified at his/her level.

ADVANCED LEVEL
A pupil is able to: • Apply addition or subtraction of whole numbers in daily life. • Carry out buying and selling of common objects. • Apply the concept of capacity in daily life. • Draw a pictogram and interpret a bar graph. • Write number names from number symbols and vise versa. • Count numbers by eights in decreasing order.
ADEQUATE
A pupil is able to: • Complete a sequence. • Add up to three 2-digit numbers with carrying. • Subtract upto a 2-digit number from a 2-digit number with borrowing. • Multiply a 2-digit number by a 1-digit number with carrying. • Divide a 2-digit number by a 1-digit number. • Draw a unit fraction. • Count numbers in fours and sixes. • Share equally a given number of objects. • Identify the place value of a number up to hundreds.
BASIC

A pupil is able to: • Show a 3-digit number on an abacus. • Add upto three 2-digit numbers without carrying. • Subtract upto a 3-digit number from up to a 3-digit number. • Multiply up to a 2-digit number by a 1-digit number without carrying. • Sort geometrical shapes. • Read unit fractions. • Form given sets.
INADEQUATE
A pupil is able to: • Count objects or figures in ones. • Add or subtract similar pictures. • Associate objects to objects or objects to figures or number symbols to its number name.

3.3 OVERALL LEVEL OF ACHIEVEMENT OF P 3 PUPILS IN NUMERACY

This section presents the achievement of P 3 pupils in Numeracy. The overall mean score was 55.4% with a standard error (S.E) of 0.52. The respective mean scores of the boys and the girls were 56.2% (S.E. 0.53) and 54.6% (S.E. 0.58); which were comparable. The percentages of P 3 pupils attaining different proficiency levels in Numeracy are given in Table 3.01.

TABLE 3.01: PERCENTAGE OF P 3 PUPILS REACHING VARIOUS PROFICIENCY LEVELS IN NUMERACY

PROFICIENCY LEVELS	BOYS	GIRLS	ALL
Advanced	20.1	17.8	19.0
Adequate	51.2	50.6	50.9
Basic	22.9	24.3	23.6
Inadequate	5.7	7.2	6.5
TOTAL	100.0	100.0	100.0

An overall 19.0% of the pupils were rated 'Advanced'. These are the pupils who had not only demonstrated an in-depth understanding of the concepts and skills at the level but also applied them in novel situations.

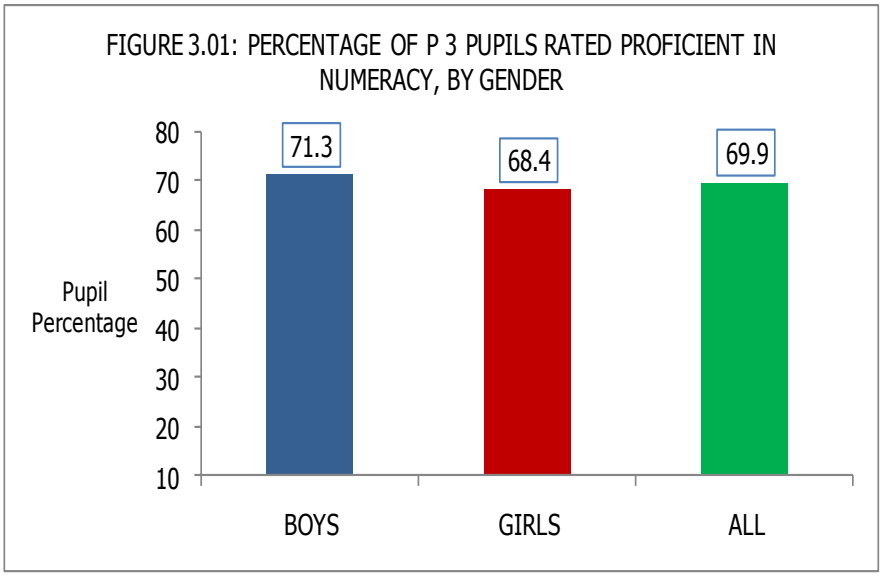
The second category of pupils rated 'Adequate' constituted 50.9%. They demonstrated a satisfactory academic performance in the subject. For instance, they could subtract a 2-digit number from a 2-digit number with borrowing.

The third group of pupils rated 'Basic' constituted 23.6%. This category of pupils showed partial understanding and limited display of the skills at the level.

The last group of pupils rated "Inadequate" constituted 6.5%. This category of pupils demonstrated little understanding of the concepts and skills at the level. For instance they could only associate either objects to objects or objects to figures.

The proportions of boys and girls at each proficiency level were comparable.

Figure 3.01 shows the percentages of P 3 pupils rated proficient (Advanced + Adequate) in Numeracy.



Overall 69.9% of the P 3 pupils reached the proficient level. Pupils at this level were competent over unusual subject matter which includes knowledge, understanding, and application, together with their associated skills. The difference in the proportions of girls and boys reaching the proficient level was insignificant; implying that the proportions were comparable.

3.4 ACHIEVEMENT OF P 3 PUPILS IN NUMERACY BY TOPICAL AREAS

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

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

TOPICAL AREA	BOYS	GIRLS	ALL
Associating objects	94.1	92.5	93.3
Counting	91.2	90.0	90.6
Division	62.5	60.6	61.6
Statistics	55.3	54.7	55.0
Addition	53.5	50.5	52.0
Multiplication	52.6	51.4	52.0
Subtraction	52.6	48.8	50.7
Measures	31.9	30.1	31.1
Completing sequences & Sorting shapes	33.4	28.3	30.8

Over 90% of the pupils were rated proficient in "Association" and "Counting".

Whereas the proportions of pupils (52.0%) reaching the desired proficiency levels in "Addition" and "Multiplication" were equal, the percentage (61.6%) attaining the desired proficiency in "Division" was higher. P 3 pupils performed worst in the topics of "Measures" and "Number sequence" where the respective proportions rated proficient were 31.1% and 30.8%. The difference in the proportions of boys and girls attaining the desired proficiency in each topic was insignificant with more boys than girls being rated proficient.

3.5 ACHIEVEMENT OF P 3 PUPILS IN THE COMPETENCIES OF NUMERACY

In this section, a description of the achievement of P 3 pupils in the competencies assessed in the Numeracy test is given. The flags on each competence were assigned the colours 'Green', 'Yellow', or 'Red' where: 'Green' represents competencies in which at least three quarters of the pupils were rated proficient. 'Yellow' represents competencies in which at least a half, but less than three quarters of the pupils reached the desired proficiency. Lastly, 'Red' indicates competencies 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 of Numeracy.

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.	96.0	95.7	95.8
Associating a number of objects to figures.	92.6	91.1	91.9
Counting in tens.	87.1	87.2	87.2
Counting in ones in increasing order.	87.6	86.3	86.9
Counting in ones in decreasing order.	85.3	82.3	83.8
Associating an equal number of objects.	78.8	77.8	78.3
Associating a figure to its name in word(s).	73.4	72.4	72.9
Identifying place value of a number.	63.6	64.0	63.8
Showing a three digit number on an abacus.	63.5	62.3	62.9
Writing number names from symbols.	35.1	36.1	35.6
Writing number symbols from words.	33.7	32.4	33.1
Counting in eights.	13.5	11.0	12.2

Best performance was exhibited in "Identifying place value on an abacus" and Associating a number of objects to figures" where over 90% of the pupils reached the desired rating. This was followed by "Counting in ones in increasing/decreasing order", "counting in tens" and "Associating an equal number of objects" where at least three quarters of the pupils were rated proficient.

Whereas the rest of the competencies had between a third to two thirds of the pupils reaching the desired rating, less than 1 in 5 of the pupils attained the desired rating in "counting in eights". There was an insignificant difference in the proportions of boys and girls rated proficient in each competence though more boys attained the desired rating.

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.	92.4	90.5	91.4
Subtracting up to a 3-digit number from up to 3-digit number without borrowing.	79.5	76.6	78.0
Multiplication as repeated addition.	70.4	69.3	69.8
Division of a number less than 20 by a one-digit number.	65.3	63.8	64.5
Multiplying a one digit number by a one digit number.	63.4	61.6	62.5
Sharing objects	63.6	58.4	61.0
Multiplying a two digit number by a one digit number.	45.8	43.4	44.6
Adding two or three two-digit numbers with carrying.	44.9	42.5	43.7
Divide a number > 20 by a one digit number.	42.6	42.1	42.4
Subtracting up to a two-digit number from a two-digit number with borrowing.	40.0	35.6	37.8
Applying subtraction in daily life.	38.3	33.6	36.0
Applying addition in daily life.	36.8	34.2	35.5

Best performance was shown in "adding two or three 2-digit numbers without carrying" where 91.4% of the pupils reached the desired rating. This was followed by "subtraction without borrowing".

Nearly 2 in 3 pupils were competent in:

"Multiplication as repeated addition", "dividing a number less than 20 by a one-digit number" and "multiplying a one-digit number by a one-digit number" and "sharing objects". In the rest of the competencies, the proportions of pupils rated proficient ranged from 35.5% in "applying addition to real life situations" to 44.6% in "multiplying a 2-digit number by a 1 digit number".

Apart from "sharing objects" and "Applying subtraction in daily life", where the difference in the proportion of boys and girls rated proficient was significant, in the rest of the competencies the proportions were comparable.

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.	66	64.5	65.2
Solving sums involving buying and selling.	56.9	51.6	54.3
Applying the concept of capacity in daily life.	50.0	46.0	48.0
Sorting shapes.	46.5	49.3	47.9
Telling time on the hour.	41.7	45.7	43.7
Interpreting bar graphs.	37.3	37.7	37.5

P 3 pupils demonstrated best performance in "Representing information in pictograms" where nearly 2 in 3 were rated proficient.

Apart from "solving sums involving buying and selling" where 54.3% of the pupils reached the desired rating, less than a half of the pupils did so in the rest of the competencies.

More girls than boys attained the desired rating in "Interpreting bar graphs, sorting shapes and telling time on the hour".

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.	83.1	82.9	83.0
Forming sets.	82.2	83.6	82.9

Over three quarters of the pupils (83.0%) could "write and draw unit fractions" as well as "forming sets". Boys and girls performed at about the same level with equal proportions attaining the desired rating.

3.6 ACHIEVEMENT OF P 3 PUPILS IN NUMERACY BY AGE AND GENDER

This section describes the achievement of P 3 pupils in Numeracy by age and gender. Table 3.07 gives the mean scores of P 3 pupils in Numeracy by pupils' age and gender.

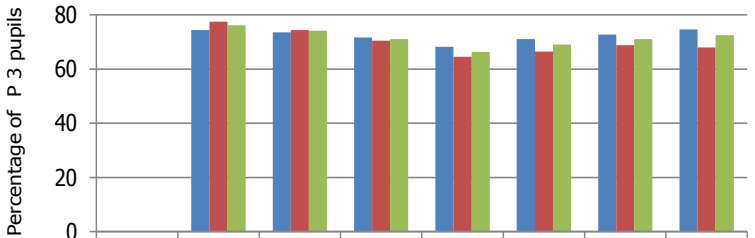
TABLE 3.07: MEAN SCORES OF P 3 PUPILS IN NUMERACY BY AGE AND GENDER

AGE (years)	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
5 – 7	62.0	4.94	62.5	2.82	62.3	2.47
8	60.0	1.66	60.0	1.82	60.0	1.65
9	56.7	0.94	55.9	0.86	56.2	0.78
10	54.4	0.59	52.2	0.59	53.2	0.49
11	54.9	0.67	52.7	0.63	54.0	0.52
12	56.7	0.65	53.7	0.13	55.4	0.57
12+	57.8	0.92	52.8	1.13	56.2	0.79
Uganda	56.2	0.53	54.6	0.58	55.4	0.52

The mean scores decreased with increase in age from 62.3% for the 5-7 year-olds to 60.0% for the 8 year olds. It then remained approximately the same with increase in age. Apart from the ages of 12 years and above, the difference in the mean scores of boys and girls was insignificant with the boys doing better.

However, the gap between the boys and girls mean scores increased gradually from 2.2% at age 10 years to 5.0% at age 12^{+} years. Figure 3.02 shows the percentages of P 3 pupils rated proficient in Numeracy, by age and gender.

FIGURE 3.02: PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN NUMERACY, BY AGE AND GENDER



	5 – 7	8	9	10	11	12	12+
BOYS	74.4	73.6	71.6	68.2	71.0	72.7	74.6
GIRLS	77.5	74.4	70.5	64.5	66.4	68.8	68.0
ALL	76.2	74.1	71.0	66.3	69.0	71.0	72.5

The proportions of P 3 pupils reaching the desired rating decreased with increase in age from 76.2% for the 5 – 7 year-olds to 66.3% for the 10-year olds. It then increased steadily from 69.0% for the 11-year-olds to 72.5% for the 12+ year-olds.

More girls than boys were rated proficient at the age of 5 – 7 years and 8 years. From age 9 years to 12^{+} years, more boys reached the desired rating. However, the difference in the proportions was insignificant at each age, except at age 11+ years.

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

In this section, a presentation of the achievement of P 3 pupils in Numeracy by school ownership and gender is made. Table 3:09 shows the mean scores of pupils in Numeracy by school ownership.

TABLE 3.09: MEAN SCORES OF P 3 PUPILS IN NUMERACY BY SCHOOL OWNERSHIP

SCHOOL OWNERSHIP	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
Government	53.9	0.57	52.1	0.63	53.0	0.57
Private	72.9	1.32	73.0	1.23	73.0	1.17

The mean score of pupils (73.0%) from private schools was significantly higher than the mean score (53.0%) obtained by pupils from government schools. The mean scores of boys and girls from each school ownership were comparable. The percentages of pupils rated proficient in Numeracy by school ownership are given in Figure 3.04.

3.8 ACHIEVEMENT OF P 3 PUPILS IN NUMERACY, BY SCHOOL LOCATION AND PUPILS' GENDER

This section presents the achievement of P 3 pupils in Numeracy by school location and pupils' gender. Table 3.08 shows the mean scores of P 3 pupils in Numeracy, by school location.

TABLE 3:08: MEAN SCORES OF P 3 PUPILS IN NUMERACY BY SCHOOL LOCATION AND GENDER

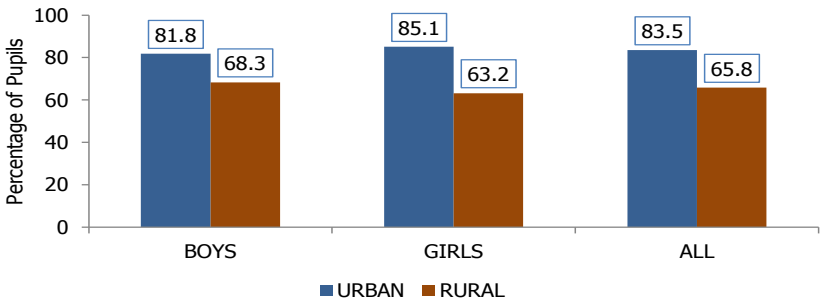
SCHOOL LOCATION	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
Urban	64.3	1.47	65.7	1.42	65.0	1.38
Rural	53.8	0.49	51.1	0.50	52.5	0.46

The mean scores of pupils from urban and rural schools were 65.0% and 52.5%, respectively. The difference in the performance gap was significant indicating that pupils from urban schools did better. Girls from urban schools obtained a higher mean score of 65.7% than boys at 64.3%.

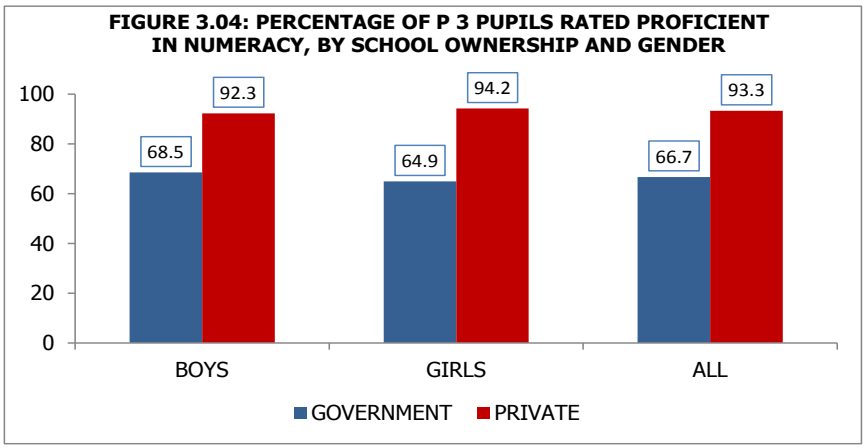
Conversely, boys from rural schools (mean score 53.8%) performed better than the girls of the same school setting.

Figure 3.03 shows the proportions of pupils rated proficient in Numeracy, by school location and pupils' gender.

FIGURE 3.03: PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN NUMERACY, BY SCHOOL LOCATION AND GENDER



The respective proportions of pupils attaining the desired rating from urban and rural schools were 83.5% and 65.8%. The difference was significant with more pupils from the urban schools reaching the desired proficient levels. The proportion of boys and girls in each school setting was insignificantly different.



Overall 93.3% of pupils from private schools attained the desired rating compared to only 66.7% of pupils from government schools who obtained a similar rating. Whereas more girls (94.2%) reached the desired proficiency levels in the private schools, the reverse was true in the government schools. However, the difference in proportions of boys and girls attaining the desired rating in each school ownership was insignificant.

3.9 ACHIEVEMENT OF P 3 PUPILS IN NUMERACY BY DISTRICT

In this section, an outline of the achievement of P 3 pupils in numeracy by district is given.

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 levels. '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 P 3 pupils rated proficient in Numeracy by district.

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

GREEN		YELLOW		RED	
Kalangala	99.0	Kaabong	74.9	Katakwi	49.5
Sheema	98.8	Kyankwazi	74.6	Alebtong	49.4
Kiruhura	97.3	Arua	74.6	Agago	49.0
Mbarara	96.5	Koboko	74.6	Otuke	47.8
Kampala	96.1	Kamwenge	74.6	Nwoya	46.8
Rubirizi	95.9	Buvuma	74.1	Namayingo	46.2
Mitooma	95.9	Kabale	74.0	Sironko	45.9
Bushenyi	95.4	Nakapiripirit	73.3	Amolatar	45.1
Masaka	94.7	Kayunga	73.1	Kaliro	44.6
Wakiso	94.0	Kabarole	72.3	Kole	43.9
Buhweju	93.7	Ngora	72.1	Mbale	41.1
Mukono	91.9	Lira	72.0	Apac	41.0
Nakaseke	89.8	Namutumba	71.2	Dokolo	40.3
Mityana	89.2	Hoima	69.9	Pallisa	39.1
Kalungu	88.5	Mpigi	69.6	Kapchorwa	37.1
Lyantonde	87.9	Serere	69.1	Kitgum	36.3
Kanungu	87.6	Lwengo	67.8	Luuka	35.5
Moyo	87.1	Kotido	66.3	Kaberamaido	33.9
Ssembabule	86.9	Kyenjojo	66.0	Bukwo	31.5
Buikwe	86.7	Bukomansimbi	65.4	Masindi	30.5
Kyegegwa	86.0	Nebbi	64.6	Amuria	29.9
Kasese	85.8	Manafwa	64.5		
Butambala	85.5	Pader	64.5		
Ntungamo	84.9	Bulambuli	64.2		
Ibanda	82.6	Butaleja	64.1		
Isingiro	82.4	Bugiri	63.0		
Abim	81.7	Bundibugyo	62.8		
Napak	81.7	Jinja	62.3		
Kibuku	81.6	Maracha	62.1		
Mubende	80.6	Kween	61.3		
Kiboga	80.2	Budaka	61.1		
Luwero	80.1	Bududa	60.1		
Gulu	80.0	Zombo	59.8		
Rukungiri	79.3	Soroti	59.1		
Rakai	79.2	Kamuli	58.9		
Kisoro	78.8	Iganga	58.1		
Mayuge	77.6	Amuru	57.7		
Nakasongola	76.5	Busia	57.5		
Moroto	76.2	Adjumani	57.4		
Kibaale	75.9	Ntoroko	55.3		
Yumbe	75.8	Buliisa	55.2		
Gomba	75.6	Oyam	54.8		
Buyende	75.2	Bukedea	54.5		
Amudat	75.0	Kiryandongo	54.2		
		Kumi	50.6		
		Tororo	50.3		
		Lamwo	50.2		

21: 19%

44: 39%

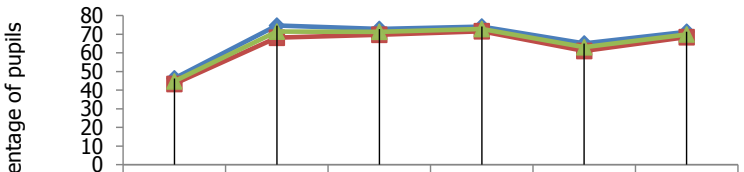
47: 42%

Forty four (44) out of 112 districts were rated in 'Green' with Kalangala having the highest proportion of pupils (99.0%) falling in 'Green'. It was followed by Sheema, Kiruhura and Mbarara in that decreasing order of the proportion of pupils rated proficient. Forty seven districts were in 'Yellow' and 21 fell under 'Red'. No district had less than a quarter of its pupils reaching the desired rating.

3.10 ACHIEVEMENT OF P 3 PUPILS IN NUMERACY IN THE YEARS 2007 – 2012

This section presents the trend of achievement of P 3 pupils in Numeracy from 2007 to 2012. Figure 3.05 shows the percentages of pupils rated proficient in Numeracy over the years 2007 to 2012.

FIGURE 3.05: PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN NUMERACY IN 2007 - 2012, BY GENDER



	2007	2008	2009	2010	2011	2012
BOYS	46.3	74.6	72.8	74.1	65.0	71.3
GIRLS	43.3	68.1	69.7	71.6	61.0	68.4
ALL	44.7	71.4	71.3	72.8	63.0	69.9

The percentages of pupils rated proficient increased from 44.7% in 2007 to 71.4% in 2008, remained nearly constant up to 2010. It fell in 2011 to 63.0% and rose up to about its constant value in 2012.

The difference in proportions of boys and girls being insignificant in all years.

3.11 CONCLUSIONS

Topically, P 3 pupils did best in "Associating", "place value and counting" and worst in 'Graphs", "Sorting" and "Measures".

The pupils did not only have a complete mastery of "identifying place value of a number on an abacus" but generally were competent in all "Association" competencies. However, the pupils had difficulty in "counting in eights".

Overall 91.4% of the pupils demonstrated competence in adding two or three 2-digit numbers without carrying. They faced difficulty in applying addition (35.5% proficient) and subtraction (36.0% proficient) in daily life.

P 3 pupils showed marginal performance in most of the competencies of "Graphs, sorting and Measures".

Chapter 4

ACHIEVEMENT OF P 3 PUPILS IN LITERACY IN ENGLISH

4.1 INTRODUCTION

The performance of P 3 pupils in Literacy in English is presented in this chapter. A description of the competencies that were assessed is presented first. This is followed by a presentation of the overall level of performance, and the achievement of pupils in the various competencies. Then pupils' performance is presented by age and gender, school ownership, school location and district.

4.2 DESCRIPTION OF THE COMPETENCIES BY PROFICIENCY LEVEL

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

ADEQUATE LEVEL	
Reading Comprehension	Writing
A pupil is able to: ▪ Associate pictures to words describing them. ▪ 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 LEVEL	
Reading Comprehension	Writing
A pupil is able to: ▪ Describe parts of an activity in a picture. ▪ Associate object to the same object. ▪ 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.
INADEQUATE 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.

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

Overall, the P 3 pupils obtained a mean score of 49.9% (S.E: 0.68). The means for the boys and girls were 48.9% (S.E: 0.68) and 5 0.8% (S.E: 0.75), respectively with no significant gender difference. 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	16.4	18.9	17.6
Adequate	35.6	36.7	36.2
Basic	35.7	32.7	34.2
Inadequate	12.2	11.7	12.00
TOTAL	100.0	100.0	100.0

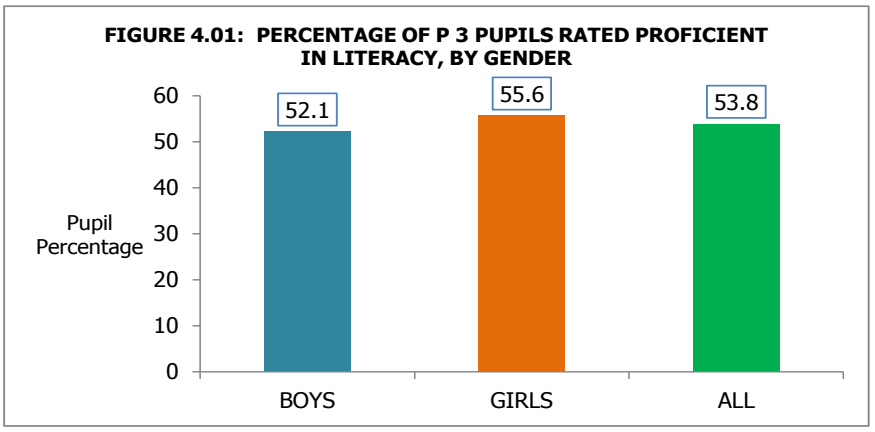
A total of 17.6% of the P 3 pupils were rated 'Advanced'. These are pupils who satisfactorily acquired the Literacy skills specified at P 3 level. More than a third of the pupils (36.2%) were in the 'Adequate' level. These are pupils who had acquired the desired minimum level of proficiency as specified at P 3 level.

Slightly more than a third of the pupils (34.2%) were categorized as 'Basic". These are pupils whose performance exhibited that they had achieved only the elementary competencies of Literacy.

The P 3 pupils in the 'Inadequate' category were 12%. These performed below the level expected of them.

Figure 4.01 shows the percentage of P 3 pupils rated proficient in Literacy by gender.

FIGURE 4.01: PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN LITERACY, BY GENDER



More than a half of the P 3 pupils (53.8%) were rated proficient in Literacy. Significantly more girls 55.6% than boys 52.1% were rated proficient.

4.4 ACHIEVEMENT OF P 3 PUPILS IN VARIOUS COMPETENCIES

This section is a presentation of the P 3 pupils' achievement in the different competencies. The percentages of P 3 pupils who were rated proficient in the competencies of Reading Comprehension are shown in Table 4.02.

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

COMPETENCIES	BOYS	GIRLS	ALL
Associating (Picture:picture; object:word; activity:sentence).	97.4	97.4	97.4
Completing pictures.	81.2	78.1	79.7
Reading and comprehending a story.	59.7	63.4	61.5
Completing words.	52.1	56.0	54.0
Reading and completing sentences.	43.1	46.3	44.7
Recognising objects in picture form.	39.9	45.6	42.7
Identifying the missing parts of an object.	38.4	39.0	38.7
Reading and describing the activities in a picture.	29.3	32.3	30.8

Out of all the competencies of Reading Comprehension that were assessed, the P 3 pupils performed best in 'Associating objects' with 97.4% of them rated proficient. 'Completing pictures' followed with 79.7% reaching the proficient level. On the other hand, 30.8% of the pupils were rated proficient in 'reading and describing the activities in a picture. Whereas there were differences in proficiency levels between the genders, they were not significant.

Table 4.03 shows the percentages 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
Associate object to same object .	98.9	98.7	98.8
Associate object to word.	92.9	92.8	92.9
associate activity to a sentence	62.1	55.9	58.9

Nearly all the P3 pupils (98.8%) could associate an object to the same object. On the other hand, 92.9% could associate an object to a word while 58.9% could associate an activity to a sentence describing it. A significant gender difference was noticed in the latter.

Table 4.04 presents the percentage of P 3 pupils who reached the proficient level in the various competencies of writing.

TABLE 4.04: PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN THE COMPETENCIES OF WRITING.

COMPETENCIES	BOYS	GIRLS	ALL
Writing patterns.	92.6	93.0	92.8
Writing letters of the alphabet.	91.8	92.1	91.9
Copying words.	83.9	83.2	83.5
Copying a story.	80.3	83.5	81.9
Drawing pictures of named objects.	62.7	64.6	63.6
Naming objects in pictures.	41.0	46.5	43.7
Writing words.	32.3	37.1	34.7
Writing sentences.	29.0	29.9	29.4

Among all the competencies of writing, P 3 pupils performed best in 'writing patterns' followed by 'writing the letters of the alphabet'. However, only 29.4% could write sentences correctly. The girls performed significantly better than the boys in 'naming objects in pictures'.

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

This section presents the performance of P 3 pupils in Literacy in English by age and gender. Table 4.05 shows the mean scores of P 3 pupils in Literacy in English by age and gender.

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

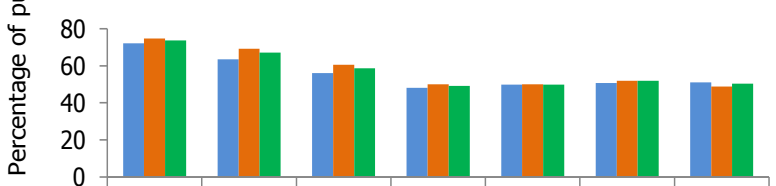
AGE (years)	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
6 – 7	64.8	6.13	65.7	3.40	65.4	3.00
8	58.5	2.27	62.0	2.17	60.7	2.09
9	52.3	1.22	54.1	1.08	53.3	1.01
10	46.6	0.67	47.7	0.66	47.7	0.55
11	47.0	0.79	46.5	0.75	46.8	0.64
12	46.9	0.71	46.8	0.78	46.8	0.62
12+[γ]	47.4	0.94	44.6	1.12	46.5	0.81

[γ] Age above 12 years

The mean scores of P 3 pupils in Literacy decreased with increase in age from 65.4% (S.E: 3.0) for the 6 – 7 year-olds to 46.5% (S.E: 0.81) for the above 12 year-olds. There were no significant differences in mean scores by age.

Figure 4.02 shows the percentage of P 3 pupils rated proficient in Literacy by age and gender.

FIGURE 4.02: PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN LITERACY IN ENGLISH BY AGE AND GENDER



	5 – 7	8	9	10	11	12	12+
BOYS	72.2	63.6	56.1	48.1	49.8	50.8	51.1
GIRLS	74.7	69.3	60.6	50.1	50.1	52.0	48.9
ALL	73.7	67.1	58.7	49.2	49.9	51.9	50.4

The percentage of P 3 pupils rated proficient in Literacy declined with increase in pupils' age. Whereas 73.7% of the pupils' aged 5 – 7 years were rated proficient, the percentage declined up to 49.9% for the 11 year-olds. It rose again to 51.9% for the 12 year-olds and then slightly declined from there to 50.4% for the 12+ year-olds. Significant difference in achievement due to gender was noted among the 8 and 9 year old pupils.

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

This section presents a description of the achievement of P 3 pupils in Literacy by school ownership. Table 4.06 shows the mean scores of P 3 pupils in Literacy by school ownership and gender.

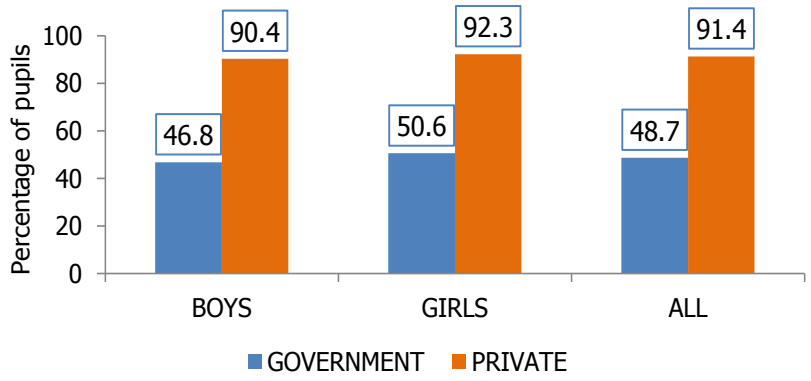
TABLE 4.06: MEAN SCORES (PERCENTAGE) OF P 3 PUPILS IN LITERACY BY SCHOOL OWNERSHIP

SCHOOL OWNERSHIP	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
Government	45.3	0.72	47.2	0.82	46.2	0.74
Private	75.3	1.70	77.9	1.58	76.6	1.57

The P 3 pupils from the private schools scored a higher mean of 76.6% (S.E: 1.57). Their counterparts in the government schools obtained a mean score of 46.2% (S.E: 0.74). There were no significant gender differences in mean scores.

Figure 4.03 shows the percentage of P 3 pupils rated proficient in Literacy in English by school ownership and gender.

FIGURE 4.03: PERCENTAGE OF P3 PUPILS RATED PROFICIENT IN LITERACY IN ENGLISH BY SCHOOL OWNERSHIP



Private schools registered 91.4% of the P 3 pupils rated proficient in Literacy in English. On the other hand, 48.7% of the P 3 pupils in government schools reached the same level of achievement. Though a significant difference in pupil performance was noted between government and privately owned schools; there were no gender differences in performance within the same ownership.

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

This section presents the results of P 3 pupils' performance in Literacy in English by school location. Table 4.07 shows the mean scores P 3 pupils in Literacy in English by school location and gender.

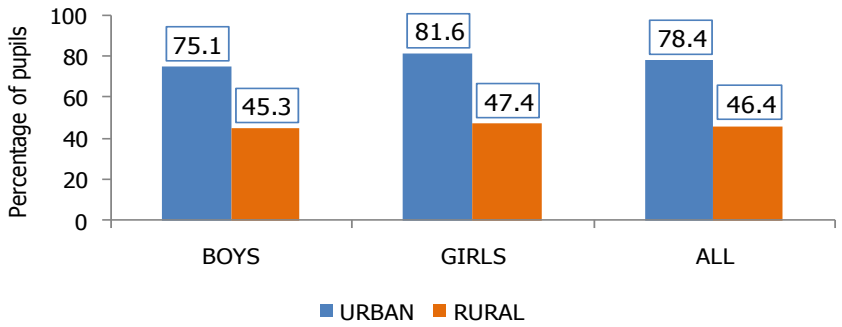
TABLE 4.07: MEAN SCORES (PERCENTAGE) OF P 3 PUPILS IN LITERACY BY SCHOOL LOCATION AND GENDER

SCHOOL LOCATION	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
URBAN	63.4	1.88	68.2	1.82	65.8	1.78
RURAL	44.6	0.56	45.4	0.56	45.0	0.54

The P 3 pupils from the urban schools obtained a mean score of 65.8% (S.E: 1.78); whereas the mean score for pupils from the rural schools was 45.0% (S.E: 0.54). There were significant gender differences in pupils' performance in the urban schools.

Figure 4.04 shows the percentage of P 3 pupils rated proficient in Literacy in English by school location and gender.

FIGURE 4.04: PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN LITERACY IN ENGLISH, BY SCHOOL LOCATION AND GENDER



More than three quarters of the P 3 pupils (78.4%) from the urban schools were rated proficient in Literacy in English. On the other hand, just about a half (46.4%) of the P 3 pupils from the rural schools were rated proficient. The girls from the urban schools (81.6%) performed significantly better than the boys (75.1%) from the schools in the same locality.

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

This section is a description of the achievement of P 3 pupils in Literacy in English by district. The districts were grouped using the following colours: 'Green', 'yellow' and 'Red'.

The 'green' colour is for those districts where 75% and above of the P 3 pupils were rated proficient. The districts categorized as 'Yellow' are those in which at least a half, but less than three quarters of the P 3 pupils attained the desired rating. Districts in 'Red' are those where less than a half of the pupils reached the desired proficiency level. 'Red' districts with an asterisk (*) had less than a quarter of the pupils rated proficient, while those with double asterisk (**) had 10% or less of the pupils attaining the desired proficiency level.

Table 4.08 shows 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 THE PERCENTAGES OF P 3 PUPILS RATED PROFICIENT IN LITERACY IN ENGLISH

GREEN		YELLOW		RED			
Sheema	98.8	Luweero	74.8	Kibuku	49.8	Maracha	24.6*
Kampala	97.2	Rukungiri	73.7	Kibaale	49.5	Pallisa	22.6*
Mbarara	97.1	Moroto	73.4	Kween	48.8	Kumi	22.2*
Masaka	94.0	Kyegegwa	73.2	Lira	48.0	Amolatar	19.8*
Wakiso	93.1	Rakai	72.5	Ngora	47.3	Masindi	19.7*
Kiruhura	93.0	Buvuma	70.6	Iganga	46.7	Nwoya	18.9*
Mitooma	92.2	Jinja	69.0	Kiryandongo	46.7	Oyam	18.4*
Bushenyi	91.0	Kaabong	68.5	Kyenjojo	46.2	Lamwo	18.3*
Kalangala	88.3	Kasese	68.4	Kamuli	45.3	Bukwo	17.4*
Rubirizi	88.2	Kiboga	68.0	Nebbi	42.8	Luuka	16.7*
Butambala	87.1	Napak	67.6	Budaka	42.6	Alebtong	12.8*
Buhweju	85.9	Isingiro	67.5	Arua	42.4	Amuria	12.3*
Mukono	84.8	Mpigi	67.2	Bugiri	42.3	Kaberamaido	11.1*
Mityana	84.6	Bukomansimbi	66.9	Bulambuli	42.1	Kole	11.1*
Nakaseke	82.3	Nakapiripirit	64.2	Koboko	41.0	Dokolo	08.7**
Lyantonde	82.3	Nakasongola	61.7	Pader	38.5		
Amudat	82.2	Kotido	61.4	Soroti	36.6		
Buikwe	81.9	Gomba	61.1	Bududa	35.4		
Sembabule	76.8	Lwengo	60.1	Adjumani	34.6		
Kalungu	75.4	Mubende	59.7	Yumbe	34.6		
Ntungamo	75.2	Kanungu	58.8	Mbale	34.3		
		Serere	57.2	Sironko	34.3		
		Mayuge	57.0	Apac	34.2		
		Ibanda	57.0	Zombo	34.2		
		Kisoro	56.5	Bundibugyo	34.0		
		Kabarole	55.1	Kapchorwa	33.8		
		Hoima	53.6	Ntoroko	33.6		
		Abim	53.3	Buliisa	32.2		
		Kayunga	52.0	Busia	31.8		
		Kabale	51.8	Tororo	31.7		
		Kyankwanzi	51.5	Amuru	31.6		
		Butaleja	51.5	Manafwa	31.3		
		Namutumba	51.3	Bukedea	30.8		
		Kamwenge	51.3	Katakwi	30.1		
		Moyo	50.9	Otuke	29.0		
		Gulu	50.3	Agago	28.5		
		Buyende	50.0	Namayingo	27.8		
				Kitgum	25.5		
				Kaliro	25.1		

21 (19 %)

37 (33%)

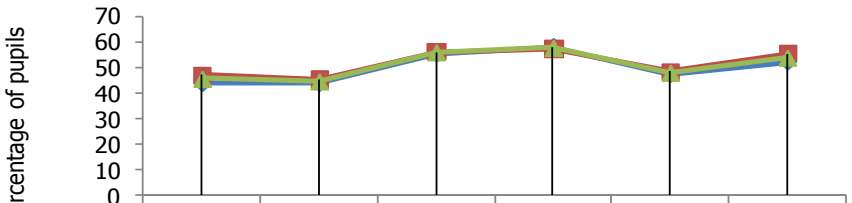
54 (48%)

Just about a fifth of all the districts, that is, 19% of the districts were categorized as 'Green', while those in the 'yellow' group were a third (33%) of all the districts. On the other hand, 'Red' had the highest number of districts (48%). Out of these, 14 had one asterisk while one, Dokolo, had double asterisks. All these districts with asterisks are from the Eastern and Northern Regions apart from Masindi.

4.9 ACHIEVEMENT OF P 3 PUPILS IN LITERACY IN ENGLISH IN THE YEARS 2007 – 2012

The achievement of P 3 pupils in Literacy in English in the years 2007 – 2012 is presented in this section. Figure 4.05 shows the percentage of P 3 pupils rated proficient in Literacy in 2007 – 2012.

FIGURE 4.05: PERCENTAGE OF P 3 PUPILS RATED PROFICIENT IN LITERACY IN ENGLISH IN 2007 - 2012, BY GENDER



	2007	2008	2009	2010	2011	2012
BOYS	43.8	43.8	55.2	57.9	47.3	52.1
GIRLS	47.2	45.3	56.2	57.3	48.5	55.6
ALL	45.5	44.5	55.9	57.6	47.9	53.8

The achievement of P 3 pupils was nearly the same between the years 2007 – 2008. From the year 2008 it rose from 44.5% to 55.9% in 2009 and again to 57.6% in 2010. However, in 2011 there was a drop to 47.9%, only to begin rising again to 53.8% in 2012.

4.10 CONCLUSIONS

Of all the reading comprehension competencies assessed, P 3 pupils performed best in 'associating'. They could ably associate an object to the same object and an object to a word describing it. However, fewer could associate an object to a sentence describing it.

Pupils' performance was not as expected in the other competencies of Reading Comprehension especially 'Reading and describing the activities in a picture'. Pupils seemed to lack exposure to the activities in their environment, which were shown in the pictures used.

Out of the competencies assessed under writing, more of the P 3 pupils did better in writing patterns and letters of the alphabet. However, fewer could write sentences and words correctly.

It is important to note that improvement in reading and writing requires regular practice by the learners.

Chapter 5

ACHIEVEMENT OF P 6 PUPILS IN NUMERACY

5.1 INTRODUCTION

This chapter presents the achievement of P 6 pupils in Numeracy. First of all, the overall mean score and the proportions of pupils rated proficient is given. Then the percentage of pupils attaining the desired proficiency in each competency is made. Lastly, the mean scores and percentages of pupils reaching 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.

5.2 DESCRIPTION OF THE COMPETENCIES BY PROFICIENCY LEVEL

A description of the competencies assessed is given below:

ADVANCED LEVEL

A pupil is able to:

- Apply the concepts of the four basic operations, fractions and capacity in novel situations.
- Round off decimal numbers to the nearest whole number.
- Find the number of small surface areas/containers, that can cover / fill a larger one.
- Construct a triangle with given dimensions.
- Interpret bar / picto-graphs
- Recognize and complete the next pattern.

ADEQUATE LEVEL

A pupil is able to:

- Add a 3-digit number to a 3-digit number with carrying.
- Subtract 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 the combined operation of addition and multiplication.
- Compute the LCM of up to three numbers each of which is less than 50.
- Find the square or square root of a number.
- Use a ruler and a pair of compasses to construct an angle of 45^0.
- Identify and draw lines of symmetry.
- Carry out household budgeting.
- Construct a circle of given radius.

BASIC

A pupil is able to:

- Add two 3-digit numbers without carrying
- Subtract two 3-digit numbers without borrowing.
- Change a fraction to a decimal and vise versa.
- Draw/read a fraction.
- Tell time on a clock face to the hour.
- Identify even and odd numbers.
- Measure lengths accurately
- Draw angles.

INADEQUATE

A pupil is able to:

- Name faces of a polygon.
- Write a number shown on an abacus.
- Write a 4-digit number in words.

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

5.3 OVERALL ACHIEVEMENT OF P 6 PUPILS IN NUMERACY

In this section, an outline of the achievement of P 6 pupils in Numeracy is given. The overall mean score was 43.8%, with a standard error (S.E) of 0.48; boys and girls obtaining mean scores of 45.8% (S.E: 0.51) and 42.0% (S.E: 0.53) respectively. The boys performed significantly better than the girls.

Table 5.01 shows the percentage of P 6 pupils reaching the various proficiency levels in Numeracy by gender.

TABLE 5.01: PERCENTAGE OF P 6 PUPILS REACHING THE VARIOUS PROFICIENCY LEVELS IN NUMERACY BY GENDER

PROFICIENCY LEVEL	BOYS	GIRLS	ALL
Advanced	7.3	4.8	6.1
Adequate	42.3	36.1	39.1
Basic	37.7	42.7	40.2
Inadequate	12.6	16.4	14.6
TOTAL	100.0	100.0	100.0

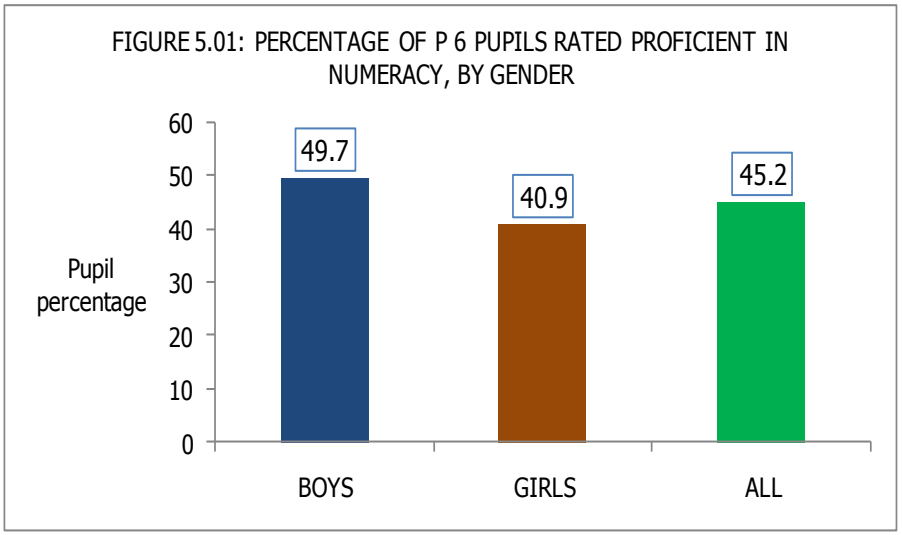
There were 6.1% of P 6 pupils in the 'Advanced' proficiency level. These were the pupils who demonstrated an in-depth understanding of the Numeracy concepts thus indicating superior performance.

The second group of pupils rated 'Adequate' constituted 39.1%. These were the pupils who demonstrated an overall understanding of the Numeracy concepts as well as generalizing facts and making conclusions where necessary.

The third category of pupils rated 'Basic' constituted 40.2%. These were the pupils who demonstrated partial mastery of the necessary knowledge and skills at the level.

The last category of students constituted 14.6%. These are the pupils whose performance indicated little understanding and almost no display of any skill.

Figure 5.01 shows the percentage of P 6 pupils rated proficient in Numeracy.



Overall 45.2% of P 6 pupils reached the desired proficiency levels in Numeracy. The difference in the proportions of boys and girls rated proficient in Numeracy was significant. More boys (49.7%) than girls (40.9%) attained the desired rating.

5.4 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY BY TOPICAL AREA

This section outlines the achievement of P 6 pupils in Numeracy by topical area. Table 5.02 shows the percentage of pupils rated proficient in various topical areas of Numeracy.

TABLE 5.02: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN TOPICAL AREAS OF NUMERACY

TOPICAL AREA	BOYS	GIRLS	ALL
Operations on numbers	77.3	71.4	74.3
Number system and place value	70.4	61.5	65.9
Graphs	62.0	52.9	57.4
Number patterns and sequence	49.8	42.8	46.2
Fractions	35.1	30.2	32.6
Geometry	21.6	17.0	19.2
Measures	17.5	10.9	14.1

Best done topic was operations on numbers where 74.3% were rated proficient. A satisfactory proportion of pupils demonstrated competence in the topical areas of 'number system & place value' and 'graphs' where the proportions of pupils rated proficient were 65.9% and 57.4%, respectively.

The worst done topics were Geometry and Measures in which 19.2% and 14.1% of pupils, respectively, reached the desired proficiency level. The proportions of boys attaining the desired proficiencies were significantly higher than the girls' within each topical area.

5.5 ACHIEVEMENT OF P 6 PUPILS IN THE COMPETENCIES OF NUMERACY

This section describes the performance of P 6 pupils in each of the competencies assessed in the test. 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 reached the desired proficiency. Lastly, 'Red' represents the competencies in which less than a half of the pupils were rated proficient. Tables 5.03 – 5.09 give the percentages of P 6 pupils rated proficient in the competencies, grouped in their respective topics.

TABLE 5.03: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN THE COMPETENCIES OF 'OPERATIONS ON NUMBERS'

COMPETENCIES	BOYS	GIRLS	ALL
Adding 3-digit numbers:			
· Without carrying.	97.3	97.7	97.5
· With carrying.	92.2	96.7	96.9
Dividing a two digit number by a one digit number.	92.4	90.5	91.5
Subtracting 4-digit numbers:			
· Without borrowing.	89.2	86.1	87.6
· With borrowing.	85.2	85.1	85.1
Multiplying a two-digit number by a one-digit number.	85.1	81.8	83.4
Applying addition in real life situations (up to 4 digits).	68.1	68.9	68.5
Applying subtraction in real life situations.	69.4	61.9	65.6
Using symbols >, <, to compare numbers.	64.8	63.8	64.3
Multiplying a 2-digit number by a 2-digit number.	67.1	60.2	63.6
Carrying out long division.	61.3	54.4	57.8
Applying multiplication in real life situations, involving a 2-digit number by a one-digit number.	61.1	50.3	55.6
Applying division in real life situations (a 3-digit number by a 2-digit number).	54.0	45.8	49.8
Using brackets to show the order in which combined operations (x, +) must be performed.	21.7	19.4	20.5

Whereas nearly all the pupils (≈97%) were able to add a 3-digit number to a 3-digit number with or without carrying, relatively lower proportions of pupils (≈85%) demonstrated competence in subtracting numbers with or without borrowing.

About 2 in 3 pupils could apply the concepts of addition and subtraction in daily life as compared to about a half of the pupils who did so in multiplication and division.

Pupils still have difficulty in using brackets to demonstrate the order in which combined operations of (x, +) can be performed. Apart from addition without carrying where the proportion of boys and girls rated proficient were comparable, the proportions of boys attaining the desired rating in most of the other competencies were significantly higher.

TABLE 5.04: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN THE COMPETENCIES OF 'NUMBER SYSTEM AND PLACE VALUE'

COMPETENCIES	BOYS	GIRLS	ALL
Writing numbers given in figures (up to 4 digits) in words and vise versa.	89.8	86.0	87.8
Writing a number shown on an abacus.	84.9	84.4	84.6
Writing the place value of a digit in a number	75.9	73.9	74.9
Writing numbers in expanded form and vise versa	65.6	66.4	66.0
Converting Roman numbers to Hindu - Arabic and vice versa.	57.8	41.4	49.5
Rounding off decimals to the nearest whole number.	32.7	28.1	30.3

P 6 pupils demonstrated equal competence in writing a number on an abacus and writing numbers in symbolic form or words where over 80% of them reached the desired proficiency. Whereas about three quarters of the pupils (74.9%) could write the place value of a digit in a numeral, only 1 in 2 were able to convert a Roman number to Hindu-Arabic and vice versa. The worst performance (30.3%) was exhibited in rounding off decimals to the nearest whole number.

TABLE 5.05: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN THE COMPETENCIES OF 'GRAPHS'

COMPETENCIES	BOYS	GIRLS	ALL
Drawaing bar graphs	69.5	66.8	68.1
Interpreting pictograms	56.5	47.1	51.7

About 2 in 3 pupils reached the desired rating in drawing of bar graphs compared to about a half who attained a similar rating in interpretation of pictograms. The boys performed significantly better than the girls in the two competencies of graphs.

TABLE 5.06: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN THE COMPETENCES OF 'NUMBER PATTERNS AND SEQUENCE'

COMPETENCIES	**BOYS**	**GIRLS**	**ALL**
Completing number sequence.	88.6	82.4	85.5
Finding the LCM of up to 3 numbers each of which is less than 50.	55.7	53.0	54.3
Forming number patterns.	49.5	45.1	47.2
Finding the square roots of numbers up to 50.	44.2	38.1	41.1
Identifying even and odd numbers.	39.5	37.9	38.7
Arranging numbers according to size .	35.6	26.4	30.9
Finding the squares of numbers up to 50.	23.8	23.1	23.4

With exception of completing number sequence where the proportion of pupils rated proficient was over 75%, the percentages of those attaining the desired proficiency in all the competencies of number patterns and sequences were ranging from 23.4% in finding squares of numbers to 54.3% in finding the LCM of three numbers.

The boys performed significantly better than the girls in nearly all competencies apart from identifying even or odd numbers and finding the squares of numbers where the difference in proportions was insignificant.

TABLE 5.07: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN THE COMPETENCIES OF 'FRACTIONS'

COMPETENCIES	BOYS	GIRLS	ALL
Drawing and shading non-unit fractions.	83.6	84.4	84.0
Writing non-unit fractions.	83.6	81.9	82.7
Adding fractions with the same denominator.	79.3	80.3	79.8
Subtracting fractions with same denominator.	71.5	73.3	72.4
Multiplying a fraction by a fraction.	67.7	64.2	65.9
Adding two decimal fractions of up to thousandths without carrying.	64.4	65.4	64.9
Subtracting two decimal fractions of up to thousandths without borrowing.	62.6	61.3	61.9
Dividing a fraction by a fraction.	45.3	41.2	43.2
Multiplying a fraction by a natural number.	31.8	32.0	31.9
Changing fractions to decimals and vise versa.	32.6	29.7	31.1
Applying the concept of fractions in daily life.	29.0	24.1	26.5
Subtracting fractions with different denominators.	28.4	23.5	25.9
Adding fractions with different denominators.	12.9	12.4	12.7
Dividing a fraction by a natural number.	14.9	10.3	12.5

A high proportion of pupils (≈83%) demonstrated competence in drawing and writing non-unit fractions compared to slightly lower proportions of pupils (≈2 in 3) who proved competent in the competencies of subtracting fractions with same denominator, multiplying a fraction by a fraction and adding/subtracting decimal fractions. In the rest of the competencies, pupils' performance was rather inadequate. For instance, in adding and subtracting fractions with different denominators, a mere 12.7% and 25.9% of the pupils rated proficient respectively.

In addition, only 12.5% of the pupils could divide a fraction by a natural number. The proportion of boys and girls reaching the desired proficiency levels were comparable.

TABLE 5.08: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN THE COMPETENCIES OF 'GEOMETRY'

COMPETENCIES	BOYS	GIRLS	ALL
Drawing angles	68.6	67.4	68.0
Constructing circles.	62.0	66.0	64.0
Naming faces of a polygon	38.9	37.2	38.0
Recognizing lines of symmetry.	36.0	36.0	36.0
Measuring lengths.	35.1	30.9	33.0
Measuring angles.	36.7	24.7	29.1
Constructing a triangle	11.5	10.0	10.7

Whereas about 2 in 3 pupils reached the desired proficiency in the competencies of drawing angles and constructing circles, about a third of the pupils attained a similar rating in recognizing lines of symmetry, measuring lengths and naming faces of a given polygon.

In addition, a mere 10.7% of the pupils were able to construct a triangle whose dimensions are given. The proportions of boys and girls rated proficient were comparable in nearly all the competencies of Geometry except in 'measuring angles and lengths' where the proportions of the boys rated proficient were significantly higher than the girls.

TABLE 5.09: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN THE COMPETENCIES OF 'MEASURES'

COMPETENCIES	BOYS	GIRLS	ALL
Solving problems involving money (buying and selling).	63.4	54.8	59.0
Calculating the area of a polygon.	42.6	43.1	42.8
Telling the time shown on a clock face.	39.7	32.7	36.1
Solving problems involving time and distance.	29.6	19.9	24.6
Converting units: smaller to bigger and vise versa	26	21.9	23.9
Carrying out household budgeting.	19.4	15.1	17.2
Finding number of small containers/surface area that can fill a large one.	20	13	16.4

Slightly over a half of the pupils (59.0%) were competent in solving money related problems. Smaller proportions of pupils demonstrated competencies in the rest of the competencies of measures, the most challenging competence being finding the number of small containers / surface area that can fill a large one and carrying out household budgeting. Significantly higher proportions of boys than girls reached the desired

rating. The proportions of boys and girls attaining the desired rating in the rest of the competencies were comparable.

5.6 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY BY AGE

This section outlines the achievement of P 6 pupils in Numeracy by Age and gender. Table 5.10 gives the mean scores of pupils in Numeracy by age and gender.

TABLE 5.10: MEAN SCORES (PERCENTAGE) OF P 6 PUPILS IN NUMERACY, BY AGE AND GENDER

AGE (years)	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
5-10	50.3	2.51	51.0	2.52	50.7	1.99
11	58.5	1.53	54.9	1.79	56.2	1.40
12	51.3	1.03	46.2	0.78	48.5	0.78
13	45.9	0.62	41.7	0.66	43.5	0.56
14	43.7	0.52	38.6	0.49	41.1	0.43
15	43.1	0.83	37.5	0.75	40.6	0.61
16+[ר]	40.8	0.73	35.7	1.41	39.3	0.73

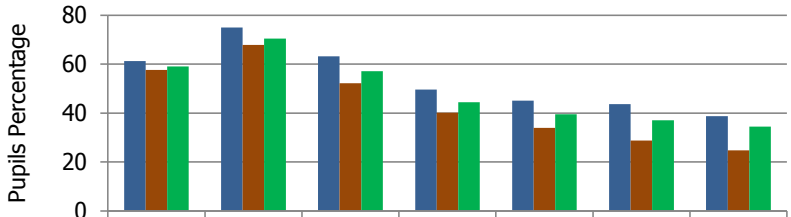
The mean scores of pupils increased with increase in age from 50.7% at 10 years to 56.2% at 11 years. Then, the mean scores gradually decreased with increase in age from 56.2% at 11 years to 39.3% at 16 and above years.

Apart from the 5-10 year olds where the girls mean score was slightly higher than the boys, the boys obtained significantly higher mean scores in all other ages.

The percentages of P 6 pupils reaching the desired proficiency in Numeracy is given in Figure 5.02.

[ר] Age above 15 years

FIGURE 5.02: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN NUMERACY, BY AGE AND GENDER



	9-10	11	12	13	14	15	15+
BOYS	61.3	75.0	63.2	49.6	45.1	43.7	38.7
GIRLS	57.6	67.8	52.2	40.1	34.0	28.8	24.8
ALL	59.1	70.4	57.1	44.4	39.5	37.1	34.5

Just like the mean scores, the proportions of pupils attaining the desired proficiency increased with increase in age from 59.1% at 5 – 10 years to 70.4% at 11 year olds and then decreased gradually with increase in age. Significantly higher proportions of boys attained the desired rating.

5.7 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY BY SCHOOL OWNERSHIP

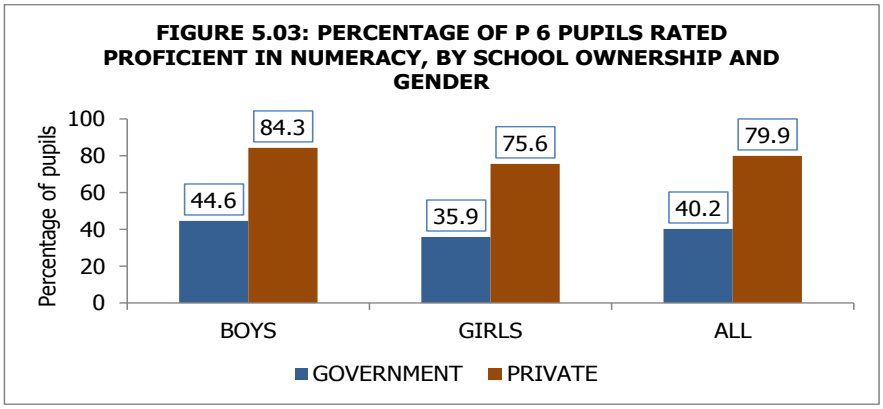
A description of the achievement of P 6 pupils in Numeracy by school ownership is given in this section. Table 5.11 shows the mean scores of P 6 pupils in Numeracy by school ownership and gender.

TABLE 5.11: MEAN SCORES (PERCENTAGE) OF P 6 PUPILS IN NUMERACY BY SCHOOL OWNERSHIP AND GENDER

SCHOOL OWNERSHIP	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
Government	43.3	0.51	39.6	0.55	41.4	0.48
Private	62.9	1.16	58.5	1.24	60.7	1.11

Pupils from government and private schools obtained mean scores of 41.4% and 60.7%, respectively. The difference in the mean scores is significant with private schools performing better.

In either school ownership, the boys obtained significantly higher mean scores than the girls. The proportions of pupils reaching the desired proficiency in Numeracy by school ownership is given in figure 5.03.



The respective proportions of pupils reaching the desired proficiency levels in the government and private schools were 40.2% and 79.9%. The difference in the proportions is significant with more pupils from private schools attaining the desired proficiency. Significantly more boys than girls were rated proficient in each type of school ownership.

5.8 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY BY SCHOOL LOCATION

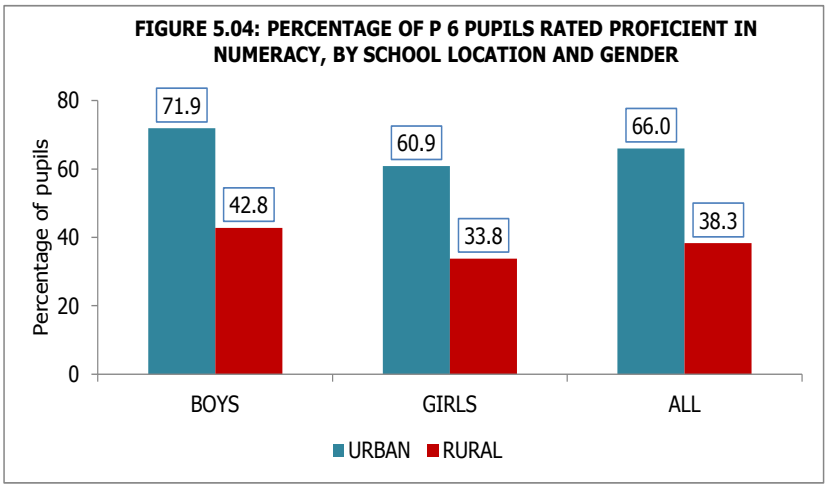
In this section, a presentation of the achievement of pupils in Numeracy by school location is given. Table 5.12 gives the mean scores of P 6 pupils in Numeracy by school location and gender.

TABLE 5.12: MEAN SCORES (PERCENTAGE) OF P 6 PUPILS IN NUMERACY BY SCHOOL LOCATION AND GENDER

SCHOOL LOCATION	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
Urban	55.9	1.11	50.6	1.14	53.1	1.04
Rural	42.6	0.49	39.0	0.58	40.8	0.48

Pupils from the urban and rural schools obtained respective mean scores of 53.1% and 40.8%. The difference in the mean scores was significant, with pupils from urban schools performing better. Boys from either school setting obtained higher mean scores than girls in the same school setting.

Figure 5.04 gives the proportions of pupils rated proficient in Numeracy by school location.



Urban schools had a significantly higher proportion of pupils (66.0%) reaching the desired proficiency level than the rural schools with 40.8% attaineding a similar rating. More boys than girls were rated proficient in the same school setting.

5.9 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY BY DISTRICT

A presentation of the performance of P 6 pupils in Numeracy by district is made in this section. The districts were categorized into the following colours: 'Green', 'Yellow' and 'Red'. Districts in 'Green' are those in which at least 75% 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 levels. Lastly, districts in 'Red' districts with an asterisk (*) had less than a quarter of the pupils rated proficient, and those with double asterisks (**) had 10% and below of the pupils rated proficient.

Table 5.13 shows the categorization of districts according to percentages of P 6 pupils rated proficient in Numeracy.

TABLE 5.13: CATEGORIZATION OF DISTRICTS ACCORDING TO PERCENTAGES OF P 6 PUPILS RATED PROFICIENT IN NUMERACY

GREEN		YELLOW		RED					
Mbarara	88.5	Kanungu	73.5	Lyantonde	49.7	Kumi	34.9	Mityana*	24.7
Kiruhura	86.4	Kampala	73.2	Kyenjojo	49.6	Tororo	34.4	Amuru*	24.3
Bushenyi	85.5	Ntungamo	68.5	Masindi	48.5	Nakaseke	34.1	Gomba*	24.0
Rukungiri	78.2	Kisoro	67.6	Apac	48.3	Kayunga	33.5	Kween*	23.9
Sheema	77.8	Mitooma	67.4	Mayuge	47.8	Dokolo	33.5	Serere*	23.4
Rubirizi	76.9	Ibanda	66.8	Lira	47.6	Kapchorwa	32.5	Zombo*	23.1
		Buhweju	63.6	Nakapiripirit	47.2	Mpigi	32.4	Manafwa*	22.5
6: 5 %		Wakiso	63.1	Arua	47.1	Kasese	32.2	Oyam*	22.5
		Masaka	61.5	Kyegegwa	47.0	Ngora	31.4	Bukomansimbi*	22.3
		Moyo	60.0	Ntoroko	46.9	Buvuma	29.7	Alebtong*	21.5
		Abim	59.3	Rakai	46.7	Kibaale	29.7	Buliisa*	20.9
		Jinja	59.1	Kabale	46.7	Bundibugyo	29.5	Kamuli*	20.8
		Kalangala	58.0	Kaabong	45.7	Pallisa	29.5	Mbale*	20.5
		Amudat	56.9	Maracha	45.6	Kiboga	28.9	Kyankwanzi*	16.7
		Isingiro	56.4	Lwengo	45.0	Mubende	28.1	Amolatar*	16.7
		Yumbe	56.2	Pader	44.4	Lamwo	28.0	Luuka*	15.4
		Busia	55.5	Nakasongola	44.2	Nwoya	27.9	Bulambuli*	13.1
		Kamwenge	54.9	Katakwi	43.4	Butambala	27.8	Bukwo**	08.0
		Koboko	54.7	Butaleja	41.6	Sironko	27.3		
		Buikwe	54.6	Amuria	40.0	Bugiri	27.1	18: 16%	
		Kabarole	54.0	Bududa	39.6	Kaberamaido	26.4		
		Luwero	53.9	Moroto	39.6	Kaliro	25.1		
		Kotido	53.0	Hoima	38.8	Kole	25.0		
		Gulu	52.9	Buyende	38.5				
		Kibuku	52.7	Namayingo	38.4	58: 52%			
		Adjumani	52.7	Agago	37.8				
		Otuke	52.1	Sembabule	37.5				
		Budaka	50.5	Soroti	37.4				
		Napak	50.5	Kitgum	37.2				
		Mukono	50.0	Bukedea	36.6				
				Nebbi	36.2				
		30: 27 %		Kiryandongo	36.1				
				Kalungu	35.9				
				Namutumba	35.5				
				Iganga	35.1				

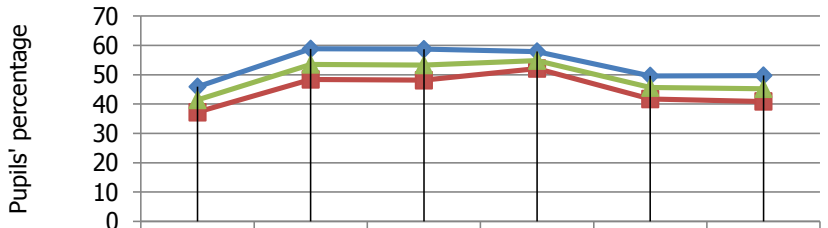
Six districts out of 112: Mbarara, Kiruhura, Bushenyi, Rukungiri, Sheema and Rubirizi were rated 'Green'.

Sixteen districts were rated 'Red' with an asterisk and one district; Bukwo was rated 'Red' with double asterisks.

5.10 ACHIEVEMENT OF P 6 PUPILS IN NUMERACY IN 2007 – 2012

This section outlines the achievement of P 6 pupils in Numeracy over the years 2007 to 2012. Figure 5.05 gives the percentages of P 6 pupils attaining the desired proficiency levels in the years 2007 – 2012 by gender.

FIGURE 5.05: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN NUMERACY IN 2007 - 2012, BY GENDER



	2007	2008	2009	2010	2011	2012
BOYS	45.9	58.8	58.7	57.9	49.6	49.7
GIRLS	37.2	48.4	48.1	52.1	41.7	40.9
ALL	41.4	53.5	53.3	54.8	45.6	45.2

The proportions of pupils attaining the desired rating increased over the years from 41.4% in 2007 to 53.5% in 2008, then remained nearly constant up to 2010, then it dropped to 45.6% in 2011 and remained at about the same level 45.2% in 2012.

More boys than girls were rated proficient in all the years.

5.11 CONCLUSIONS

Topically, P 6 pupils performed best in 'Operations on numbers' where over three quarters of them could perform the four basic operations on whole numbers. However the proportions of the pupils who could apply the four operations in real life situations dropped from 2 in 3 in 'addition and subtraction' to about 1 in 2 in 'multiplication and division'.
Further a mere 20.5% demonstrated competence in use of brackets to carry out combined operations of multiplication and addition.

The second well-done topic was 'Number system and place value' where about two thirds of the pupils were rated proficient. The pupils performed best in 'writing numbers given in figures in words and vise versa' but had difficulty in 'rounding off decimal numbers to the nearest whole number'.
Whereas the remaining topics were averagely done, worst performance was exhibited in the topics of 'Geometry' and 'Measures' where the respective proportions of pupils rated proficient were 19.2% and 14.1%.

The major setback in 'Geometry' was the use of the Mathematical instruments: the pupils lacked the basic skills in construction. While in 'Measures' the pupils were deficient of elementary skills in buying and selling as well as the knowledge of comparing length, volumes and areas of smaller and larger shapes/objects.

Whereas over two thirds of P 6 pupils ably carried out the four basic operations on fractions with same denominator as well as decimal fractions, less than 1 in 3 were competent in most of the other competencies of fractions especially dividing a fraction by a natural number and applying fraction in novel situations.

Further, less than a quarter of the pupils (23.4%) were able to find the squares of numbers less than 50.

Chapter 6

ACHIEVEMENT OF P 6 PUPILS IN LITERACY IN ENGLISH

6.1 INTRODUCTION

This chapter is a presentation of the P 6 pupils' achievement in Literacy in English. The presentation is in terms of mean scores and the percentages of pupils reaching the desired proficiency levels. First, the overall figures are presented followed by performance by competence. This is followed by a description of pupils' achievement by gender and age, school ownership, location and district. The description of the competencies assessed in Literacy in English in P 6 is given in the next section.

6.2 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 and interpret a cartoon.	A pupil is able to: ▪ Write an informal letter 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.

ADEQUATE LEVEL		
Reading Comprehension	Writing	Elements of Grammar
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.	A pupil is able to: ▪ Fill an Application Form correctly and neatly. ▪ Write a simple guided composition. ▪ Write an informal letter, but with errors in the format. ▪ Write a composition relevant to the topic but lacking in sequence.	A pupil is able to: ▪ Give the opposite of most words. ▪ Use a given vocabulary item in a full sentence. ▪ Use the present continuous tense correctly. ▪ Use most structures correctly. ▪ Use comparatives which are formed by modification of the stem.

BASIC LEVEL		
Reading Comprehension	Writing	Elements of Grammar
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.	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 informal letter, but with many errors and omissions. ▪ Write a short	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,

BASIC LEVEL		
Reading Comprehension	Writing	Elements of Grammar
	composition, making many errors.	but make grammatical errors. ▪ Use the simple past tense. ▪ Use a few simple structures correctly. ▪ Use comparatives which are formed by adding '*er*'.

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

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

The P 6 pupils obtained an overall mean score of 32.1% (S.E: 0.59). The means for the boys and girls were 31.7% (S.E: 0.60) and 32.6% (S.E: 0.64), respectively. So, the gender difference in mean scores is negligible.

The percentage of pupils who reached the different levels of proficiency in Literacy in English is shown in Table 6.01.

TABLE 6.01: PERCENTAGE OF P 6 PUPILS REACHING THE VARIOUS LEVELS OF PROFICIENCY IN LITERACY IN ENGLISH, BY GENDER

PROFICIENCY LEVELS	BOYS	GIRLS	ALL
Advanced	5.5	6.3	5.9
Adequate	34.1	35.7	34.9
Basic	27.0	25.5	26.3
Inadequate	33.4	32.5	32.9

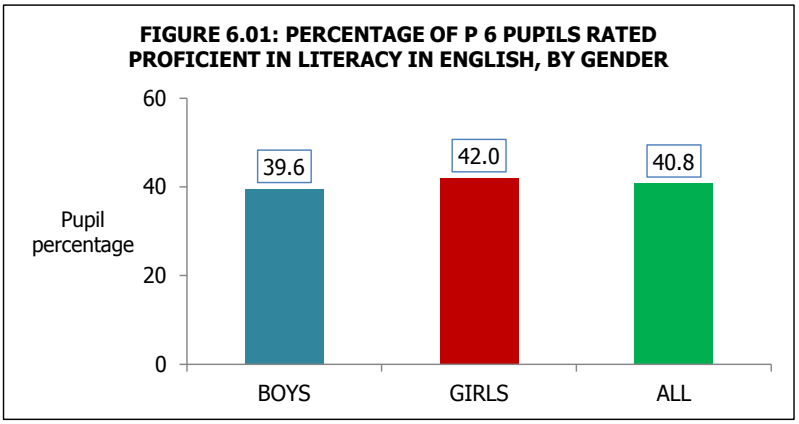
Of all the P 6 pupils, less than a tenth (5.9%) reached the 'Advanced level'. This is the level of complete mastery of all the skills specified by the curriculum for the P 6 pupil. These pupils have acquired most of the competencies expected of them at the P 6 level.

The next level of proficiency is 'Adequate level', which registered slightly over a third (34.9%) of the P 6 pupils rated proficient. The 'adequate level' is the minimum required level of proficiency.

Slightly more than a quarter of the pupils (26.3%) were rated 'Basic'. This category of pupils could only exhibit elementary skills of Literacy compared to what is specified and expected of them at the P 6 level.

The 'Inadequate level' recorded less than a third (32.9%) of the pupils. These are pupils who are yet to acquire the elementary skills of Literacy.

The percentage of P 6 pupils who were rated proficient in Literacy in English by gender is shown in Figure 6.01.



Overall, 40.8% of the P 6 pupils were rated proficient in Literacy. Of these, 39.6% were boys and 42.0% girls. There were no significant gender differences in performance implying that the boys and girls performed at nearly the same level.

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

6.4.1 Achievement of P 6 pupils in Reading Comprehension

The P 6 pupils' achievement in the sub-skill areas and competencies of Reading Comprehension is described in this section. Table 6.02 shows the percentage of P 6 pupils rated proficient in the sub-skill areas of Reading Comprehension.

TABLE 6.02: 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.	93.0	91.3	92.1
Reading and interpreting a cartoon.	65.4	60.7	63.0
Reading a poem.	46.5	47.5	47.1
Reading and describing the activities in a picture.	44.1	48.8	46.5
Reading a picture sequence.	34.7	36.2	35.5
Reading and comprehending a story.	33.4	34.4	33.9
Reading tabular information (e.g. a calendar).	16.8	15.8	16.3

Over 90% of the pupils could 'associate objects to actions', though a lesser number (63.0%) showed ability in reading a cartoon and deriving meaning out of it. On the other hand, just slightly more than a third (33.9%) of the pupils were able to read a story and comprehend it; and fewer, (16.3%) were competent in reading and interpreting tabular information. No significant gender differences were registered.

Table 6.03 shows the percentage of P 6 pupils rated proficient in selected competencies of Reading Comprehension.

TABLE 6.03: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN SELECTED COMPETENCIES OF READING COMPREHENSION

COMPETENCIES	BOYS	GIRLS	ALL
Calendar Reading			
Reading a calendar and identifying events that take place on particular days.	63.0	59.3	61.1
Reading a calendar and using it to tell the date of a particular day of the preceding month.	11.1	10.3	10.7
Story Reading			
Reading a story and answering questions requiring picking the response directly from the text.	62.9	62.5	62.7
Reading a story and answering a question requiring forming own opinion based on the text.	15.4	17.6	16.5
Cartoon Reading			
Reading a cartoon and answering questions requiring direct response from the text.	48.2	49.0	48.6
Reading a cartoon and giving the contextual meaning of a word used	9.8	8.8	9.1
Poem Reading			
Reading a poem and answering questions requiring direct responses from the text.	46.8	47.1	47.0
Reading a poem and answer questions requiring making conclusions based on it.	18.5	19.7	19.1

In all cases of reading texts, the performance of the P 6 pupils in a particular competence varied with the complexity of the task involved. Pupils could easily respond to items of recall nature than those in the higher order abilities category. For instance, 61.1% of the pupils were able to read a calendar and identify events that occur on particular dates, while only 10.7% could read a calendar of a given month and use it to tell the date of a particular day of the preceding month.

In story reading, 62.7% of the pupils were able to respond to a knowledge question requiring writing the answer picked directly from the text, whereas only 16.5% exhibited ability to form their own opinion based on the text.
For composition writing, 60.1% of the pupils could write legibly although only 5.7% could use the correct punctuation and spelling.

6.4.2 Achievement of P 6 pupils in Writing

The performance of the P 6 pupils in the sub-skill areas and competencies of writing is described in this section. Table 6.04 shows the percentage of P 6 pupils rated proficient in the sub-skill areas of writing.

TABLE 6.04: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN THE SUB-SKILL AREAS OF WRITING

SUB-SKILL AREAS OF WRITING	BOYS	GIRLS	ALL
Writing a guided composition.	76.3	77.6	77.0
Naming objects.	72.4	71.7	72.1
Completing an Application Form.	56.3	55.7	56.0
Writing a letter.	47.4	56.1	51.8
Writing words.	50.3	48.3	49.3
Writing a composition.	37.7	45.1	41.5
Drawing and labelling objects.	42.1	37.7	39.8

More than three quarters of the pupils (77.0%) exhibited ability to write a guided composition. These were followed by 72.1% who were able to write the names of objects and more than a half of the pupils (56.0%) who could competently complete an application form.

On the other hand, fewer pupils (41.5%) were able to write a narrative composition. There were significant gender differences in 'writing a letter' and 'writing a narrative composition' with more girls than boys rated proficient. Table 6.05 shows the percentage of P 6 pupils who were rated proficient in selected attributes of composition writing.

TABLE 6.05: PERCENTAGE OF P 6 PUPILS WHO WERE RATED PROFICIENT IN SELECTED ATTRIBUTES OF COMPOSITION WRITING

COMPETENCIES	**BOYS**	**GIRLS**	**ALL**
Composition writing:			
Legibility	56.0	64.0	60.1
Relevant content	34.5	41.6	38.1
Correct format	10.2	12.5	11.4
Correct punctuation and spelling	5.1	6.2	5.7

6.4.3 Achievement of P 6 pupils in Grammar

The performance of P 6 pupils in the competencies of Grammar is described in this section. Table 6.06 shows the percentages of P 6 pupils rated proficient in the competencies of grammar.

TABLE 6.06: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN THE COMPETENCIES OF GRAMMAR

COMPETENCES	BOYS	GIRLS	ALL
Giving plurals.	58.8	61.3	60.1
Using comparatives.	68.2	70.9	69.6
Using prepositions.	78.1	79.7	78.9
Identifying opposites.	28.7	31.3	30.0
Using tenses.	37.5	40.6	39.1
Using given structures.	31.7	32.1	31.9
Using given vocabulary.	41.0	41.0	41.0
Using adjectives	48.7	53.4	51.1

Whereas more than three quarters of the pupils (78.9%) were able to use prepositions correctly, slightly more than a half of the pupils (51.1%) could use adjectives correctly. On the other hand, fewer pupils, 39.1% and 30.0%, were rated proficient in the use of tenses and identifying opposites, respectively. In all cases the gender differences were not significant.

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

The achievement of P 6 pupils in Literacy in English by age is described in this section. Table 6.07 shows the mean scores of P 6 pupils in Literacy in English by age and gender.

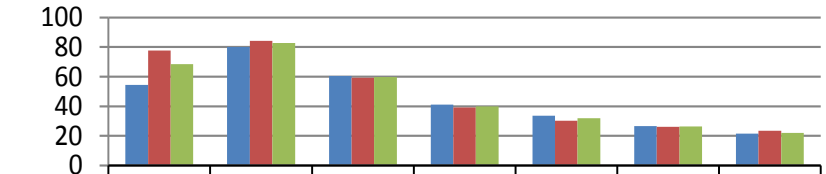
TABLE 6.07: MEAN SCORES (PERCENTAGE) OF P 6 PUPILS IN LITERACY BY AGE AND GENDER.

AGE (years)	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
9-10	40.2	3.07	48.4	2.08	45.3	2.05
11	50.3	1.95	52.3	1.44	51.6	1.50
12	41.0	1.23	39.9	0.91	40.4	0.97
13	32.3	0.67	31.3	0.66	31.8	0.58
14	28.5	0.54	27.4	0.56	27.9	0.46
15	26.3	0.60	25.5	0.74	25.9	0.55
15+[ω]	24.1	0.61	23.2	1.02	23.8	0.57

[ω] Age above 15 years.

Pupils' mean scores in Literacy began by rising from 45.3% for the 9 – 10 year olds to 51.6% for the 11 year olds. From that age, upwards, the mean scores declined gradually reaching 23.8% for the 15 and above year olds. There was significant gender difference in mean scores at the age of 9 – 10 years with the girls obtaining a higher mean score 48.4% (S.E: 2.08) compared to the boys' 40.2% (S.E: 3.07). Figure 6.02 shows the percentage of P 6 pupils rated proficient in Literacy by age and gender.

FIGURE 6.02: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN LITERACY IN ENGLISH, BY AGE AND GENDER



	9-10	11	12	13	14	15	15+
BOYS	54.4	80.1	60.5	41.2	33.6	26.6	21.5
GIRLS	77.6	84.2	59.2	39.1	30.3	26.1	23.4
ALL	68.6	82.7	59.8	40.0	32.0	26.4	22.0

Whereas more than two thirds of the 9 – 10 year old pupils (68.6%) were rated proficient in Literacy, the percentage rose to more than three quarters (82.7%) for the 11 year olds. However, the following age witnessed a drop in the percentage of pupils rated proficient from the 82.7% for the 11 year olds to 22.0% for the 15 and above year olds. Significantly, more girls (77.6%) than boys (54.4%) aged 9 – 10 years were rated proficient in Literacy.

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

The achievement of P 6 pupils in Literacy in English by school ownership is described in this section. The mean scores of the pupils by school ownership are presented in Table 6.08.

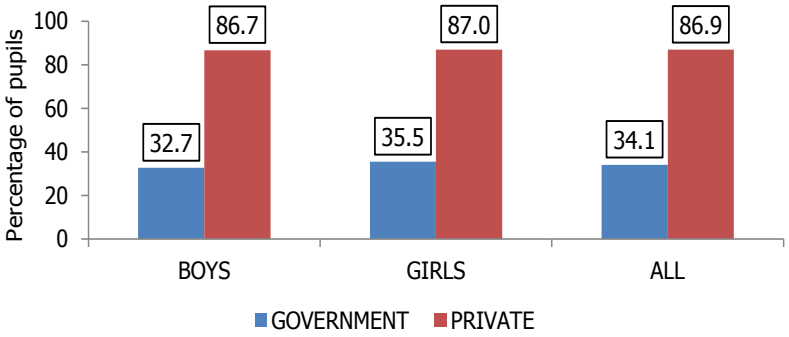
TABLE 6.08: MEAN SCORES (PERCENTAGE) OF P 6 PUPILS IN LITERACY BY SCHOOL OWNERSHIP AND GENDER

SCHOOL OWNERSHIP	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
Government	28.6	0.61	29.6	0.72	29.1	0.63
Private	52.5	1.10	53.2	1.05	52.9	1.02

P 6 pupils in government schools obtained a mean score of 29.1% whereas those in private schools achieved a mean score of 52.9%. In both cases, there were no significant gender differences in mean scores.

Figure 6.03 shows the percentage of P 6 pupils rated proficient in Literacy by school ownership and gender.

FIGURE 6.03: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN LITERACY, BY SCHOOL OWNERSHIP AND GENDER



Just slightly more than a third (34.1%) of the P 6 pupils in government schools were rated proficient in Literacy. On the other hand, more than three quarters of the pupils (86.9%) in private schools attained the same rating. There were no significant gender differences in either case of ownership.

6.7 ACHIEVEMENT OF P 6 PUPILS IN LITERACY IN ENGLISH BY SCHOOL LOCATION AND GENDER

The P 6 pupils' achievement in Literacy according to the location of their schools (rural or urban) is described in this section. Table 6.09 shows the mean scores of P 6 pupils in Literacy by school location and gender.

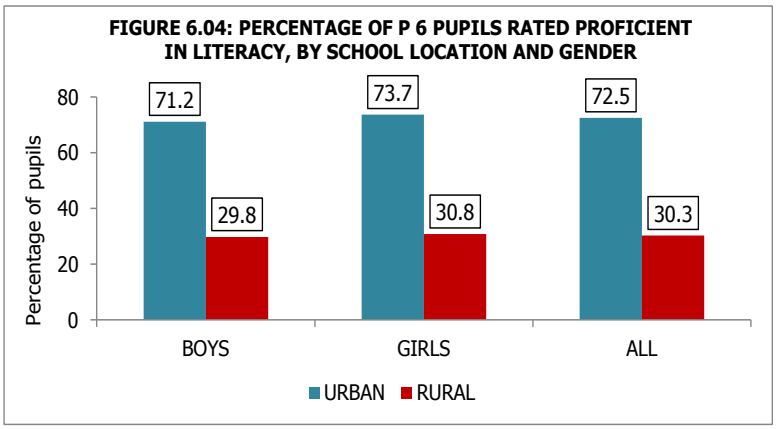
TABLE 6.09: MEAN SCORES (PERCENTAGE) OF P 6 PUPILS IN LITERACY IN ENGLISH BY SCHOOL LOCATION AND GENDER

SCHOOL LOCATION	BOYS		GIRLS		ALL	
	Mean	S.E	Mean	S.E	Mean	S.E
URBAN	45.3	1.39	46.3	1.27	45.9	1.28
RURAL	27.4	0.47	27.7	0.64	27.6	0.50

The P 6 pupils in the urban schools obtained a mean score of 45.9%, which is significantly higher than that of pupils in the rural schools (27.6%). There were no significant gender differences for pupils in schools in both

locations, and interestingly, the means of the boys and girls in the rural schools are closer to each other than is the case with the urban schools.

Figure 6.04 shows the percentage of P 6 pupils rated proficient in Literacy by school location and gender.



Nearly three quarters of the P 6 pupils in the urban schools (72.5%) were rated proficient in Literacy. On the other hand, fewer, 30.3%, of the P 6 pupils in the rural schools were rated at the same level. The existing gender differences were not significant.

6.8 ACHIEVEMENT OF P 6 PUPILS IN LITERACY IN ENGLISH BY DISTRICT

This section is a description of the achievement of P 6 pupils in Literacy by district. The districts are categorized 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. Those categorized 'Yellow' are ones in which at least a half, but less than three quarters of the pupils acquired the desired proficiency. Finally, districts grouped in Red are those with less than a half of the pupils reaching the desired proficiency level. Districts in 'Red' with an asterisk (*) had less than a quarter 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 6.10.

TABLE 6.10: CATEGORIZATION OF DISTRICTS ACCORDING TO PERCENTAGES OF P6 PUPILS RATED PROFICIENT IN LITERACY IN ENGLISH

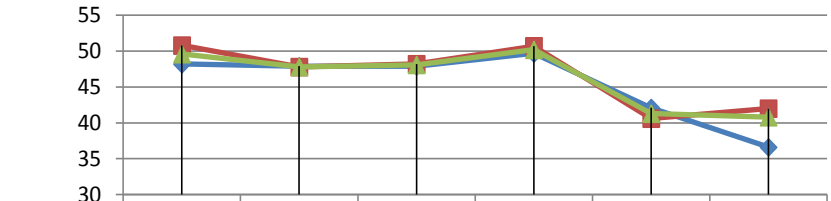
GREEN		YELLOW		RED			
Kampala	89.6	Wakiso	73.5	Napak	48.7	Mityana	30.1
Amudat	88.0	Kiruhura	72.9	Jinja	48.4	Budaka	29.6
Mbarara	83.1	Bushenyi	71.9	Kyegegwa	48.3	Kabale	29.6
Masaka	75.2	Kotido	66.7	Kyenjojo	47.4	Bukedea	29.3
4 (3.6 %)		Sheema	66.7	Soroti	47.2	Amuria	28.2
		Moroto	62.6	Adjumani	47.1	Bundibugyo	28.2
		Mukono	61.6	Arua	47.0	Yumbe	28.1
		Luweero	60.5	Kiryandongo	46.6	Kasese	28.0
		Rukungiri	59.8	Ntungamo	46.2	Maracha	27.4
		Rubirizi	58.5	Mayuge	45.9	Bugiri	26.6
		Kaabong	57.7	Tororo	45.7	Kween	26.5
		Kanungu	57.1	Lyantonde	44.5	Buvuma	26.2
		Koboko	56.8	Buikwe	43.7	Mbale	25.7
		Nakapiripirit	56.7	Kabarole	43.0	Agago	25.3
		Kalangala	56.6	Rakai	42.8	Kumi	25.0
		Ibanda	56.5	Kamwenge	42.7	Nebbi	25.0
		Nakasongola	55.4	Ntoroko	42.3	Kayunga	24.8*
		Buhweju	52.6	Butaleja	41.7	Namutumba	24.4*
		Kitgum	51.9	Namayingo	41.6	Kaberamaido	24.2*
		Masindi	51.5	Bududa	40.5	Serere	24.1*
		Abim	51.4	Mitooma	39.8	Sironko	23.2*
		Moyo	49.8	Kapchorwa	39.2	Bulambuli	23.1*
		Gulu	49.4	Busia	39.2	Pallisa	22.9*
		Isingiro	49.3	Sembabule	38.4	Manafwa	21.2*
		24 (21.4 %)		Butambala	37.9	Kaliro	21.1*
				Kibuku	37.3	Mubende	20.4*
				Mpigi	36.8	Kibaale	19.4*
				Katakwi	36.7	Dokolo	18.8*
				Nakaseke	36.0	Gomba	18.2*
				Lira	36.0	Buyende	18.2*
				Zombo	34.6	Nwoya	17.9*
				Apac	33.9	Amuru	17.6*
				Pader	33.7	Bukomansimbi	16.9*
				Kalungu	33.5	Kisoro	16.8*
				Otuke	33.4	Kamuli	13.8*
				Kiboga	32.0	Amolatar	13.6*
				Ngora	31.8	Oyam	13.4*
				Iganga	31.8	Kole	13.1*
				Buliisa	31.3	Kyankwanzi	12.9*
				Lwengo	31.1	Lamwo	12.0*
				Hoima	30.7	Bukwo	9.8**
						Alebtong	9.1**
						Luuka	7.1**
						84 75%	

Only four districts: Kampala, Mbarara, Amudat and Masaka (3.6%) were grouped 'Green' implying that they each had more than 75% of their pupils rated proficient in Literacy. The 'Yellow' category had twenty four districts (21.4%) meaning that these had more than 50% but less than 75% of their pupils reaching the desired proficiency level. The majority of the districts, eighty four (75%) were in the 'Red' category meaning that each had less than 50% of their pupils reaching the minimum desired level of proficiency. Out of all the 84 districts in 'Red', 27 of them (32%) are indicated with asterisks indicating that each had less than 25% of their pupils rated proficient. The districts with double asterisks i.e. Bukwo (9.8%), Luuka (7.1%) and Alebtong (9.1%) had each less than 10% of their pupils rated proficient in Literacy.

6.9 ACHIEVEMENT OF P 6 PUPILS IN LITERACY IN ENGLISH IN THE YEARS 2007 – 2012

This section is a presentation of the performance of P 6 pupils in Literacy in English. Figure 6.05 shows the percentage of P 6 pupils rated proficient in Literacy in the years 2007 – 2012

FIGURE 6.05: PERCENTAGE OF P 6 PUPILS RATED PROFICIENT IN LITERACY IN ENGLISH IN 2007 - 2012, BY GENDER



	2007	2008	2009	2010	2011	2012
BOYS	48.2	47.9	47.9	49.7	42.1	36.6
GIRLS	50.8	47.8	48.2	50.7	40.6	42.0
ALL	49.6	47.8	48.1	50.2	41.3	40.8

Between the years 2007 – 2010, the overall percentage of the P 6 pupils rated proficient in Literacy was in the range of 47% - 50.2%. In 2011 the percentage dropped to 41.3%; only to drop again, though slightly, to 40.8 in the year 2012. Similarly, there has been a significant drop in the performance of the boys from year 2011's 42.1% to 36.6%. However, the girls performance slightly rose from the 2011's 40.6% to 42% for the year 2012.

6.10 CONCLUSIONS

Reading Comprehension still registered majority of the pupils doing well in associating objects. However, very few pupils were rated proficient in items that required reading a text and responding to questions which required critical thinking.

In writing, whereas the pupils did well in writing a guided composition, very few were able to reach the same level when it came to writing a narrative composition and a letter.

In grammar, majority of the pupils could use prepositions, though fewer exhibited ability to use other forms and structures.

Chapter 7

CONCLUSIONS, DISCUSSIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

This chapter presents the main findings, together with the plausible reasons for the performance patterns as well as the recommended actions to be taken to get better teaching and learning in schools, and learning achievement. In addition to that, the responsible centres expected to implement the suggested recommendations are also given. The chapter is divided into two sections. The first section gives the overall achievement of pupils in Numeracy and Literacy in English; and the second, the achievement of pupils by selected factors: pupil gender and age, school ownership, location, district and then trends in achievement.

7.2. ACHIEVEMENT OF PUPILS

7.2.1 OVERALL LEVEL OF PUPILS' ACHIEVEMENT

Results:

- Overall, 69.9% of the P 3 pupils met the defined proficiency level in Numeracy and 53.8% reached a similar ranking 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, just over a half of the pupils showed such proficiency in Literacy in English.

- At P 6, the proportions of the pupils who attained the defined proficiency levels in Numeracy and Literacy in English were 45.2% and 40.8%, respectively. These are the pupils who demonstrated that they had acquired most of the competencies specified in the P 6 curriculum.

Reasons:

- The teaching of Numeracy in the local language, possibly enables pupils to understand the concepts better.
- Perhaps the pupils' deficiency in reading skills might have affected their performance in Literacy.
- Insufficient reading materials and inappropriate use of time allotted for reading, which would promote the development of pupils' reading skills.
- Increasing number of pupils, especially in government schools, which is not matched by the resources.
- Inadequacy in curriculum interpretation skills which might have led some teachers to teach concepts outside the national curriculum.

- 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.
- Teaching following textbooks instead of the national curriculum.
- Rushing of teachers through the curriculum.

Recommendation:	***Responsibility Centre***
Continue training teachers in the implementation of the thematic curriculum.	NCDC, PTCs, DES
Re-train tutors in PTCs on how to teach reading and writing.	Universities, NTCs
Provide enough reading materials, and encourage teachers to be resourceful by developing others.	Teachers, Parents, MoE&S, Community Leaders.
Encourage schools to allow pupils borrow books.	Parents, Community leaders, DES, MoE&S
Train tutors in PTCs and teachers how to interpret the curriculum for teaching and then for assessment purposes.	PTCs, NTCs, UNEB, MoE&S
Strengthen the use of assessment findings to improve the quality of teaching and learning.	Teachers, Headteachers, DES, MoE&S, Community Leaders, Parents
Teach English Language using appropriate methods of teaching it as a second language.	Teachers, Headteachers, DES
Take time on each topic in the curriculum until pupils have understood.	Teachers, Headteachers

7.2.1.1 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.

P 3 pupils had difficulty in the following Numeracy competencies:

- Addition with carrying.
- Subtraction with borrowing.
- Applying addition and subtraction in daily life.
- Interpreting graphs, Sorting shapes and Measures.
- Writing number names from symbols.

In Numeracy, P 6 pupils were able to:

- Add, subtract, multiply numbers by a one-digit number and divide by a one-digit number.
- Writing numbers given in figures in words and vice versa.
- Carry out the four basic operations on fractions with same denominator.

P 6 pupils had difficulty in:

- Applying the four operations in real life situations.
- Use of brackets to carry out combined operations of multiplication and addition.
- Rounding off decimal numbers to the nearest whole number.
- Basic skills in construction using geometrical instruments.
- Elementary skills of comparing length, volumes and areas of smaller and larger shapes/objects.
- Finding the squares of numbers less than 50.

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 prepare appropriate formative assessment tools and strategies
- Inappropriate use of assessment as a guide to the teaching-learning process.
- Teaching theoretically, without showing practical application.
- Some teachers are deficient in the skills of geometry
- Insufficient geometrical instruments for teachers and pupils.
- Giving exercises and tests which do not encourage application of learnt concepts in novel situations.

Recommendation:	***Responsibility Centre***
Train teachers to practically relate what is taught to real life situations.	PTCs, NTCs, Universities
Ensure that pupils have mastered pre-requisite concepts before introducing new ones.	Teachers, Head teachers, DES
Organise workshops for tutors with particular emphasis on methodology.	PTCs, NTCs, MoE&S, Universities.
Organise workshops for teachers focusing on enhancing their skills in teaching Geometry.	Head teachers, PTCs, DES, MoE&S
Provide geometrical instruments for teachers and encourage parents to buy for their children.	Head teachers, MoE&S, Community leaders.
Give pupils exercises regularly and mark them in order to gauge their level of understanding of the topic taught.	Teachers, Head teachers
Train tutors and teachers in correct formative assessment techniques.	UNEB, NTCs, PTCs

7.2.1.2 ACHIEVEMENT OF PUPILS IN LITERACY IN ENGLISH

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

- Ably associate an object to the same object and an object to a word describing it.
- Write the letters of the alphabet with the correct shape and position.
- Copy a story, with the correct spacing between words.

Problem areas of Literacy at P 3:

- Reading and describing activities in a picture.
- Writing names of objects with the correct spelling.
- Writing sentences and words correctly.

In Literacy in English, P 6 pupils could:

- Read a text and answer comprehension questions of recall nature.
- Write a guided composition.
- Use comparatives and prepositions.

P 6 pupils had difficulty in:

- Reading a calendar and use it to tell the date of a particular day in the preceding month.
- Reading a story (and other texts) and comprehending it so as to be able to answer questions requiring deeper understanding, such as forming their own opinion.

- Writing a relevant composition with the correct format.
- Identify opposites.
- Using sentence structures correctly.

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.
- Pupils' limited practice and exposure to suitable reading materials.
- Lack of appropriate displays in and outside the classroom in some schools.
- Pupils lack of skill on how to organise and write down their own ideas.
- Lack of guidance in independent reading and writing.
- Insufficient reading materials.
- Some teachers lack reading skills
- Lack of practice because teachers find it hard to write comprehension passages.
- Teachers over emphasize grammar and teach less of the other areas.
- Teaching reading comprehension as listening comprehension.
- Limited exposure of teachers, especially in rural areas.
- Inappropriate assessment, which does not enhance critical thinking skills.
- Teaching outside the national curriculum.

Recommendation:	***Responsibility Centre***
Teach reading skills to beginners using phonic and syllabic methods.	Teachers, Headteachers, DES
Provide enough reading materials and encourage parents to buy some for their children.	Teachers, Headteachers, MoE&S, Community leaders
Hold refresher courses for tutors and teachers on a regular basis and focus on methodology.	PTCs, NTCs, DES, MoE&S
Guide pupils to write stories and display some of their work.	Teachers
Encourage the community to involve children in reading and writing activities, such as taking readings in places of worship.	Teachers, Parents, Head teachers, Community leaders
Organise intra and inter class as well as inter school reading and writing competitions.	Teachers, Headteachers, DES, PTCs
Train teachers and tutors in correct formative assessment techniques.	UNEB, PTCs, NTCs.
Organize workshops for tutors and	DES, PTCs, MoE&S

Recommendation:	***Responsibility Centre***
teachers, focussing on skills of teaching reading and writing.	
Teach reading and writing as timetabled.	Teachers, Head teachers
Prepare appropriate displays and guide pupils also to prepare some.	Teachers
Guide pupils in independent reading and writing.	Teachers, Head teachers, Parents
Guide pupils to write stories and display some of their work.	Teachers

7.2.2 ACHIEVEMENT OF PUPILS BY GENDER

Result:

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

Reasons:

- Gender stereotyping, especially in the rural areas.
- Lack of female role models in Mathematics and at upper primary level.

Recommendation:	***Responsibility Centre***
Sensitize the community on how to monitor learning activities.	MoE&S, LGs, Community leaders
Popularise Mathematics and Science to female students in secondary schools.	Universities, NTCs, Headteachers, Teachers, Community leaders
Use affirmative action to increase the enrolment of females into PTCs and NTCs.	MoE&S

7.2.3 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 were poorer among older pupils.

Reasons:

- Older children may have distracters to school attendance, such as petty trade.
- Some of the older pupils maybe orphans, who are family heads or have inconsiderate care-takers.
- Some of the older pupils may have learning difficulties.

Recommendation:	***Responsibility Centre***
Encourage parents to send children to school at the right age, that is, six years in P 1.	MoE&S, LGs, Community leaders, Head teachers, Teachers
Introduce programs that can interest older pupils in schools.	Teachers, Head teachers, NCDC, MoE&S, LGs
Obtain comprehensive bio-data on every pupil and use it to program teaching-learning activities accordingly.	Teachers, Head teachers, Parents
Design learning activities to suit interests of older pupils as well.	Teachers, Head teachers, NCDC

7.2.4 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 level in both subjects, while in government schools, boys did better than girls in Numeracy in both P 3 and P 6.

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
- 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 Language at home and they attend nursery schools, where they learn the basic competencies of Numeracy and Literacy early.
- Lower rate of absenteeism among teachers and pupils in private schools.
- 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.

- Laxity in supervision of teaching in government schools.
- Lack of lunch for some pupils and teachers in some government schools.

Recommendation:	***Responsibility Centre***
Reduce the class sizes in government schools by recruiting more teachers and building more classrooms and/or schools.	LGs, MoE&S
Strengthen the mechanism of tracking teachers' and pupils' attendance in government schools.	Head teachers, community leaders, LGs, MoE&S,
Ensure increased monitoring and supervision in government schools by especially the community.	Community leaders, LGs, MoE&S,
Sensitize and devise measures to ensure that parents play rightful roles in the education of their children.	Community leaders, Head teachers, Teachers, LGs, MoE&S
Provide regular support supervision to guide teachers.	Head teachers, PTCs, DES, MoE&S
Ensure that all pupils and teachers have a mid-day meal.	Parents, Community leaders, Teachers, Head teachers, MoE&S

7.2.5 ACHIEVEMENT OF PUPILS BY SCHOOL LOCATION

Results:

Pupils in urban schools performed better than those in rural areas, at both P 3 and 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. Parents' laxity to provide school requirements is noted as a key challenge, in government aided schools.
- Teachers in rural areas are more frequently absent. They engage in agriculture and other activities during school time to meet their needs. Less contact time.
- Less support supervision in the rural areas.

Recommendation:	***Responsibility Centre***
Train teachers to make instructional materials, and to help pupils also to make some.	PTCs, NTCs, MoE&S,
Enact and enforce bylaws which encourage and/or compel parents to play their roles effectively.	LGs
Increase administrative and community supervision in rural schools**.**	LGs, Community leaders, MoE&S
Ensure regular support supervision.	DES, Community leaders, PTCs, NTCs.

7.2.6 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.
- Only Mbarara district had the majority of their both P 3 and P 6 pupils (over 75%) rated proficient.
- The following districts: Alebtong, Amolatar, Amuru, Bukomansimbi, Bukwo, Buliisa, Dokolo, Gomba, Kaberamaido, Kamuli, Kole, Kween, Kyankwanzi, Lamwo, Luuka, Manafwa, Mbale, Nwoya, Oyam, Pallisa, Serere and Zombo had very few pupils in both classes rated proficient.

Reasons:

- Mbarara is fast developing an urbanized setting with social amenities, which promote learning.
- Perhaps in the districts that performed well, there:
    - is more parental involvement in the learning of the pupils such as follow-up of learners' performance.
    - could be low levels of absenteeism among pupils and teachers.
- Most of the districts which had few pupils rated proficient are new and maybe facing challenges such as absence of a fully functional education department in the district.
- Rice growing, fishing and other money earning activities which occupy the pupils and teachers.
- Inadequate infrastructure and teachers in some of the schools.

Recommendation:	***Responsibility Centre***
Find out the good practices in the well performing districts and replicate them in other districts.	DIS, DEO, DES, MoE&S,
Identify and address the challenges currently faced by the new districts and any other with few proficient pupils.	MoE&S, MoLG
Sensitize parents on the need to keep pupils in school during school days.	Community Leaders, Teachers, Head teachers, LGs, MoE&S.

7.2.7 ACHIEVEMENT OF PUPILS IN THE YEARS 2007 -2012

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. From, 2011, however, the proportions of the pupils rated proficient dropped to 63.0% at P 3 and 45.6% at P 6, and then this year, 2012, it rose to 69.9% at P 3 and remained unchanged at P 6.

- In Literacy, the achievement level of P 3 pupils rose in 2009 and remained almost constant, with about 57% of the pupils rated proficient in 2010. It later dropped to 47.9% in 2011 and rose again to about 54% in 2012. At P 6 in the period 2007-2010 the proportions of the pupils reaching the defined proficiency level remained approximately the same; about 50%. However, in 2011 the proportions of P 6 pupils rated proficient dropped to about 41% and has remained almost unchanged this year, 2012.

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 these new districts could have faced challenges; such as high rate of absenteeism among pupils and teachers, lack of infrastructure, teachers etc.
- Rising school enrolments, unmatched by increase in resources. Consequently, primary schools faced a number of challenges: high pupil-teacher ratio and inadequate instructional materials.
- Rise in the cost of many commodities; fuel, food stuff and even scholastic materials.

- Residual effects of the 2011 natural disasters: landslides, floods and lightning, unreliable electricity (load shedding), political campaigns which preceded the national elections of 2011 and might have had some residual effects persisting into 2012.
- The unresolved teachers' plight.

Recommendation:	***Responsibility Centre***
Continue and expedite the provision of the necessary infrastructure and facilities in all the districts.	LG, MoE&S
Reduce the pupil-teacher ratio by training and recruiting more teachers.	MoE&S
Provide sufficient instructional materials, especially for the thematic and transitional curriculum.	NCDC, MoE&S,
Increase UPE fund allocations to schools and make releases on time to allow schools to plan on how to effectively use it.	MoE&S
Resolve, expeditiously, issues of teachers welfare.	MoE&S