



Graduate School of Development Studies

**“THE SECRET BEHIND THE FIGURES”:
EVALUATION OF UPE PROGRAM IN IGANGA DISTRICT**

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Dedication

To my dear parents Rev con Paul Kitakule and Janet Kitakule without whom my academic background and career could not be possible to account for. To all my brothers and sisters, Bernard, Joshua, Nathan, Paul, Rachael, Rebecca, ketty, Mebra and to the little sweet sisters Jane and Brenda I look forward to seeing you upgrade in your studies.

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MAY THE LORD BLESS YOUR WORK

List of Acronyms

CCG	Class Completion Grant
DEO	District Education Officer
DIV	Division
ECE	Early Childhood Education
EPRC	Education Policy Review Commission
GOU	Government of Uganda
ILG	Iganga District local government
LGDP	Local Development Grant
MDG	Millennium Development Goals
NAPE	National Assessment of Progress in Education
UNDP	United Nations Development Programme
UNEB	Uganda National Examination
UNESCO	United Nations Education Scientific and cultural organisation
UPE	Universal Primary Education
SFG	School Facility Grant
TPR	Teacher pupil ratio

Abstract

Uganda since 1997 has been quite successful at expanding enrolment in primary education following the implementation of free education. Increased enrolments require increased resources in order to maintain the quality. Increase in enrolment did not match with increase in input resulting in shortages in the number of teachers, classrooms and learning materials leading to large classes and declining academic achievements of pupils in Public schools.

This study is about the impact of class size on pupil's academic achievement in Iganga district and its main objective is to investigate the mechanisms through which class size, affects pupils academic achievement in Iganga district public schools and further to determine other factors that might have an impact on pupils academic achievements¹

Relevance to Development Studies

This study is relevant to the development studies since it evaluates the second Millennium Development Goal (Universal Primary Education) at district level in one of the African developing countries (Uganda). The information contained therein will add to the existing knowledge in the field of universal primary education and the effect of class size on pupils' academic achievement.

Keywords

Class size, Universal Primary Education, academic achievement, teacher- pupil ratio, enrolment

Chapter 1

Problem Description and Methodology

1.0 Contextual Background.

Primary education lays a foundation for the success of any educational system. Primary education is supposed to impart knowledge, basic skills, develops attitude, nurtures values and morals. Furthermore primary education is the foundation on which advanced forms of education could be built. Primary education is also necessary in developing political, social, and economic institutions of any state. Education transfers, knowledge and information, and education can be a vehicle for the success of any individual, community, institution or nation. Generally, developing countries lag behind in literacy levels compared to most of the developed countries and there has been a concerted effort to improve on this trend. The United Nations developed a time frame of 2015 for equal access to education. (Grogan 2006) observed that

“A major aim of the United Nations’ Millennium Development Goal is to reduce the number of uneducated African youth. This manifesto set the target year 2015 for all children in the world to complete school, and for boys and girls to have equal access to education at all levels”.

Expanding primary school education system and improving its quality have been important goals in developing countries since the 1960s in their first post independence phase. In 1961, for example, African ministers of Education met in Addis Ababa under the auspices of the United Nations Education Scientific and Cultural Organisation (UNESCO) and agreed upon a resolution to achieve universal, free and compulsory primary education in all African countries within twenty five years. From then, two similar conferences were organised in Karachi and Santiago de Chile in the same period. In the 1960s and 1970s, most African countries launched the implementation of Universal Primary Education (UPE) policies although, many fell short of their goals and others were abandoned, due to financial limitations of the governments of these countries as well as other underlying challenges like inadequate infrastructure and teachers. However, the enrolments in primary schools in these countries increased. (Rondinelli et al. 1990)

UPE policy was re-embarked upon in the world conference on ‘Education for All’ held in Jomtien during (March 5-9, 1990). It was in this conference that a framework for action suggested universal access to and completion of primary education (or whatever higher level of education is considered as ‘basic’) by the year 2000. The right to free and compulsory education is recognised as a fundamental human right in the universal declaration, and in the convention on the rights of the child (Najjuma 2001:6).

1.2 The Introduction of Universal Primary Education (UPE) in Uganda.

In 1986 when the National Resistance Movement/Army (NRM/A) took over power in Uganda, it instituted a number of commissions to assess the performance of all government ministries including the Ministry of Education and Sports. By 1989, an Education Policy Review had been established recommending policy reforms for primary, secondary and tertiary education. One of their major recommendations was the universalization of primary education by the year 2000. The report argues that it was only when every child is enrolled at the right age and does not leave school without completing the full cycle of primary education that it would be possible to ensure that all the citizens have the basic education needed for a living. In the report, UPE was envisioned to lay foundation for transformation of the Ugandan society leading to greater unity among the people, higher moral standards and an accelerated growth of the economy (MoES 1999:10). In 1992 a Government white paper committee was appointed and it published its first report on Education. The committee was assigned to examine the Education committee report and identify realistic and satisfactory recommendations to the government.

The recommendation by The Education Policy Review Commission (EPRC) of universalising primary education were accepted by the white paper committee and only modified the time frame for completion of the programme to the year 2003. This was followed with some preparations for UPE which started in 1993 including training of teachers and head teachers, and supply of learning materials under the umbrella of Primary Education and Teachers Development Project. (MoES 1999:9)

UPE aimed at meeting the following objectives;

“Making basic education accessible to the learners and relevant to their needs as well as meeting national goals, making education equitable in order to eliminate disparities and inequalities, establishing, providing and maintaining quality education as the basis for promoting the necessary human resource development, initiating a fundamental positive transformation of society in the social, economic and political fields and ensuring that education is affordable by the majority of Ugandans by providing, initially, the minimum necessary facilities and resources, and progressively the optimal facilities, to enable every child to enter and remain in school until they complete the primary education cycle.” (MoES 1999:10)

According to (MoES 1999); there was no immediate progress until 1996 when the first presidential election was held. During those electoral campaigns, President Museveni promised the electorates to provide free primary education to four children per family on being elected. Following his election, President Museveni announced in December 1996 that the implementation of UPE was to begin in January 1997. It must be noted that the coming of the UPE though had its roots since 1990 when the last conference was held in Jomtien, this was a political pronouncement without any policy framework for implementation. Before the UPE policy, most of the costs for children’s education were borne by parents. Based on general economic situation at that time, children from

poor families could not afford primary education or dropped out before completing primary education.

The declaration of UPE in 1996 committed the government of Uganda to paying school fees at a rate of 5000 Ugandan shillings for pupils in lower primary (Primary One-Primary Three) per annum and 8100 Ugandan shillings for upper primary (Primary Four-Primary Seven) and payment of salaries for teachers. By 1999, teachers in public schools earned 75,000 shillings per month. Other costs of schooling like uniform, lunch and transport fees remained the responsibility of parents (Grogan 2006:6-7)

Furthermore, the government also made a national commitment to buying text books and other instructional materials and building of classrooms and schools for the growing number of pupils and also meeting the needs of the disadvantaged and underrepresented students such as those with special needs and girls (Umoh 2003) . The government through the Ministry of Education and Sports had the responsibility of training and retraining teachers, providing and developing policies and policy guidelines, planning for quality education including assessment and monitoring of learning and teaching processes in schools.

Other than the central government, other stake holders also had roles to play in the implementation of UPE. The district authority under local government administration ensures that UPE capitation Grant is disbursed to the respective schools and proper accountability made by the head teachers, ensuring that the education budget is followed without any diversion of the funds and reporting to the district council on the implementation of UPE. The district is also responsible for monitoring, supervision of schools and ensuring successful implementation of the program through sensitization and mobilization of the community to take their children to school and also provision of desks, safe water, and construction of classrooms (Bategeka 2005:7).

The School Management Committees (SMCs) at the school level are obliged to give the overall direction to the operation of the school and ensuring that schools have development plans, approving and managing school budgets annually, monitoring the finances of the school, linking schools to communities, and ensuring transparency particularly in use of UPE grants. Parents also play a vital role in UPE implementation by providing the basic necessities to their children especially feeding, hygiene and medical care, shelter, exercise books, pencils, pens and clothing. Furthermore, they provide basic nurturing and support, and physical and material support. Key elements of nurturing include preparing a child to attend school, safe home environment, and ensuring that the child is clean. (Ibid: 7)

1.3 The state of affairs in Ugandan Education Sector before and after the Introduction of UPE.

Uganda was a British protectorate from 1894 until October 9th 1962 when it gained her independence. Prior to independence, formal school education was introduced by the Missionaries in 1877, and was modelled along the British System of education.

Uganda follows a 7-4-2-4 model of education, with seven years of primary education, 4 years of lower secondary, 2 years of upper secondary and 4 years of tertiary education. The higher education system is composed of universities, national teachers colleges, colleges of commerce, technical colleges, training institutions, and other tertiary institutions. At each level, there is a national selection examination which feeds a centrally administered process of distributing successful candidates among the available next levels(MoES 1999:4).

From the time Uganda gained her independence in 1962, about half a million pupils had enrolled at primary level which number steadily increased to 800,000 in 1971 in about 2,900 schools. In the proceeding years, primary pupils' enrolment increased to about 2.1 million in about 7,000 schools. In this period, (1971-1985) while enrolment increased, there was no direct co-relation with increase in the number of schools or classrooms. The period (1971-1985) was characterised by decline in the gross domestic product and a general decline in the share of the education sector in the national budget from 3.4% to 1.4%. By then primary education was reaching only 50% of the school going age group (MoES 1999:6).

According to (MoES 2007:7), this formal education was mainly for the children of chiefs to provide functionaries needed by the British colonial government to administer their indirect rule system of government. Due to this policy, formal education was not made available to all people. Many Ugandans therefore remained illiterate.(Odubi 1990) observed that prior to the introduction of UPE in Uganda, national pupils' enrolment in primary schools was still low, and the teacher pupil ratio was at 1:40 and class size was less than 65.

The introduction of UPE in 1997, led to drastic increase in enrolments in primary schools resulting in several challenges.

According to National Assessment of Progress in Education (NAPE); the mean scores and pupils rated proficient in terms of English and Mathematic performance declined immediately following the implementation of UPE (UNEB 2003). NAPE was first carried out in Uganda in 1996 to assess the achievement of teachers and pupils in grade 3 and 6 in English and Mathematics. Another assessment in the same grades was repeated in 1999, 2003 and 2004. The findings revealed in general weak performance in both English and Mathematics in grade 3 and 6. Teacher's performance was generally up to standard, but less satisfactory in Mathematics and English.

NAPE results showed further that the introduction of UPE led to decline in the mean score in English from 39% in 1996 to 24% in 2004 and Mathematics from 24% to 13%.This implies that a smaller percentage of pupils

were reaching the desired proficiency levels than before UPE, and the quality of pupils work as reflected by the mean score, also decreased perhaps due to pupils incapability to read with understanding. Additionally, Mathematics mean scores remained the same at 40% between 1996 and 1999, although the percentage of the pupils dropped from 48% to 42%. The real drop in the standards occurred in 2003- from 49 mean score in 1996 to 21 in 2003. Only a half of the proportion of pupils that had been rated proficient in the previous assessment attained a similar rating in 2003.

1.4 Class Size.

Class size is the actual number of children to a given teacher.

(Guarcello et al. 2006:17) made an analysis of school quality indicators based on three areas; classroom which involves class size, curriculum, pedagogy and technology. The quality of teachers in terms of qualifications, experience and teachers assignment, and school environment which includes school leadership, education leadership, school discipline and school management and organization. Developed countries have quality education as compared to developing countries where most of these indicators are inadequate.

Uganda has shortages in classrooms and classroom spaces, high teacher pupil ratio, high class to classroom ratio and pupil classroom ratio resulting in large class size. Most of the studies conducted in Europe indicate that classes of 30 pupils are large and recommend reducing them to 20 and below in order to increase on pupils' performance.

(Blatchford.P 2003) argues that small classes allow pupils interaction with the teacher and with fellow pupils, teachers are able to identify pupils' individual weaknesses, class control and management is easy, less time is spent on class arrangement and teachers are able to complete the syllabus in time. Small classes are easy to monitor, they increase pupils' participation and quick responses from the teacher. Pupils in small classes get enough home work and quick feedback from their teachers.

Whilst in developing countries some authors like (Michaelowa 2001) and (Musana 2006) argue that when class size exceeds 62 pupils, effective learning ceases. (Nakabugo et al. 2007) argue that large classes are difficult to manage and such difficulties result in pupils' indiscipline. The reality in developing countries and Uganda in particular is that class size is large and some teachers teach more than 120 pupils in one class. Uganda is faced with a problem of classrooms and inadequate teachers which makes it impossible to have small classes. Increase in enrolment therefore may have compromised with the quality of education in Uganda.

The introduction of UPE resulted in the rise of primary school enrolment figures from 2.7 million pupils in 1996 to 5.3 million in 1997,(73%) and to 7.1 million(127%) by 2005 (MoES 2005:9). Even though this was followed by an increase in the number of teachers and classrooms, the current average of teacher-pupil ratio is 1:51, meanwhile the official teacher pupil ratio according to the Ministry of Education and Sports is 1:45; the reality however, is that it is much higher.

1.5 Problem statement

The Government of Uganda (GOU) has made primary education reform one of its highest priorities. Under the Universal primary education system, net primary enrolment now stands at 95% of all children aged 6-13 years (MoES 2006)

(MoES 1998) indicate that due to the introduction of UPE, gross enrolment increased by 73% in one year from the pre-UPE total of 3,068,625 pupils¹ in 1996 to 5,303,564 in 1997. By 2003, gross enrolment in primary schools was 7,633,314 children representing an increase of 149% the pre-UPE enrolment. However, increase in enrolment did not match with increase in inputs (schools, classrooms, teachers, text books) contributing to large classes.

Iganga district is one of the districts in Uganda with the highest enrolment of 172, 000 pupils and poor academic performance. The district is also faced with the challenges of insufficient inputs like; teachers, classrooms, text books, desks, pit latrines, which affect the learning of pupils. Despite the district efforts to provide more classrooms in the district, a good number of the schools still lack permanent classroom structures and have crowded classes. Out of the required 4,394¹ classrooms, only 1,435 exist.

This implies that about 60% of the pupils study in semi-permanent, grass thatched structures or under trees. Learning therefore is usually interrupted especially during rainy seasons where some schools have to close. Such conditions are likely to affect the general performance of the pupils and teachers.

Iganga district has got 3054 trained teachers, who are responsible for 172,000 pupils; this gives an average ratio of 1:56 pupils per teacher. However, despite the average, majority of the teachers have classes above 120 pupils due to inadequate classrooms.

The Primary Leaving Examination (PLE) results from Iganga District Education Office indicate that before the introduction of UPE in 1996, 12.6% of the pupils obtained division one² as compared to the results of the first UPE graduates in 2003 where only 4.4% passed in division one. It's on the basis of the above that the study set to establish the mechanisms through which class size affects pupils' academic achievement under UPE.

1.6 Relevance and Justification.

Studies on class size have been undertaken in Uganda but not particularly in Iganga. (Najjuma 2001) researched on the impact of UPE Policy on performance of primary schools relating it to enrolment and parents' participation in Masaka district. However she was not specific on pupils' academic achievement and class size. (Aguti 2002) carried out a similar study

¹ District three year development plan 2006/2007/2009(Iganga Local Government 2006).District education profile

² Division one ranges from 4-12 aggregates

which showed that, although distance learning had led to increase in trained teachers, it did not solve the problem of huge pupil-teacher ratios in Uganda. However none of the available studies has systematically explored the effects of increased enrolment, the corresponding increase in teachers and its effects on pupils' performance. Though (Blatchford.P 2003) and (Valerie 2002) carried out studies on class size and pupils' performance in lower primary, they did not take into account, the whole range of primary education (Primary One- Primary Seven) which distances their findings from this study. Additionally, it's evident, that most of these studies were carried out in the north and as a result, the measure of large class was different and might not be contextually applicable to developing countries let aside Uganda especially.

Though (Nannyonjo 2008) carried out a study in Uganda on factors influencing learning achievements in grade six, with class sizes being one of them, she did not explain how class size affects pupils' performance and among the sampled districts, Iganga was not inclusive. (Nakabugo et al. 2007) also conducted a study in Uganda on large classes and their study was based on the strategies of handling large classes in order to improve pupils' performance.

This study will hence be an eye opener to the Iganga context in addition to provision of insight for policy makers in the district and Uganda in general on how to improve quality of education in public schools. The study will add knowledge to the existing information on UPE and performance.

1.7 Major Objective.

The purpose of the study is to investigate the mechanisms through which class size, affects pupils academic achievement in Iganga district public schools and further to determine other factors that might have an impact on pupils' academic achievements.

Specifically the study is to identify the relationship between class size and pupils' class scores, the relationship between class size and teachers' class assessment and also to identify other factors that contribute to pupils' academic achievement in public schools in Iganga district.

1.8 Research questions.

The main questions asked are;

1. In which ways has class size affected pupils' academic achievements under universal primary education in public schools in Iganga district?
2. What other factors have contributed to low academic achievements of pupils in Iganga district?

Sub-questions

- What is the relationship between class size and pupils' test scores?
- What is the relationship between class size and teachers' class assessment in Iganga district?
- How has class size changed?

1.9 Scope and limitations of the study.

The study focused on the ways in which class size affected pupils' academic achievements under universal primary education in schools in Iganga district and also other factors that have contributed to low academic achievement.

The study was limited to Iganga district because it is one of the districts in Uganda with the highest teacher- pupil ratio in the country, enrolment figures, coupled with low academic performance of pupils. It involved selected public schools.

Study limitations

Some information regarding pupil- teacher ratio per school, especially for the years before the implementation of the programme was difficult to obtain due to poor data storage and lack of permanent offices at school. Some of the schools the researcher visited did not have offices and hence documents were kept at the headmaster's residence whilst others were kept in rooms rented with in the villages. Fortunately, the district had compiled some information on teacher pupil ratios for the period required, therefore the researcher resorted to using teacher pupil ratio at district level since it was readily available.

To answer the question on class size and teachers assessment, it required the researcher to use tests or end of term examinations for the schools visited. However since setting and marking these tests are not standardised across the district and even nationally, the researcher preferred using PLE results that are centrally set at national level with an independent body which makes the marks reliable and more realistic.

Making comparison in performance before and after the introduction of UPE required looking at performance before the introduction of the programme for about five years rather than comparing with only 1996. This limited the analysis and called for further investigation of what happened before.

Questionnaires, desk reviews and interviews were used to generate information on teachers' perceptions on class size and pupils' performance as well as variation in enrolment and performance before and after the introduction of UPE. The use of these three sets of tool helped corroborate the information and complimented on the weaknesses of a particular tool.

Time was also a limitation to the study because most schools are located in rural areas where public transport is unavailable since the study involved movements throughout the district. Accessing such schools was a problem. At times the people who were supposed to provide information were absent and disorganized and this was time consuming.

1.10 Methodology.

This study used both primary and secondary data like Journals, articles, published /unpublished documents and reports from the Government of Uganda and online documents were the main sources of secondary data which

helped the researcher to gain insight on what had been written on the subject and it enriched the section of literature review.

Questionnaires and interviews administered between 11th July and 3rd August in the district of Iganga in Uganda were the source of primary data. Statistical data was analyzed using statistical tools such as percentages and ratios. Primary information was useful to the researcher as it enhanced the reliability and authenticity of the information presented in the study.

1.10.1 Area

The area of study was Iganga district in eastern Uganda. Iganga was chosen as a case because it's one of the districts in Uganda with the highest enrolment in public schools, a high teacher pupil ratio, large classes and also one of the poor performing districts. The researcher works in this district as a senior assistant secretary in charge of monitoring government programmes at sub-county level. This helped the researcher in accessing information that was useful for this study.

1.10.2 Population

The study population constituted the teachers, pupils in UPE schools, District Education Officers and head teachers. In this study teachers were purposefully chosen in order to get their perceptions and attitudes towards class size. Since teachers deal with pupils within and outside class they could best understand why pupils perform poorly in class.

Pupils in public schools were used in the study because they are the ones that the policy has affected. Information collected on pupils included enrolments and primary leaving examination marks.

The district education officers and the head teachers were interviewed because they are directly involved in the implementation of the UPE programme. The researcher expected to get in-depth information on the challenges being faced in the implementation of the programme.

1.10.3 Sample size

The sample size constituted seventy three (73) respondents

Table; 1 Categories of respondents

Category of respondents	Sample size
Teachers	70
District education officer	01
District Inspector of schools	01
Head teacher/ Examiner	01
Total	73

1.10.4 Rationale for sample selection

According to information from (Iganga Local Government 2007) there are 148 UPE schools in Iganga district. The researcher carried out the study in 18 randomly selected schools. Four teachers, that is, two male and two female were selected per school and this gave a total of 72 teachers however, only 70 responded. Both male and female were select to check whether both categories face the same problems in teaching large classes or not. The district education officials were interviewed. These were selected purposively as key informants since they are knowledgeable of UPE policy and its implementation.

The schools selected were based on their existence prior to UPE and also given that they are current beneficiaries under the UPE programmes.

The choice of selection of the schools was based on their accessibility and enrolment patterns. Schools with both low and high enrolment were selected. Both low and high enrolment has a contributing factor on class size and academic performance which was the aim of this study.

1.10.5 Questionnaires.

The questionnaires were used as method of collecting data because of the large sample (70 teachers) some questions were open ended while others were close ended. The use of both closed and open ended questionnaires helped to corroborate information obtained. See appendix.

1.10.6 Interview guide

The Interview guide enabled the researcher to ask questions which were in line with the study and helped to address the short falls that were associated with questionnaires. The people interviewed included a head teacher, one inspector of schools and District education officer as shown in the appendix

1.10.7 Documentary review

Documents such as mark sheets for PL E results, journals, text books and information from internet about primary education were systematically reviewed to establish the enrolment and academic achievement trends.

1.10.8 Organization of the paper.

This study is organized in four chapters. Chapter one of the study highlights the contextual background of UPE in Uganda and the methodology. Chapter two of the study introduces the main concepts that have been used in the study and critically reviews the literature on the subject matter. Chapter three discusses the finding and analysis that was generated by the study and finally chapter four present conclusions.

Chapter 2

Main concepts and literature review

2.0 Introduction

This chapter defines the main concepts used in the study and reviews existing literature about class size and pupils academic achievement. Specifically, the chapter focuses on the relationship between class size and pupils' class score, and teachers' class assessment.

2.1 Class size.

Class size is calculated differently in different countries. In Uganda, class size is calculated basing on teacher pupil ratio yet class size is not the same as teacher pupil ratio. The calculation of teacher pupil ratio include both full time and part time teachers , Librarians, special education support staff divided by the number of pupils in a school. Thus, the teacher pupil ratio is always lower than the actual class size and the difference between the two can vary depending on the teachers' roles and the amount of time spent by teachers in classroom during the school days. Although teacher pupil ratio is important in measuring the amount of money spent per child in terms of how pupils learn, what matters is the number of pupils that are physically interacting with the teacher.

In this study, class size was defined as the number of pupils taught by a teacher at a particular time. Class size varies per day and term by term since the number of pupils enrolled in class may differ from those being taught in a class at a particular time for reasons like absenteeism, change of school among others factors (Goldstein and Blatchford 1998:256).

2.3 Class scores

Class scores is a mean of measuring academic performance in institutions of learning. Class scores are numbers that convey the performance of an examination. Class scores is also a summary of evidences contained in candidates' responses to items of an examination that are related to the construct being measured.

In the context of this study, class score refers to the marks pupils attain in the various subjects, that is, English, mathematics, Science and Social studies. The marks used were primary leaving examination results (PLE) from 1996-2007. This is because they could easily be obtained from schools and the district education office. In addition, PLE examinations are standardized and are the same in the whole country, so they give good comparison across schools. PLE exanimations are also set by an independent body and marked at national level without any biases which made them realistic and reliable to be used for the study.

2.4 Teachers' class assessment:

This is the ability of teachers to find out whether the pupils are achieving the objectives set or not. Teachers have to assess the pupils in order to understand what pupils know, understand and what the pupils can do with the knowledge as a result of their learning experience. Teachers' class assessment may take the form of the number of times the teachers administer tests to the pupils, how much home work is given and how soon the teacher gives feed back to the pupils.

2.5. The relationship between class size and pupils' class score

(P Blatchford et al. 2002), argued that there was clear effect of class size on pupils' academic achievement in their first year. In their study, effects included decreasing test scores with increase in class size in literacy and mathematics. Blatchford, P. et al argued that there were different effects of class size for the different ability groupings and gains for class reduction were highest for the lowest achieving group.

Furthermore, in mathematics test scores decreased with increases in class size although there was little change between 20 and 25 pupils. When the classes were analyzed in terms of the different ability groupings, it was found that the achievement of the low baseline achievement group continued to fall as class sizes increased beyond 28 pupils. For the other two ability bands there was no real change after 22 pupils. Consequently, it appeared that for lower baseline achievers there was a larger gain effect from being in a small class when compared to the other ability groups. Does this mean that small classes only benefit slow learners? And what really takes place in small classes that do lead to great achievement for the pupils that do attend them?

Additionally, in terms of literacy, increase in class size caused a decrease in test score although there was little evident change between 18 and 25 pupils in the class. Furthermore, the gain from a reduction in class size from 25 to 15 was estimated to be much greater for the lowest achieving group. But does this mean that a simple reduction in the number of students is enough to explain the increase in achievement? Or are there other factors that do bring about increase in academic achievement of pupils scores when class size is reduced?

(Valerie 2002:36) in support argues that class size may be just one dominant factor that may affect learning and achievement since in other studies pupils' achievement has been found to increase in classes with over 30 pupils.

Blatchford and others also acknowledged that class size was not the only determining factor of pupils' academic progress. They recognized that home influence and parental input as well as within-child factors such as intelligence and the ability to concentrate affect children's achievement. They found that there was a gender difference. Girls were about 4 months ahead of boys in literacy on entry to the first year. The authors also appreciated that the prior achievement level of children on entry to the school influenced their progress,

as did the child's family's economic status, measured by entitlement to free school meals.

Whilst the effect of class size in the study was relatively small compared to these other factors, the authors believe that the effect of class size is nevertheless significant. (Ibid 179-181)

According to (Valerie 2002:9), young children in smaller classes do better in reading than those in larger classes, especially in the first year of school. They also pay more attention to the teacher and their work. Valerie argues that smaller classes enable teachers to improve their teaching method, reduces on their stress level and workload.

A team headed by Goldstein, studied over 10,000 children in two successive cohorts in over 300 state schools in 13 local education authorities throughout the country in England. They found that children in smaller reception classes (their first year of school) improved measurably in tests of literacy. The results indicated that class size has a clear effect, both before and after adjusting for other possible influences, such as disadvantage.

On the other hand, achievement in literacy decreased as class size rose from about 15 to about 30, but in mathematics there was little effect on progress in classes over 25. In literacy, children who started school as low achievers benefited most from smaller classes, with the most important benefits occurring when class sizes fell below 25. (Goldstein and Blatchford 1998)

The study conducted by (Jepsen and Rivkin 2002) on the relationship between class size reduction, new teachers and students' achievements' in kindergarten up to grade three in California indicated that a reduction in class size by 10 students in grade three brought about 4% increases in mathematics score and 3% points in reading. These varied from school to school. It was also revealed that schools with more low income students were likely to receive better benefits and schools with a high proportion of black students appeared to benefit little from smaller classes. In this case assumptions can be drawn from these findings if small classes are only beneficial to younger children and especially those from poor back grounds.

(Michaelowa 2001:1708) examined thirty seven variables assumed to impact learning competencies in Cameroon, Coted'voire, Burkina Faso Madagascar and Senegal. The variables were analyzed at school, class, and country level. From the analysis, Michaelowa concluded that, there is an inverse relationship between class size and learning outcomes. Additionally, Michaelowa concluded that 62 students per teacher was a threshold number and once classes exceed 62 she argues effective learning stops. Michaelowa gives a higher number as compared to that given by Blatchford et al who recommends the number of pupils to be kept below 20 for effective learning. Does it mean small numbers are only relevant in developed countries?

In line with Michaelowa's analysis, (Benbow et al. 2007) in their study on the impact of large classes in Developing world concluded that while learning can occur in large classes, the quality of teaching and its overall effect on education is much lower in comparison to an environment where classes are much smaller in size.

This is true for Iganga district and perhaps Uganda at large. The introduction of free education increased class sizes and compromised on the quality of teaching and learning.

Furthermore Benbow and her colleagues point out that there were a variety of obstacles that emerge with large classes that can negatively affect teaching and learning. These among others include teachers' difficulty to differentiate their instructional methods like catering for individual students, teachers also tend to require more time for classroom management at the expense of teaching. Uganda being a developing country and also faced with large classes it may be undergoing such challenges and these calls for an investigation.

(Nannyonjo 2008) examined the relationship between pupils' performance and class size in grade 6 in Uganda. Test scores in English and Mathematics were examined using scatter plots and line graphs. The scatter plots for test score against class size demonstrated that English test scores decrease slightly with increase in class size. The scatter plot for Mathematics indicated that there was a positive change in the test scores with increase in class size. Nannyonjo acknowledges that pupils in large classes can score as high as those in smaller classes. However, no explanation was given to this. Is it the class size that does affect pupils' score or the methods of teaching used by teachers? Such questions require investigation. In English Nannyonjo found that classes of about 60 pupils had the highest mean score while in mathematics the highest score were between class size of 50 and about 60. The findings revealed that pupils in schools with a large class size have lower mathematics and English test scores as compared to those from schools with small class sizes. Nannyonjo concludes that large class sizes somehow relate to lower pupils' test scores although pupils in large classes can score high as those in smaller classes. There is need to make an investigation into why larger classes tend to comparatively perform poorly than smaller ones. Is it because it is difficult for teachers to manage, control and supervise pupils in large classes or it goes beyond mere management or supervision?

2.6 The relationship between class size and teachers' class assessment

(Blatchford.P 2003) found that class size also affected teaching, classroom organization and pupils' behaviour as well as social relationships. He argued that, smaller classes may not be so beneficial socially. According to him, there were signs of adverse effects on children's social relationships in classes below 20, with children more aggressive towards or rejected by each other. In larger classes, children spent more time with each other, rather than the teacher and so may have developed more independence from the teacher.

Children in smaller classes get more teaching support and attention, and are more attentive, which may be especially important for this age group. He adds that smaller groups in primary education may lead to more interaction and personal attention. Although he argues that improvement in performance is only noticed in the first year, this poses questions why improvement in

performance is not persistent in the proceeding years and why is there an improvement in the first year?

Finn and Achilles (1999) as cited by (Blatchford.P 2003:574) articulated the relationship between small classes and pupils attention and argued that small classes increase pupils' engagement in learning. Finn and Achilles argue that since in small class settings everyone is seen by the teacher, it is difficult to withdraw from learning interactions. Furthermore, when classes are reduced the pressure is increased for each pupil to participate in learning and every pupil is more attentive to the teacher which results in instructional contact and improved pupils learning behaviour.

(Odden 1990-216) also cited Glass and Smith (1978), Glass, Cahen, Smith and Filby (1982) who conducted a meta- analysis study on class size and students achievement using 725 effects. They concluded that there was a clear and strong relationship between class size and pupils achievement. In their research, they found that out of 725 effects, 60% indicated higher achievement in small classes. It also showed that students learnt more in small classes and classes had to be reduced to a number below 20 students to produce significant effects on the students' achievement. However their study was criticized by Slavin (1984, 1986) that the meta-analysis give equal weight to all the findings whether well or poorly designed studies and also their research often combined studies that were on different topics giving an example of the study on how to play tennis that produced a large effect. The methodology used was also questioned.

Slavin (1989) reanalysed the same finding by using only those with "methodologically sound studies addressing students academic achievement" using standard deviation and the results showed that for both classes with 20 and those smaller of about 15 students had very small effects of 0.08 and 0.04 standard deviation respectively. The results also indicated that if class sizes were reduced by half from 30 to 15, the effect would increase students performance by 1/10 standard deviation. This implies that the Glass and Smith (1978) study used very small groups which produced large effects.

Such studies are contradictory to that conducted by (Michaelowa 2001) in Francophone countries and (Musana 2006) in Uganda who argue that for effective learning to take place the number of pupils should not exceed 62. The two authors give a higher number as compared to the meta-analysis study which recommends 20, a class size which is not applicable to developing countries given the problem of inadequate classrooms and teachers. Additionally, given the large enrolment in Uganda as a result of UPE, reducing class sizes to less than 20 pupils require a lot of financial investment in school infrastructure and the training of teachers. Such quantum of investment will however be unaffordable to the country given its economic stand currently.

(Nakabugo et al. 2007:6) interviewed 35 teachers about their experience of teaching in large classes in Uganda. It was found that teachers in large classes are faced with challenges in classroom control and management which result in indiscipline, giving examples of excessive noise, children dodging exercises, difficulty to prepare teaching and learning materials and difficulty to reach out and interact with all pupils. Large classes also limit participation of all pupils during lessons and feed back is usually restricted to few pupils. There is also a

difficulty of assessing and giving immediate feedback as well as difficulties in marking exercises.

In the same study, Nakabugo et al concluded that large classes is an issue to many primary schools in Uganda and that teachers have realized that it has negative influence on the quality of teaching and learning of pupils.

A Similar study conducted by (Nannyonjo 2008) revealed that large classes in early grades (p1-p3) constrain teachers in individualizing instructions and lower the percentage of total hours that teachers could spend teaching in classrooms.

Whilst other researchers do believe smaller classes increase pupils' learning, others feel taking on class reduction as policy measure to increase quality is wrong.(Sullivan 2006) in her study conducted in developing countries on class sizes argues that class sizes in this part of the world are more varied than those in the USA.

(Mingat 1998:702) compared performance of Korea, Taiwan, Japan and Singapore to the OECDs in academic achievement and it was found that these countries performed better. Korean students exceeded the international mean by 0.8 standard deviation, Japanese had 0.7, Taiwanese by 0.6and lastly Singaporean with 0.2 and yet these countries had high teacher-pupil ratios. For example the most performing country, Korea maintained its teacher-pupil ratio at about 55 and Japan with the highest performing economy in Asia has relatively large classes.

This finding contradicts the researches that were carried out in Europe and America, which emphasized that smaller classes improve pupils' learning. This raises questions like what makes pupils in Asian countries perform better in large classes than in other countries. What teaching strategies do they use in such large classes and can such strategies be adopted by other countries with large classes like Uganda to improve pupils' performance?

Table 2: Conclusions from the review

Theme	Main findings	Agreement	Disagreements	Research gaps
Class size and test scores	-There are decreasing test score in literacy and mathematics with increase in class size Blatchford et al(2002), -Younger children in small classes do better than those in large classes (Valerie 2002	- Class size is not the only determining factor for academic progress Blatchford et al (2002), Valerie(2002) -Children in small classes in their first year improved in literacy -Even studies that do set high numbers of pupils in class like 60 do support a positive effect of academic achievement when class size is reduced(Michaelowa 2001)	- High test scores when Classes are reduced to 15 Blatchford et al (2002) Michaelowa (2001) 62 is the threshold number for effective learning. -learning occurs in both large and small classes Michaelowa(2001) Nannyonjo(2008), Benbow et al (2007) -it's the low achievers and disadvantaged who benefit most from small	-There is no universal number of pupils that constitute large or small class. Studies conducted in Europe and America give smaller numbers of pupils (below 20) whilst those in Africa and Asia give about 60. -Findings do not explain how class reduction brings about improvement in performance. -Findings show that class reduction is beneficial to a certain category of children like low achievers, children in early grades but not to all. -The benefits in re-

			classes(Blatchford and Goldstein 1998	ducing class size are only noticed in first year but do not persist in the proceeding years.
Assessment	<ul style="list-style-type: none"> - Children in small classes get more teaching support and attention and are more attentive than those in large classes (Blatchford 2003 -Large classes limit pupils participation in classes (Nakabugo et al 2007) 	-when classes are reduced, the pressure is increased on pupils to participate and be more attentive to the teacher. (Finn and Achilles 1999)	-Children have to be reduced to a number below 20 to produce significant effects in academic achievement (Glass and Smith 1978)	<ul style="list-style-type: none"> -In Some studies the methodology used was questioned Glass and Smith (1978) -The numbers of children given in order for performance to improve is very low(15) so not being cost effective Slavin 1989 -The class size recommended is very small and not very applicable to Ugandan primary school experience

Conclusions

This chapter reviewed the literature on class size and pupils performance specifically on the relationship between class size and pupils test scores and majority of the researchers agreed that class size affects pupil's test score although different numbers were given for effective learning. The literature reviewed also indicated that small classes increase pupils' participation, attention, interaction in class and are easy to monitor and control.

In the next chapter, the researcher presents analyses and interprets findings obtained both from primary and secondary data.

Chapter 3

Data Presentation and Analysis

3.0 Introduction

This Chapter analyses and interprets the collected data. The chapter is presented in accordance with the objectives of the study as to establish the relationship between class size and pupils' performance.

3.1 School Enrolment

The below table indicates the enrolment trend in the four selected schools in Iganga. Before the introduction of UPE in 1996, the enrolment was low due to low affordability by the majority of the population

With the introduction of UPE in 1997, the enrolment increased steadily though the proportional increase differed from school to school due to different conditions that faced each school. For example, Kawete primary school received lower enrolment compared to all others. This may be attributed to its history of both poor performance and infrastructures before UPE. According to information from the head teacher of Kawete p/s, declaring primary education free was an opportune moment for those pupils who had for long desired to study in schools like Namungalwe and Magogo where there was better academic performance and better structures.

Another drastic increase in enrolment is seen in 2002 which to a large extent was attributed to the change of UPE policy from four children per family to all regardless of their background. In 2004, the trend indicates a decline in enrolment in UPE schools which may have been caused by the rapid increase in private schools. By 2004, the number of private schools had amounted to 156 in the whole district. This is consistent with the information from the Inspector of schools who indicated that, with the increase in enrolment coupled with low facilities increase, there was low performance in UPE schools which forced children to either drop out and or join private schools. The decline in enrolment was also noticed in the National Housing Survey conducted in 2005/2006 as the net enrolment ratio was 84% reflecting a decline from 86% in 2004 (MoES 2007).

Table 3: Enrolment trends of four selected schools in Iganga district from 1996-2008

School	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Kawete	440	599	659	755	854	1016	1385	1480	877	855	692	677	742
Magogo	851	1234	1198	1190	1060	1060	1298	1234	1005	918	890	835	854
Bunyiro	1100	1278	1578	1836	1738	1836	1481	571	1023	1204	1222	1244	1149
Namun-galwe	839	1069	1189	1227	1218	1318	1450	1461	994	1022	1015	1022	999
Total	3230	4180	4624	5008	4870	5230	5614	5746	3899	3999	3819	3778	3744

Source: School records from individual schools

3.2 Class Size

Table 4: Class size in the sampled schools

Class size	Respondents	Respondents%
50-70	15	22.4
71-90	18	26.9
91-120	15	22.4
Above 120	19	28.4
-	3	4.3
Total	70	100

Source: The researcher's own construction

Despite the Ministry of Education recommended class size, this study noted that the majority of the sampled schools had high class sizes ranging from 90-120 as evidenced in the table above. This may be attributed to the increase in the population of the children of school going age in Iganga district which does not match with the available school facilities like structures and the teachers. For example, among the schools visited by the researcher, Bunnyiro primary school had 220 pupils in primary 5 and 193 in primary 3. The head Teacher's response to the question of why such scenarios existed attributed to lack of structures and government's negligence in recruiting more teachers and yet the enrolment is high.

The Iganga Class size is far above that recommended by several scholars like (Musana 2006), who advises that for best pupils' performance to be realized in Uganda, the number of pupils in class should be maintained at 45-50 at maximum. Relating this on teachers response rate on their class size, almost all teachers reported that they have classes with pupils above 50. The large classes are likely to have an impact on pupils' academic performance in the district.

3.3 Teacher-pupil ratio

From the study findings, it is evident that there have been changes in teacher-pupil ratio for the last twelve years as shown in the table below.

Table 5: Teacher pupil ratios in Iganga district (1996-2007)

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
TPR	1:49	1:120	1:80	1:80	1:65	1:60	1:60	1:59	1:59	1:59	1:56	1:56

Source: Iganga District Education Annual Reports

From this table, teacher-pupil ratio was highest in 1997 due to the introduction of UPE. As earlier mentioned, UPE was politically motivated and hurriedly implemented so as to fulfil the President's pledge; a factor that may

have left no room to the policy planners to prepare for the better implementation of the programme. For example, while it was required to recruit new teachers, construct new and large classrooms as to respond to the increase in enrolment, nothing was done for the first one year.

As from the findings, the teacher pupil ratio in Iganga district increased from 1:49 in 1996 to 1:120 1997. In 1998, retired teachers were called upon to assist in schools and new teachers were recruited which reduced the teacher pupil ratio from 1: 120 to 1:80, the ratio that was still high as compared to the recommended ratio.

In 2002, as UPE was extended to all children of school going age, it was followed by training of primary teachers to cater for the increasing number of pupils. As they waited for trained teachers, the untrained teachers were recruited on contract so as to help handle the increasing number of pupils. This resulted in a drop from 1:80 to 1:65 and to 1:60 down words as shown in the table. This was also confirmed by (Aguti 2002) in her study on UPE and distance teacher education. However the evidence from Iganga district shows that the effort made so far to arrest the situation needs to be strengthened so as to meet the target of 1:45 TPR.

3.4 Performance analysis of primary seven pupils in UPE schools in Iganga district.

In order to understand whether class size has an impact on performance, the researcher took a ten year trend analysis of PLE performance.

This time period was chosen because it was when there was massive enrolment in most public schools arising out of the introduction of UPE. In table 6, the column for total stands for the total class size for the respective years.

Table 6: Performances of primary seven pupils in PLE under UPE schools in Iganga district

Year	Div 1	Div 2	Div 3	Div 4	Div X	Div U	TOTAL
1996	595	1508	665	860	240	872	4740
1997	707	9769	8288	5951	4086	725	29526
1998	771	9922	6900	5002	3800	780	27175
1999	800	1955	2870	1290	3391	1435	11741
2000	700	2870	1999	1996	1760	1871	11196
2001	524	1830	1528	1510	2889	1986	10267
2002	480	2000	378	3800	3888	1788	12334
2003	1204	4054	2715	2099	4451	1468	15991
2004	734	3701	2626	2631	5233	1503	16428
2005	541	4313	4273	2715	4294	1979	18115
2006	812	4785	3695	2265	1155	1455	14167
2007	759	3938	2813	1630	2996	909	185413

Source: Iganga District Annual Education Reports

Table 7: Grading system of Uganda Primary education

Div 1	Div	Div 3	Div 4	Div X	Div U
4-12	13-24	25-30	31-35	Fail	Ungraded

From the table 6 above, there have been fluctuations in performance in the period reviewed. Of special interest to this study were the periods 1997 and 2002. The researcher will use the total number of pupils who sat for PLE as class size in the respective years. In mid 1996, a policy communication was made by the president during the presidential campaign that four children per family would benefit from UPE.

In January 1997, the first UPE candidates were enrolled resulting in a drastic increase in enrolment. This is evidenced from the number of candidates who registered for PLE from 4740 in 1996 to 29526 in 1997. There was a more than 6 times increase in the number of candidates which tallies with a fall in performance from 12% to 2%.

Decline in performance may be attributed to new enrolment of candidate in primary seven who had been out of school for some time though this might not clearly point to the issue. Class size can also be one of the contributing factors to explain the decline in performance as increase in enrolment did not match with the increase in the number of teachers and school facilities. Given the government recruitment policy and the planning process, the period of one month from December 1996 when the policy was announced and its commencement in January 1997 (MoES 1999), the period was too short to recruit teachers, build classrooms and to provide other facilities or even to think of alternatives like double shift.

The argument in the study is consistent with the findings of (Nannyonjo 2008) who argued that quality of learning has been declining in Uganda as a result of the inputs not matching the rate of increase in enrolment. Therefore performance might have declined as a result of inadequate inputs.

The drop in pupils' performance could have been due to the shocks³ that the schools experienced. The schools may have been shocked with the drastic increases in enrolments and associated large class that were not manageable. The impact could have been tremendous given that schools had not devised coping mechanisms. These shocks are evident in the number of candidate who sat for PLE in 1997 and 1998 as compared to those who sat for their exams in 1996 in the table.

Table 6 shows that there was a drop in class size in 1999 from 27175 in 1998 to 11741 in 1999 which is about 56% decrease. This decline in class size corresponded with a 9% increase in performance. The drop in enrolment and improvement in performance may have resulted from schools adopting coping

³ Shocks here meant the sudden increase in the number of pupils enrolled in a particular school. This was coupled with the limited facilities in place let alone the few instructional materials and the number of teachers that could not match the increase.

strategies for example, limiting the number of candidates in primary seven which is consistent with The theory of street level bureaucrats as advanced by (Lipsky 1997:389). Lipsky argues that street level bureaucrats when faced with uncertainties and work pressures, they take decisions and device coping strategies they follow, to enable them work effectively within their means. It is most likely that when the teachers were faced with large class sizes they had to device means of reducing them by either setting a limit on the points to being promoted to P.7 through encouraging repetition or perhaps not admitting any new candidate in primary seven.

The drop in class size may also have been that pupils voluntarily dropped out of school as a result of self assessment of their ability to pass the national exams or their chances of being promoted to primary seven. These rational decisions may have resulted in a natural reduction in class size and the improvement in pupils' performance.

In 1999, there was massive recruitment of teachers in Uganda to assist in handling the large classes (Aguti 2002). This is also reflected in table 5. Teacher pupil ratios decreased from 1:120 to 1:80 in 1999. The increase in the number of teachers' might have contributed to the improvement in pupils' academic achievement. The government in 1999 introduced School facility grant (SFG) and local government development programme (LGDP). All these grants are sent to the district to be planned for and allocated into priority areas. SFG is strictly for construction of classrooms, offices and provision of desks to schools. Whilst LGDP includes other priorities, it is a requirement that education benefits being a Poverty Eradication Action Plan (PEAP) area. LGDP also constructs classrooms and procures desks for schools and teachers tables and chairs at both district and sub-county level. (MoES 2004) such improvements in facilities may have contributed to improvement in performance.

In 2001, another presidential election was held in Uganda and during the campaigns, the incumbent President who had earlier on given free primary education for four children per family pledged free education to all if given second term and following his victory, education for all started in January 2002⁴. A shift from four children to all children of school going age led to more increase in enrolment and class sizes.

Following another policy communication, in 2002 class size increased from 10267 in 2001 to 12334 in 2002, this was also followed with a drop in performance from 5% to 3%. The drop may have been attributed to the increase in class size. Decline in performance may also be attributed to less priority that was given to performance. The President's directive of all children of school going age to be in school meant a lot of political pressure exerted on the head teachers at both national and local levels. Priority was thus focused more on enrolment rather than pupils' performance. Furthermore, this radical change made numbers shoot beyond capacity of schools to handle in terms of

⁴ UPE News letter (2003:13)

school facilities and inputs like teachers, learning materials and classroom space.

It can also be true that since the policy was abrupt, the teachers and management had not yet devised means and strategies of handling these big numbers of pupils resulting in a drop in performance. This was a very short period for any adjustments to have been made.

The increase in class size and performance in 2004 may have resulted from the teachers and the administration coping with the situation and also coming up with strategies to manage large classes and on how to improve on performance. Pressure was put on head teachers from the Ministry of Education and Sports that whoever would not make any pupil to pass in division one would be expelled from service. This policy made head teachers to put a lot of pressure on teachers especially those teaching in candidate classes, where teachers devised means of teaching pupils not with the essence of understanding but only to pass exams. (MoES 2005) such reasons could have contributed to improvement in performance.

However there was another decline in performance in the proceeding years which is likely to have come about due to the policy of automatic promotion of all students in public schools in Uganda. This issue was raised with one of the respondents who said most of the pupils promoted to the next class usually have no ability to pass.

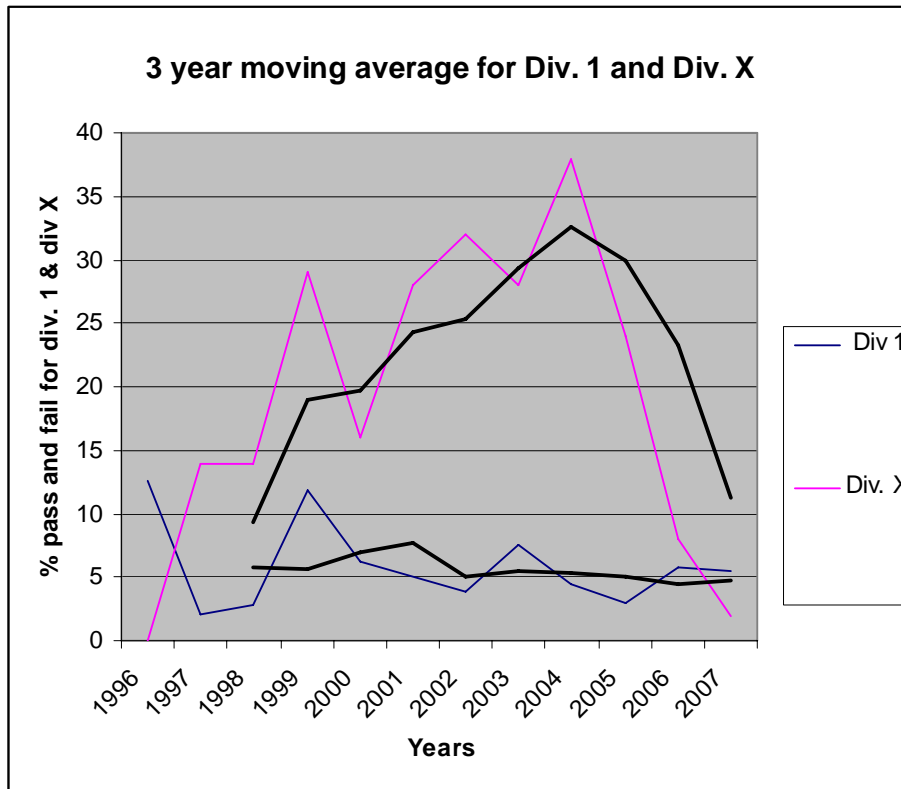
After the Ministry of Education and Sports realizing that many pupils were failing PLE and just a few were joining post primary education, they had to revise the curriculum to suit with the standard of UPE. The setting was simplified and marking is done with lenience. This was confirmed with one respondent who was a head teacher and also an examiner at UNEB⁵. He said

“UNEB has simplified exams to suit the standards of UPE. We no longer set hard questions and even mark spellings. In as long as you can try to understand what the pupils is trying to mean in a sentence or a verb you give it a tick. For example if a candidate writes the word boy as ‘boyi’ you mark it right.”

Such changes in the system may have contributed to improvement in pupils’ performance.

⁵ UNEB is Uganda national examination board. This board is in charge of setting and marking of all national examinations at all levels. It is like Cambridge.

Figure 1 Trend analysis of pupils' performance in PLE



Source own construction

The researcher used a trend analysis to establish how increase in class size affected performance of pupils in Iganga with a three years average moving trend using the percentage of pupils who passed in division one and those who failed in division x in public schools.

The average trend indicates that during the pre-UPE stage (1996), the percentage fails of pupils was lower and it began to increase with the introduction of the UPE to a point where it was highest and it began to fall but still not at a level before UPE. The percentage pass in division one according to the trend was slightly high in 1996 and a slight decline in also seen there after followed by a steady increase in percentage pass between 1999-2001 which was again followed by a decline in the number of pupils who passed in division one. Both the increase in percentage fails and decreases in the percentage passes can be attributed to increase in large classes as a result of the introduction of the UPE policy.

The trend shows that the % fails since the introduction of UPE has been higher than the % passes, implying more pupils fail.

3.5 Performance of primary seven pupils in PLE at school level

The researcher used 5 schools to compare performance at school level with performance at district level from 1996-2007. Since the researcher used secondary data to analyse primary seven pupils' performance at district , it was also imperative for the researcher to draw comparison of pupils' performance using primary data obtained from individual schools to ascertain if the trend in performance is consistent with the general district performance in the specified period.

Table 8: Bunnyiro Primary School PLE performances

Year	Div 1	Div2	Div3	Div4	Div x	Div u	Total/class Size
1996	23	22	18	12	04	04	62
1997	14	28	00	03	01	13	77
1998	20	37	09	06	06	03	82
1999	17	27	09	04	01	04	64
2000	16	33	12	22	13	04	90
2001	03	23	25	15	15	90	171
2002	09	86	24	44	19	17	199
2003	29	62	13	10	21	19	154
2004	03	68	28	26	11	20	142
2005	03	70	44	23	08	20	143
2006	01	48	58	24	08	22	149
2007	00	56	43	15	3	16	133

Source: Head masters office Bunnyiro primary school

Table 9: Kawete primary school PLE performances

Year	Div1	Div2	Div3	Div4	Div x	Div u	Total/class Size
1996	02	09	06	04	07	20	48
1997	00	08	02	05	0	4	19
1998	00	07	01	02	00	09	22
1999	01	07	04	05	01	06	24
2000	02	09	06	04	07	20	48
2001	00	10	13	12	18	22	78
2002	01	15	08	12	12	20	68
2003	02	30	12	07	13	10	74
2004	00	13	11	16	18	48	103
2005	01	23	16	12	09	09	70
2006	01	12	12	08	08	11	52
2007	01	02	08	15	00	29	61

Source: Headmaster's office Kawete p/s

Table 10: Namungalwe primary school PLE performances

Year	Div 1	Div 2	Div 3	Div 4	Div x	Div u	Total/ class size
1996	08	20	08	02	02	04	44
1997	04	20	09	09	22	11	75
1998	02	12	05	08	03	43	73
1999	08	16	10	05	07	10	56
2000	01	20	14	15	05	23	78
2001	00	21	20	19	04	33	97
2002	00	28	25	21	05	58	137
2003	01	17	07	22	11	25	83
2004	00	19	20	10	0	54	103
2005	02	20	25	12	28	09	96
2006	02	31	21	25	06	20	105
2007	00	19	26	08	07	19	79

Source: Headmaster's office Namungalwe p/s

Table 11: Magogo primary school PLE performances

Year	Div 1	Div 2	Div 3	Div 4	Div x	Div u	To- tal/class size
1996	07	04	04	06	02	02	25
1997	01	04	01	03	06	06	44
1998	00	07	04	12	01	22	46
1999	20	11	06	02	02	01	42
2000	23	04	03	14	01	00	45
2001	00	05	09	07	35	04	60
2002	00	13	26	03	03	24	69
2003	01	15	17	07	08	12	60
2004	00	26	14	09	08	15	72
2005	00	33	29	14	10	11	97
2006	05	29	19	05	03	05	66
2007	03	31	31	03	00	00	53

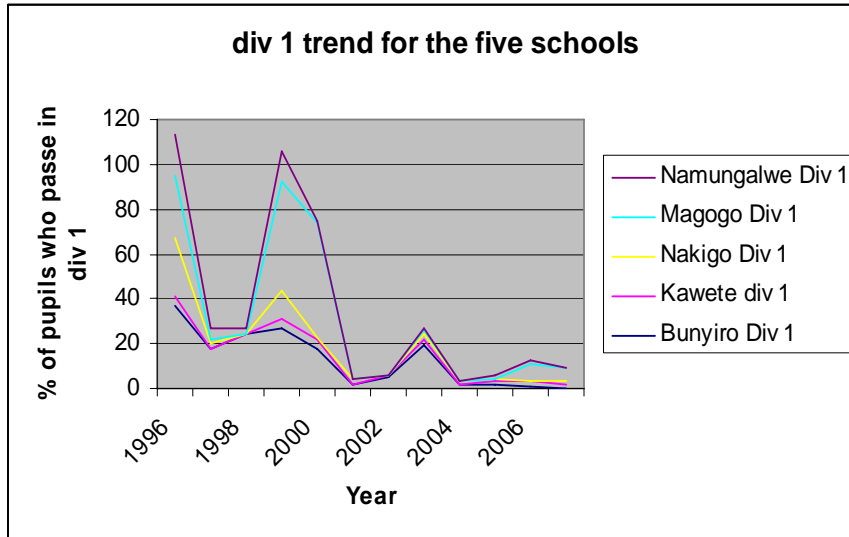
Source: Headmaster's office Magogo p/s

Table 12: Nakigo primary school PLE performances

Year	Div 1	Div 2	Div 3	Div 4	Div x	Div u	Total/ class size
1996	07	02	00	00	11	09	27
1997	01	09	07	13	12	09	51
1998	00	04	12	16	12	10	54
1999	05	06	09	11	08	01	40
2000	01	05	15	18	04	29	72
2001	01	15	17	03	06	03	45
2002	00	16	24	12	03	24	79
2003	01	22	08	06	09	05	55
2004	01	29	15	11	10	02	68
2005	01	30	47	17	13	26	134
2006	00	59	29	18	10	14	130
2007	01	31	29	19	07	29	116

Source: Headmasters office Nakigo p/

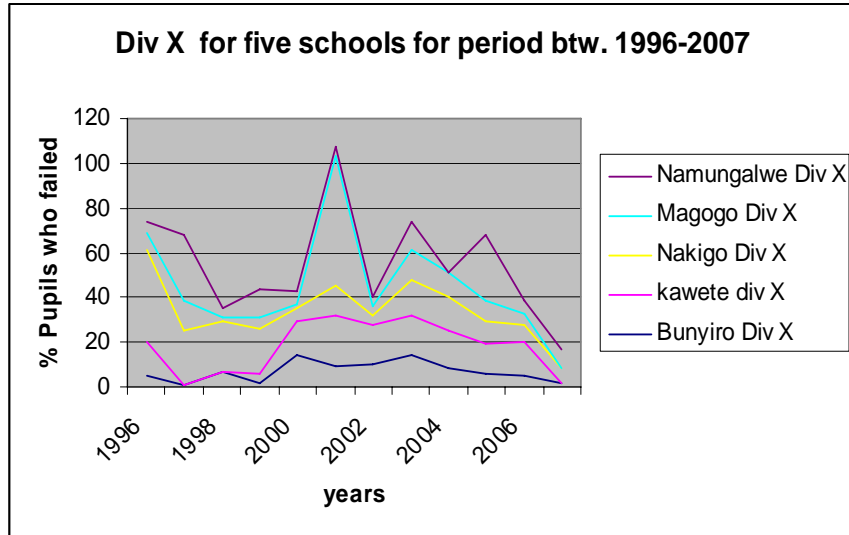
Figure 2: Division performance trends for Namungalwe, Magogo, Nakigo, Bunnyiro and Kawete p/s



Source: Own construction

The trend for the five schools above show that in 1996 before the introduction of UPE, the % passes was high and a drastic drop is seen in 1997 and 1998. In 1999 a drastic increase in all the five schools is noticed but more visible for Namungalwe and Magogo primary school. Another drop in performance is seen in 2002 followed by some improvement in 2003 and 2004 there after steadily declining except for Namungalwe and Magogo which slightly improved. This trend is consistent with the district trend and the same explanation can be given for the variations in the performance.

Figure 3: Divisions x performance trends for Namungalwe, Magogo, Nakigo Bunnyiro and Kawete p/s



Source: own construction

The trend for division x indicates that the % fail was generally high and more especially in Namungalwe and Magogo between 2000 and 2002 then followed by a general drop in the % fail in all the five schools. There is need for more investigation on Namungalwe and Magogo to ascertain why their performance trend is quite different from the other three schools.

Table 13: Correlation between: class size and performance, enrolment and performance (division 1 and x) for Bunnyiro, Magogo, Kawete and Namungalwe.

Correlation coefficients for class sizes in division 1 and division x		
	division x	total class size
division x	1	
total class size	0.398	1
p-value*	0.0051	

* p-value significant at 5%

	division 1	total class size
division 1	1	
total class size	0.0399	1
p-value	0.7878	

Correlation coefficients for enrolment in division 1 and division x		
	division x	Enrolment
division x	1	
enrolment	0.2133	1
p-value	0.1454	

	division 1	Enrolment
division 1	1	
enrolment	0.3874	1
p-value*	0.0065	

* p-value significant at 5%

The correlation for div x indicates that as class size increases, the number of pupils who fail in div x increase significantly by 40%. Implying the larger the class size, the higher the number of failures; whilst increasing class size and div 1 does not have any significant relationship. This finding implies that there are other factors that would be influencing passing of pupils in division one other than class size. Perhaps passing depends on the pupils' intelligence, availability of learning materials or teachers may concentrate on a few pupils who expose their ability to pass and ignore the rest.

This finding is line with Nannyonjo (2008) who found no significant correlation between class size and performance although Nannyonjo concluded that class size to some extent affected pupils' performance.

The correlation between enrolment and division x indicates that as enrolment increases, the number of pupils who graduate in division x increase but not significantly whilst increase in enrolment increases the number of pupils who pass in division 1 significantly by 39%. However, this finding does

not permit generalisation since enrolment data included the general enrolment of schools and not specifically primary seven.

3.6 The question of whether there is a difference between pupils' academic achievement before and after the introduction of UPE

Table 14: Table showing teachers' responses

Response	Frequency	Percentage
Yes	60	85.7
No	7	10.0
Missing response	3	4.3
Total	70	100

From the above table 85.7% of the teachers felt that pupils' academic performance is deteriorating under the UPE than it was before. This information is in line with the UPE results of 1996 when compared with those in the post UPE period. This can be attributed to the large number of pupils. 7% of the teachers see no difference between performance before and after the introduction of UPE. Such teachers may be considering quantity of those who pass without making a comparison with those who fail visa vie the class size. However other than class size, public schools in Iganga district are affected by many factors that have contributed to low academic performance of pupils in schools as obtained from interviews.

3.7 Class Size and Teachers' Class assessment

This section analyzed how class size impacts on teachers' ability to assess pupils based on teachers' perceptions. In the analysis in the table below, teachers who strongly agree and those who agree will be taken to agree, and teachers who strongly disagree and disagree will taken to have disagreed.

Table 15: The effect of class size on the pupils' academic achievement in percentages

Statement	Strongly agree	Agree	Disagree	Strongly Disagree	Missing response
Large class size affects pupils reading and writing ability	57.1	17.1	17.1	2.9	5.9
Large class is manageable	32.9	31.4	32.9		2.9
Large class size affects my assessment of pupils	47.1	42.9	7.1	2.9	0
Large class size does not demotivate me	11.4	27.1	38.6	7.1	15.7
Large class size is difficult to control	42.9	44.3	11.4	0	1.4

Source: own construction based on teachers views obtained from questionnaires

From the survey, as much as 87.2% of the teacher respondents revealed that large classes made it difficult for them to manage and control their pupils.

None of these teachers managed classes with less than 50 pupils as in table 4 above. For example some teachers managed as large as over 120 pupils in a class. 19 out of 66 teachers had classes above 120. In fact, all 19 teachers indicated that it was difficult to manage and control the pupils in their classes.

The findings contradict the 45 pupils per class threshold which the Ugandan Ministry of Education and Sports has set for being an ideal class and beyond which a class is deemed to be large. From the above therefore, there is a clear indication that classes which are handled by teachers in the sampled schools were very high. Additionally, because of the large classes teachers found difficulties in managing and controlling them, which had an effect on pupils' learning. As much as 74.2% of the teachers who responded agreed that most pupils in their classes had difficulty in writing and reading. This finding is consistent with (Nakabugo et al. 2007), who argue that large classes affect class control and management and that management difficulties result in pupils' indiscipline and difficulties in preparing teaching and learning.

However, 20% of the teachers did not agree that large classes affect pupils' ability to read and write. These teachers mostly blamed pupils' poor ability to read and write on poor parental control and supervision, especially in relation to children's academic work. To them the success of education does not depend on teachers alone, but more importantly on parents as well. Additionally, they reveal that absence of pre-primary education can partly be blamed for this phenomenon. To them, the fundamentals of reading and writing should be commenced at early childhood development centres. However these facilities are not yet accessible to all children in the district.

Large classes also affect rate of teachers' assessment. This study reveals that 90% of respondents affirmed that indeed due to the large classes they manage there is difficulty in assessing them. This implies that teachers will give less exercises and home work to avoid a lot of marking if any, or take long to give feed back to the pupils. This is likely to have an effect on pupils learning since teachers will not be able to adequately evaluate pupils and identify their individual weaknesses. Furthermore teacher-pupil interaction is very low and this adds to teachers' less ability to identify each pupil with their strengths and weaknesses. The researcher's argument is line with (P. Blatchford 2003)

On the contrary however, 10% of the teachers surveyed indicated that they do not find it difficult to assess their pupils despite their numbers. Majority of these teachers were however identified to be those who manage classes below 70 pupils. According to (Michaelowa 2001), effective teaching and learning ceases in any class beyond 62 pupils. If the teachers' indications are anything to go by, then this may to some extent be said to contradict Michaelowa's assertion, especially those handling classes more than 62 pupils. Secondly, it can be argued that Michaelowa's assertion may not be true all the time at all places with all teachers. Some teachers may possess teaching skills that go beyond the ordinary whilst possessing the capacity to effectively manage and control, and even assess classes no matter their sizes. There is need to investigate further in order to ascertain why such teachers do not find it difficult to assess pupils in large classes.

3.8 Classes Size and Pupils' Academic Achievement in different subjects

This section analyzes the impact of large class sizes on pupils' academic achievements. This was undertaken using perceptions of teachers on class sizes and how they think this affects pupils' performance in Social Studies, Science, mathematics, Agriculture and English Language.

The table 16 below indicates that majority of teachers agree that large class size negatively affects pupils' academic performance in virtually all subjects with English Language being the most affected at 71%, followed by Mathematics and social studies both at 60% and with Science at 55.7%. This is not surprising, as these corroborate our earlier argument that large classes limit the extent to which the teacher can interact with the pupils. In all of the above subjects, there requires a sufficient level of interaction, a necessity which is quite scarce for these teachers. Additionally, for these subjects to be effectively taught and well understood by the pupils, the teacher requires an environment where he/she can effectively manage, monitor and supervise the pupils. Such an environment is however usually absent, especially in the lower primary, where it is difficult to manage and control the class while teaching.

There was a surprise discovery; many responded that there is a positive impact of large classes on all the subjects. Much argument however can not be made with these discoveries, as the questionnaires were not probing enough to ascertain why they gave these answers.

Table 16: Teachers views about the impact of class size on pupils' academic achievement in the taught subjects in percentages

Subject	% Positive impact	% Negative impact	No impact	Missing response
Social Studies	31.4	60	1.4	7.1
Science	32.9	55.7	57.1	4.3
Mathematics	38.6	60	0	1.4
Agriculture	37.1	40	12.9	10
English	21	71	0	0

3.9 Other factors contributing to poor performance in Iganga District

3.9:1 Introduction

Other than class size, Iganga district is also faced with other challenges that do contribute to poor performance as discussed below.

Firstly, public schools are faced with a problem of learning materials (text books, chalk, blackboard etc). Learning materials are essential for teaching and learning, teachers' morale and also maintaining the interest of pupils in class. Text books also help teachers to diversify their teaching and allow home work assignment that extend pupils learning time.

Schools located in rural areas lack text books, papers, chalk, blackboards that are fundamental in learning and teaching. For example, data obtained from interviews revealed that, in Wailama primary school, primary seven has got only four social studies text books including the teacher's guide. This implies that only three books are shared by 58 pupils in the class and many of them do not have access to the books instead they have to listen from the teacher but cannot learn on their own or be able to have personnel study. Inadequate text books affect the interest of pupils and have an impact on their academic achievement. However this finding is contrary to (Byamugisha 2006:7) who argues that pupil text book ratios improved from 8:1 in 2000 to 1:1 in 2005 yet in line with

(Juuko and Kabonesa 2007:36) who argues that at national level schools give the impression to have text books that can be shared among pupils sufficiently though, this is quite different on ground with individual schools depending on their capacity to secure them. They continue to argue that if the average ratio of text books is divided among the total enrolment then, the text book pupil ratio could be 1:176.

(Nannyonjo 2008:46) argued that the average text book pupil ratio in rural schools is 1:14. She also argues that pupils in schools with fewer text books perform poorly as compared to those with more text books. Inadequate texts books may be attributed to insufficient funds from the government to procure them or lack of sensitization to parents to provide books for their children. The researcher argues that though parents may know the value of text books to their children's learning, given the economic status of parents especially those in rural areas they may not afford them or if they do, knowing where to get them may also prove difficult. Insufficient text books hamper serious learning of pupils.

Other than text books; schools also lack papers to facilitate assessment of pupils within a term. For UPE schools in Iganga, pupils are only given tests at the end of term. There are no mid term exams or monthly tests administered to pupils to evaluate their academic progress. According to data obtained from interviews, this was attributed to lack of stationary. In Iganga and Uganda at large teachers still use the traditional mode of teaching talk and chalk yet some schools lack black boards and chalk due to inadequate financial resources. In such schools, teaching and learning is affected resulting in low academic achievement of pupils. Basing on the above analysis, the researcher concludes that other than the class size, inadequate learning materials have may contributed to low academic achievements in Iganga.

Secondly, there is inadequate and untimely release of funds from the Ministry of Education and Sports in form of UPE Capitation Grant. In Uganda, Capitation grant is paid on the basis of the number of children enrolled in a school and the level of education. At the onset of UPE, each pupil in lower primary (P.1-P.3) was given (5000shillings) whilst for upper primary (P.4-P.7) (8100 shillings). These funds are remitted to district every month and distributed to schools basing on the enrolment. (MoES 2006) According to the guidelines, this money is distributed in percentages as follows; 50% on instructional materials, 30% on co-curricular activities 15% on school management and 5% on school administration. However, D.E.O

reported that Capitation Grant has tremendously declined from 5000 and 8100 respectively to 500 shillings only per child for both lower and upper primary. With these meagre funds being given to schools and the manner in which they are distributed, it's just little that can be got from it. This explains why schools do not have enough chalk, papers, preparatory books for teachers' school registers and black boards which may affect the teaching and learning of pupils. Besides being inadequate, funds are not also released in time; for example the District Education Officer reported that the government had not released any money for the past three months and this had disrupted all the school activities at that time. In July 2008 one of the co-curricular activities in schools was going on and very few public schools participated because the funds had not yet been released for the same. Such delays have affected schools and pupils learning.

Another factor affecting pupils' academic performance is unfair distribution of teachers in schools. In Iganga district, most of the schools near Iganga town have enough or more than the required number of teachers whilst those in rural areas are under staffed. This was revealed from the interviews with one head teacher who enumerated some two schools with such variations. Nakigo primary school teacher ceiling is 15 teachers and it has 18 teachers. Nakigo P/S is only 5kms from Iganga town and the road network to Nakigo trading centre is good this makes movement from Iganga town to Nakigo very easy, so most teachers prefer teaching in such schools.

Nawampendo P/S is about 26 km away from Iganga town and has only four teachers including the headmaster with seven classes (P.1-P.7) this means each teacher has an average of two classes and is responsible for all the four main subjects taught in primary schools in Uganda. Such teachers have heavy workloads which can easily result in de-motivation and inefficiencies. Besides, in case of illness or absenteeism of two teachers, four or more classes will not have any lessons for the number of days the teachers will be absent.

Rural schools are faced with problem of accommodation, poor roads, clean water, poor school infrastructures, poor communication which discourage teachers. This finding concurs with (UNDP 2007) which also found that there are unfair distributions of teachers in urban and rural areas. The report argues out that teachers in rural areas are not as well trained as those in urban areas which is in line with the researcher's findings. In Iganga apart from head teachers, most teachers with diplomas and degrees teach in town schools and those with certificates teacher in rural areas. Such discrepancies may lead to poor academic performance of pupils.

Inadequate classrooms; Iganga district is faced with the problem of classrooms. Despite the government efforts to construct more classrooms many schools have not yet benefited from these programs. The government provides for construction of classrooms through school facility grant (SFG) Local Development Grant (LGDP) class room completion grant (CCG) at district and sub-county level; however, the funds are inadequate to cover all the schools in the district. For example, Iganga town council has got five schools, with the highest pupil enrolment in Iganga district resulting from frequent migration in town. However, according to the inspector of schools, for the past five years, no construction has been carried out in Iganga town council.

Notwithstanding the fact that Iganga town council schools have got enough teachers as compared to other schools in rural areas, due to inadequate classrooms, they have large classes and huge teacher pupil ratios because streaming is not possible. Teachers in these schools almost face the same problems like those in schools with fewer teachers.

Although (Byamugisha 2006) reports 82.6% increase in classrooms in Uganda, this is contradictory to the situation in Iganga district. The district still lacks classrooms as compared to the enrolment. Schools visited by the researcher especially those in rural areas have temporally structures, and semi-permanent and few with permanent structures. Kawete primary school among the schools visited had the worst structures very old and almost breaking up with no windows and doors and still inadequate. Such structures put both pupils and teachers at risk and can reduce on their concentration and morale in class. Inadequate classes have resulted in large classes and its negative effects on pupils' performance in the district.

There is a problem of head teachers, teachers and pupils' absenteeism in Iganga district. The Inspector of schools reported that most head teachers are never in their schools. It was also revealed that since most teachers are forced to work especially those who are posted in rural areas where accommodation is a problem, and it require costs to get to station, such teachers only attend when the head teacher attends. Such conditions have increased the persistence of absenteeism in the district. Additionally, there is also a lot of pupils' absenteeism at schools. Pupils get discouraged with teachers absenteeism as they come at school and spend days without having lessons. Absenteeism on the side of teachers and head teachers can be attributed to lack of teachers' houses at school, poor management and inadequate supervision from the respective bodies such as school management committees, and inspectors of schools and the sub county authorities.

(Kemp 2008 :37) also reports that, in a study carried out in 2004 on teachers' absenteeism, it was found that teachers' absenteeism was at 27% in Uganda this is line with the researcher's findings although an estimate of absenteeism was not made as it was not the prime focus of this study

It was also found out that most girls do not attend schools during their menstrual period due to inadequate latrines especially in rural schools where in some schools girls have to share the same latrines with boys.(Juuko and Kabonesa 2007:32)

The attitude of parents towards the education of their children and UPE policy

The policy guideline stipulates the roles and responsibilities of the entire stake holders in the implementation of UPE. Among the stake holders are the parents. Parents are responsible for providing the basic necessities to their children especially feeding, hygiene and medical care, shelter, exercise books, pencils, pens and clothing. Furthermore, they provide basic nurturing and support, and physical and material support. Nurturing include preparing a child to attend school, safe home environment, and ensuring that the child is clean (Bategeka 2005). Most parents have fallen short of their responsibilities. According to data obtained from interviews, children are not fed at school; this finding is line with (Sullivan 2006) in Uganda who found that one of the critical

factors that affected teachers' lesson was that many children were hungry and found it difficult to concentrate. Some pupils go to school without books, pen and uniforms. It was reported that parent's have misinterpreted the policy to mean totally free education for all children. Parents have a believe that since education is being funded by the government, everything including food, uniforms, exercise books, pencils and pens should be provided by the government hence, the slogan 'baana *ba Museveni*' meaning children of President Museveni so he should provide everything for them. Besides not providing the necessities, most parents especially those in rural areas are illiterates and they may have no value for education and some are too poor to afford packing lunch for their children and buying other necessities.

UPE schools are being run by teachers who have not got any additional training in administration and management. Teachers who upgrade to a diploma level and degree levels are promoted to levels of head teachers or deputy head teachers by the District Service Commission. Head teachers have to manage a team of teachers at school. They are responsible of ensuring that teachers prepare lesson plans, and teachers teach according to the plans made. Further, head teachers have to monitor and ensure that the syllabuses have been covered and make sure that teachers come to school on a daily basis and the general administration of the school. According to information obtained from interviews, it was noted that most head teachers are too irregular at school. Their absence makes it hard for them to monitor the performance of teachers and the general administration of the schools. It was also revealed that some teachers have studied the time tables of the head teachers and only attend when the head teacher is at school. Given the inadequacy of teachers especially in rural school, absenteeism of any teacher means a lot in terms of lessons missed by the pupils and also their control at schools. Such deficiencies are likely to affect the learning of pupils and general academic achievement.

Early Childhood Education (ECE) is one of the factors that contribute to low performance in the Iganga district. ECE is very important to children's learning as it contributes to good child development outcomes that set the foundation for lifelong learning activities in school for children aged at least three years (UNESCO 2005). In Iganga district, pre-primary services are only available in town and trading centres and it's mostly children from better off families who benefit from them since they are costly. Most children in the district especially those from rural areas begin formal education from grade one. At this stage, children are introduced to the basic subjects of English and mathematics which require individual attention. Given the huge enrolment in lower primary in the district, such attention is not availed to children and has an effect on their learning.

This chapter highlighted the findings of the study and found that UPE increased enrolment tremendously however, it compromised the quality of education which is evident in the increase in the pupils who fail PLE. Findings showed that class size in Iganga district significantly affect the pupils who fail although it has no significant effect on those who pass. The findings also indicate that other than class size there are equally other factors affecting performance of pupils in Iganga district.

The next chapter therefore presents the main findings and conclusions of the study.

Chapter 4

Major Findings and Conclusions

4.1 Findings

The findings of the study are in line with (P Blatchford et al. 2002), (Nannyonjo 2008), (Valerie 2002) that increase in class sizes affected pupils' class scores although there are other factors that do contribute to low performance other than class size.

Basing on the results of pupils in the National Examinations of 1996 to 2007, the study revealed that before the introduction of UPE in 1996, the performance of pupils was better, for example in 1996 it is indicated that 12.6% of the pupils got division 1 as compared to 2004 where only 4.4% got division 1. The percentage number of pupils who fail is high compared to those who pass in division one. A correlation was run to establish the relationship between class size and pupils who passed in division 1 and x and findings revealed that reducing class size does not necessarily mean improving performance however; it reduces the number of pupils who fail significantly.

The findings also indicate that increase in enrolment increases number of pupils who pass in division one and those who fail. Nevertheless it does not mean enrolment improves pupils' performance.

The relationship between class size and teachers' class assessment was also assessed and the study indicated large classes are difficult to assess. This was pointed out by 90% of the teachers who constituted part of this study. Teachers indicated that large classes are difficult to assess, manage, supervise, and to control. The interviews also revealed the increase in the class size as a result of introduction of UPE, has made it difficult for teachers to administer tests, exercises and home work to pupils to avoid marking which is tedious

As regards the comparative analysis of pupils' academic achievement before and after the introduction of UPE, the performance trend indicates a decline. The study further found that class size indirectly affected teaching, classroom organization and pupils' behaviour leading to poor performance as well as social relationships due to limited attention paid to individual cases of pupils. Children in smaller classes get more teaching support and attention, and are more attentive, which may not be the case for pupils in large class as was indicative of the findings of this study. (Nakabugo et al. 2007), (Valerie 2002) and (P. Blatchford 2003)

There are however, other factors for poor academic achievement other than large class size and these include; poor attitudes of the parents towards education of their children, limited funding for UPE activities, absenteeism of teachers and pupils, poor administration, inadequate learning materials, inadequate classrooms and automatic promotion policy.

4.2 Conclusions

The introduction of UPE in Uganda and Iganga in particular has enabled many households to access basic education. However, the implementation of programme seems to be affected primarily by large numbers of pupils in relation to the teachers, inadequate classrooms, inadequate scholastic materials and teaching aids, inadequate number of trained teachers, poor administration, and negative attitude of parents towards the policy, inadequate text books and difficulty of managing large classes have also been contributing factors as well. These have led to poor academic achievement as evidenced from the findings.

The study aimed at establishing the effect of class size on pupils' performance and other factors that do contribute to low performance. Pupils' performance was measured using Primary Leaving Examinations. The results showed that increasing class size does not significantly affect pupils' performance instead other factors contribute to pupils' academic performance and class size is just one of them. Further research can focus on other factors that may be contributing to performance in details as mentioned above.

It is evident that other factors besides class size contribute to low academic achievement of pupils. Findings of the study suggest that more research needs to be carried out in order to understand how class size increases the number of pupils who fail and yet with no significant impact on those who pass.

Further research could also help to clarify under what conditions pupils in large classes perform better than those in smaller classes.

Similarly, another investigation is required on why some teachers teaching large classes find them manageable.

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APPENDIX

Research instruments

Interview guide

1. How long have you served in Iganga district?
2. How has the introduction of UPE affected the school enrolment patterns in the district?
3. How has increased enrolment as a result of the introduction of UPE affected the performance of pupils in schools?
4. What problems do teachers face handling large classes?
5. Is there a difference in pupils' academic achievement before and after the introduction of UPE?
6. Has the setting of exams changed?
7. What has the government done with the issue of huge enrolments in public schools?
8. . What factors have led to poor performance in UPE schools?
9. What can be done to improve on pupils' academic achievement in UPE schools?

List of people interviewed

District Education Officer
Inspector of Schools
Headmaster/Examiner

Thanks for your cooperation

List of schools visited

Namungalwe p/s

Nakigo p/s

Bunnyiro p/s

Magogo p/s

Kawete p/s

Wailama p/s

Bosesa p/s

Butende p/s

Namavundu p/s

Nawampendo p/s

Makutu p/s

Kimanto p/s

Nairika p/s

Naisanga p/s

Nagombwa p/s

Kirimwa p/s

Buwooya p/s

Kiwanyi p/s

